AirInv

0.1.2

Generated by Doxygen 1.8.1.2

Wed Aug 29 2012 12:57:14

Contents

1 AirInv Documentation

1.1 Getting Started

- Main features
- Installation
- Linking with Airinv
- Users Guide
- Tutorials
- Copyright and License

- Make a Difference
- Make a new release
- People

1.2 AirInv at SourceForge

- Project page
- Download AirInv
- Open a ticket for a bug or feature
- Mailing lists
- Forums
  - Discuss about Development issues
  - Ask for Help
  - Discuss AirInv

1.3 AirInv Development

- Git Repository (Subversion is deprecated)
- Coding Rules
- Documentation Rules
- Test Rules

1.4 External Libraries

- Boost (C++ STL extensions)
- Python
- MySQL client
- SOCI (C++ DB API)

1.5 Support AirInv

1.6 About AirInv

AirInv is a C++ library of airline inventory management classes and functions, mainly targeting simulation purposes. N

AirInv makes an extensive use of existing open-source libraries for increased functionality, speed and accuracy. In particular the Boost (*C++ Standard Extensions*) library is used.

The AirInv library originates from the department of Operational Research and Innovation at Amadeus, Sophia Antipolis, France. AirInv is released under the terms of the GNU Lesser General Public License (LGPLv2.1) for you to enjoy.

AirInv should work on GNU/Linux, Sun Solaris, Microsoft Windows (with Cygwin, MinGW/MSYS, or Microsoft Visual C++ .NET) and Mac OS X operating systems.

Note

(N) - The AirInv library is **NOT** intended, in any way, to be used by airlines for production systems. If you want to report issue, bug or feature request, or if you just want to give feedback, have a look on the right-hand side of this page for the preferred reporting methods. In any case, please do not contact Amadeus directly for any matter related to AirInv.

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Note

(N) - Amadeus employees.

3 Coding Rules

In the following sections we describe the naming conventions which are used for files, classes, structures, local variables, and global variables.

3.1 Default Naming Rules for Variables

Variables names follow Java naming conventions. Examples:

- `lNumberOfPassengers`
- `lSeatAvailability`

3.2 Default Naming Rules for Functions

Function names follow Java naming conventions. Example:

- `int myFunctionName (const int& a, int b)`

3.3 Default Naming Rules for Classes and Structures

Each new word in a class or structure name should always start with a capital letter and the words should be separated with an under-score. Abbreviations are written with capital letters. Examples:

- `MyClassName`
- `MyStructName`

3.4 Default Naming Rules for Files

Files are named after the C++ class names.

Source files are named using `.cpp` suffix, whereas header files end with `.hpp` extension. Examples:

- `FlightDate.hpp`
- `SegmentDate.cpp`

3.5 Default Functionality of Classes

All classes that are configured by input parameters should include:

- default empty constructor
- one or more additional constructor(s) that takes input parameters and initializes the class instance
- setup function, preferably named `'setup'` or `'set_parameters'`

Explicit destructor functions are not required, unless they are needed. It shall not be possible to use any of the other member functions unless the class has been properly initiated with the input parameters.

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4.1.1 Version 2.1, February 1999

```
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[This is the first released version of the Lesser GPL.  It also counts
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the version number 2.1.]
```

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When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

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For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

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Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

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A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

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table, the facility still operates, and performs whatever part of
its purpose remains meaningful.

(For example, a function in a library to compute square roots has
```

```
a purpose that is entirely well-defined independent of the
application.  Therefore, Subsection 2d requires that any
application-supplied function or table used by this function must
be optional: if the application does not supply it, the square
root function must still compute square roots.)
```

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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```
a) Accompany the work with the complete corresponding
machine-readable source code for the Library including whatever
changes were used in the work (which must be distributed under
Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable "work that
uses the Library", as object code and/or source code, so that the
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the user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
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d) If distribution of the work is made by offering access to copy
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e) Verify that the user has already received a copy of these
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```

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   ```
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   facilities.  This must be distributed under the terms of the
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   b) Give prominent notice with the combined library of the fact
   that part of it is a work based on the Library, and explaining
   where to find the accompanying uncombined form of the same work.
   ```

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4.3.2 END OF TERMS AND CONDITIONS

4.4 How to Apply These Terms to Your New Programs

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To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the library's name and a brief idea of what it does.>
Copyright (C) <year>  <name of author>

This library is free software; you can redistribute it and/or
modify it under the terms of the GNU Lesser General Public
License as published by the Free Software Foundation; either
version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the GNU
Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public
License along with this library; if not, write to the Free Software
Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA  02110-1301  USA
```

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the
library 'Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice
```

That's all there is to it!

Source

5 Documentation Rules

5.1 General Rules

All classes in AirInv should be properly documented with Doxygen comments in include (`.hpp`) files. Source (`.cpp`) files should be documented according to a normal standard for well documented C++ code.

An example of how the interface of a class shall be documented in AirInv is shown here:

```
/*!
 * \brief Brief description of MyClass here
 *
 * Detailed description of MyClass here. With example code if needed.
 */
class MyClass {
public:
  //! Default constructor
  MyClass(void) { setup_done = false; }

  /*!
   * \brief Constructor that initializes the class with parameters
   *
   * Detailed description of the constructor here if needed
   *
   * \param[in] param1 Description of \a param1 here
   * \param[in] param2 Description of \a param2 here
   */
  MyClass(TYPE1 param1, TYPE2 param2) { setup(param1, param2); }

  /*!
   * \brief Setup function for MyClass
   *
   * Detailed description of the setup function here if needed
   *
   * \param[in] param1 Description of \a param1 here
   * \param[in] param2 Description of \a param2 here
   */
  void setup(TYPE1 param1, TYPE2 param2);

  /*!
   * \brief Brief description of memberFunction1
   *
   * Detailed description of memberFunction1 here if needed
   *
   * \param[in]     param1 Description of \a param1 here
   * \param[in]     param2 Description of \a param2 here
   * \param[in,out] param3 Description of \a param3 here
   * \return Description of the return value here
   */
  TYPE4 memberFunction1(TYPE1 param1, TYPE2 param2, TYPE3 &param3);

private:

  bool _setupDone;         /*!< Variable that checks if the class is properly
                                initialized with parameters */
  TYPE1 _privateVariable1; //!< Short description of _privateVariable1 here
  TYPE2 _privateVariable2; //!< Short description of _privateVariable2 here
};
```

5.2 File Header

All files should start with the following header, which include Doxygen's `\file`, `\brief` and `\author` tags, `$Date$` and `$Revisions$` CVS tags, and a common copyright note:

```
/*!
 * \file
 * \brief Brief description of the file here
 * \author Names of the authors who contributed to this code
```

```
 * \date Date
 *
 * Detailed description of the file here if needed.
 *
 * ---------------------------------------------------------------------
 *
 * AirInv - C++ Airline Inventory Management Library
 *
 * Copyright (C) 2009-2010  (\see authors file for a list of contributors)
 *
 * \see copyright file for license information
 *
 * ---------------------------------------------------------------------
 */
```

5.3 Grouping Various Parts

All functions must be added to a Doxygen group in order to appear in the documentation. The following code example defines the group 'my_group':

```
/*!
 * \defgroup my_group Brief description of the group here
 *
 * Detailed description of the group here
*/
```

The following example shows how to document the function myFunction and how to add it to the group my_group:

```
/*!
 * \brief Brief description of myFunction here
 * \ingroup my_group
 *
 * Detailed description of myFunction here
 *
 * \param[in] param1 Description of \a param1 here
 * \param[in] param2 Description of \a param2 here
 * \return Description of the return value here
 */
TYPE3 myFunction(TYPE1 param1, TYPE2 &param2);
```

6 Main features

A short list of the main features of AirInv is given below sorted in different categories. Many more features and functions exist and for these we refer to the reference documentation.

6.1 Network generation

- Network/graph generation

6.2 Inventory generation

- Inventory generation

6.3 Finding travel solutions

- Matching of travel solutions with user requests

6.4 Distributed inventories

- Inventory independent partitions
- MPI-based distribution

6.5 Other features

- CSV input file parsing
- Memory handling

7 Make a Difference

Do not ask what AirSched can do for you. Ask what you can do for AirSched.

You can help us to develop the AirSched library. There are always a lot of things you can do:

- Start using AirSched
- Tell your friends about AirSched and help them to get started using it
- If you find a bug, report it to us. Without your help we can never hope to produce a bug free code.
- Help us to improve the documentation by providing information about documentation bugs
- Answer support requests in the AirSched discussion forums on SourceForge. If you know the answer to a question, help others to overcome their AirSched problems.
- Help us to improve our algorithms. If you know of a better way (e.g. that is faster or requires less memory) to implement some of our algorithms, then let us know.
- Help us to port AirSched to new platforms. If you manage to compile AirSched on a new platform, then tell us how you did it.
- Send us your code. If you have a good AirSched compatible code, which you can release under the LGPLv2.1, and you think it should be included in AirSched, then send it to us.
- Become an AirSched developer. Send us an e-mail and tell what you can do for AirSched.

8 Make a new release

8.1 Introduction

This document describes briefly the recommended procedure of releasing a new version of AirInv using a Linux development machine and the SourceForge project site.

The following steps are required to make a release of the distribution package.

8.2 Initialisation

Clone locally the full Git project:

```
cd ~
mkdir -p dev/sim
cd ~/dev/sim
git clone git://airinv.git.sourceforge.net/gitroot/airinv/airinv airinvgit
cd airinvgit
git checkout trunk
```

8.3 Branch creation

Create the branch, on your local clone, corresponding to the new release (say, 0.5.0):

```
cd ~/dev/sim/airinvgit
git checkout trunk
git checkout -b 0.5.0
```

Update the version in the various build system files, replacing 99.99.99 by the correct version number:

```
vi CMakeLists.txt
vi autogen.sh
```

Update the version and add a change-log in the ChangeLog and in the RPM specification files:

```
vi ChangeLog
vi airinv.spec
```

8.4 Commit and publish the release branch

Commit the new release:

```
cd ~/dev/sim/airinvgit
git add -A
git commit -m "[Release 0.5.0] Release of version 0.5.0."
git push
```

8.5 Update the change-log in the trunk as well

Update the change-log in the ChangeLog and RPM specification files:

```
cd ~/dev/sim/airinvgit
git checkout trunk
vi ChangeLog
vi airinv.spec
```

Commit the change-logs and publish the trunk (main development branch):

```
git commit -m "[Doc] Integrated the change-log of the release 0.5.0."
git push
```

8.6 Create distribution packages

Create the distribution packages using the following command:

```
cd ~/dev/sim/airinvgit
git checkout 0.5.0
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=/home/user/dev/deliveries/airinv-0.5.0 \
 -DWITH_STDAIR_PREFIX=/home/user/dev/deliveries/stdair-stable \
 -DCMAKE_BUILD_TYPE:STRING=Debug -DINSTALL_DOC:BOOL=ON ..
make check && make dist
```

This will configure, compile and check the package. The output packages will be named, for instance, `airinv-0.5.0.tar.gz` and `airinv-0.5.0.tar.bz2`.

8.7 Generation the RPM packages

Optionally, generate the RPM package (for instance, for Fedora/RedHat):

```
cd ~/dev/sim/airinvgit
git checkout 0.5.0
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=/home/user/dev/deliveries/airinv-0.5.0 \
 -DWITH_STDAIR_PREFIX=/home/user/dev/deliveries/stdair-stable \
 -DCMAKE_BUILD_TYPE:STRING=Debug -DINSTALL_DOC:BOOL=ON ..
make dist
```

To perform this step, rpm-build, rpmlint and rpmdevtools have to be available on the system.

```
cp airinv.spec ~/dev/packages/SPECS \
  && cp airinv-0.5.0.tar.bz2 ~/dev/packages/SOURCES
cd ~/dev/packages/SPECS
rpmbuild -ba airinv.spec
rpmlint -i ../SPECS/airinv.spec ../SRPMS/airinv-0.5.0-1.fc15.src.rpm \
  ../RPMS/noarch/airinv-* ../RPMS/i686/airinv-*
```

8.8 Update distributed change log

Update the NEWS and ChangeLog files with appropriate information, including what has changed since the previous release. Then commit and push the changes into the AirInv's Git repository.

8.9 Create the binary package, including the documentation

Create the binary package, which includes HTML and PDF documentation, using the following command:

```
make package
```

The output binary package will be named, for instance, airinv-0.5.0-Linux.tar.bz2. That package contains both the HTML and PDF documentation. The binary package contains also the executables and shared libraries, as well as C++ header files, but all of those do not interest us for now.

8.10 Upload the files to SourceForge

Upload the distribution and documentation packages to the SourceForge server. Check SourceForge help page on uploading software.

8.11 Upload the documentation to SourceForge

In order to update the Web site files, either:

- synchronise them with rsync and SSH:

  ```
  cd ~/dev/sim/airinvgit
  git checkout 0.5.0
  rsync -aiv doc/html/ doc/latex/refman.pdf joe,airinv@web.sourceforge.net:htdocs/
  ```

  where -aiv options mean:

  - -a: archive/mirror mode; equals -rlptgoD (no -H, -A, -X)
  - -v: increase verbosity
  - -i: output a change-summary for all updates
  - Note the trailing slashes (/) at the end of both the source and target directories. It means that the content of the source directory (doc/html), rather than the directory itself, has to be copied into the content of the target directory.

- or use the SourceForge Shell service.

8.12 Make a new post

- submit a new entry in the SourceForge project-related news feed
- make a new post on the SourceForge hosted WordPress blog
- and update, if necessary, Trac tickets.

8.13 Send an email on the announcement mailing-list

Finally, you should send an announcement to airinv-announce@lists.sourceforge.net (see https://lists.sourceforge.net/lists/listinfo/airinv-announce for the archives)

9 Installation

9.1 Table of Contents

9.2 Fedora/RedHat Linux distributions

Note that on Fedora/RedHat Linux distributions, RPM packages are available and can be installed with your usual package manager. For instance:

```
yum -y install airinv-devel airinv-doc
```

RPM packages can also be available on the SourceForge download site.

9.3 Airinv Requirements

Airinv should compile without errors or warnings on most GNU/Linux systems, on UNIX systems like Solaris SunOS, and on POSIX based environments for Microsoft Windows like Cygwin or MinGW with MSYS. It can be also built on Microsoft Windows NT/2000/XP/Vista/7 using Microsoft's Visual C++ .NET, but our support for this compiler is limited. For GNU/Linux, SunOS, Cygwin and MinGW we assume that you have at least the following GNU software installed on your computer:

- GNU Autotools:

  - autoconf,
  - automake,
  - libtool,
  - make, version 3.72.1 or later (check version with 'make –version')

- GCC - GNU C++ Compiler (g++), version 4.3.x or later (check version with 'gcc –version')
- Boost - C++ STL extensions, version 1.35 or later (check version with 'grep "define BOOST_LIB_VERSION" /usr/include/boost/version.hpp')
- MySQL - Database client libraries, version 5.0 or later (check version with 'mysql –version')
- SOCI - C++ database client library wrapper, version 3.0.0 or later (check version with 'soci-config –version')

Optionally, you might need a few additional programs: Doxygen, LaTeX, Dvips and Ghostscript, to generate the HTML and PDF documentation.

We strongly recommend that you use recent stable releases of the GCC, if possible. We do not actively work on supporting older versions of the GCC, and they may therefore (without prior notice) become unsupported in future releases of Airinv.

9.4 Basic Installation

Briefly, the shell commands './cmake .. && make install' should configure, build, and install this package. The following more-detailed instructions are generic; see the 'README' file for instructions specific to this package. Some packages provide this 'INSTALL' file but do not implement all of the features documented below. The lack of an optional feature in a given package is not necessarily a bug. More recommendations for GNU packages can be found in the info page corresponding to "Makefile Conventions: (standards)Makefile Conventions".

The 'cmake' shell script attempts to guess correct values for various system-dependent variables used during compilation. It uses those values to create a 'Makefile' in each directory of the package. It may also create one or more '.h' files containing system-dependent definitions. Finally, it creates a 'CMakeCache.txt' cache file that you can refer to in the future to recreate the current configuration, and a file 'CMakeFiles' containing compiler output (useful mainly for debugging 'cmake').

It can also use an optional file (typically called 'config.cache' and enabled with '–cache-file=config.-cache' or simply '-C') that saves the results of its tests to speed up reconfiguring. Caching is disabled by default to prevent problems with accidental use of stale cache files.

If you need to do unusual things to compile the package, please try to figure out how 'configure' could check whether to do them, and mail diffs or instructions to the address given in the 'README' so they can be considered for the next release. If you are using the cache, and at some point 'config.cache' contains results you don't want to keep, you may remove or edit it.

```
The file <tt>'CMakeLists.txt'</tt> is used to create the \c 'Makefile'
```

files.

The simplest way to compile this package is:

1. 'cd' to the directory containing the package's source code and type './cmake ..' to configure the package for your system. Running 'cmake' is generally fast. While running, it prints some messages telling which features it is checking for.
2. Type 'make' to compile the package.
3. Optionally, type 'make check'to run any self-tests that come with the package, generally using the just-built uninstalled binaries.
4. Type 'make install' to install the programs and any data files and documentation. When installing into a prefix owned by root, it is recommended that the package be configured and built as a regular user, and only the 'make install' phase executed with root privileges.

5. You can remove the program binaries and object files from the source code directory by typing ‘make clean’. To also remove the files that ‘configure’ created (so you can compile the package for a different kind of computer), type ‘make distclean’. There is also a ‘make maintainer-clean’ target, but that is intended mainly for the package’s developers. If you use it, you may have to get all sorts of other programs in order to regenerate files that came with the distribution.
6. Often, you can also type ‘make uninstall’ to remove the installed files again. In practice, not all packages have tested that uninstallation works correctly, even though it is required by the GNU Coding Standards.

9.5 Compilers and Options

Some systems require unusual options for compilation or linking that the ‘cmake’ script does not know about. Run ‘./cmake –help’ for details on some of the pertinent environment variables.

You can give ‘cmake’ initial values for configuration parameters by setting variables in the command line or in the environment. Here is an example:

```
./cmake  CC=c99 CFLAGS=-g LIBS=-lposix
```

See Also

Defining Variables for more details.

9.6 Compiling For Multiple Architectures

You can compile the package for more than one kind of computer at the same time, by placing the object files for each architecture in their own directory. To do this, you can use GNU ‘make’. ‘cd’ to the directory where you want the object files and executables to go and run the ‘configure’ script. ‘configure’ automatically checks for the source code in the directory that ‘configure’ is in and in ‘..’. This is known as a "VPATH" build.

With a non-GNU ‘make’, it is safer to compile the package for one architecture at a time in the source code directory. After you have installed the package for one architecture, use ‘make distclean’ before reconfiguring for another architecture.

On MacOS X 10.5 and later systems, you can create libraries and executables that work on multiple system types–known as "fat" or "universal" binaries–by specifying multiple ‘–arch’ options to the compiler but only a single ‘–arch’ option to the preprocessor. Like this:

```
./configure CC="gcc -arch i386 -arch x86_64 -arch ppc -arch ppc64" \
            CXX="g++ -arch i386 -arch x86_64 -arch ppc -arch ppc64" \
            CPP="gcc -E" CXXCPP="g++ -E"
```

This is not guaranteed to produce working output in all cases, you may have to build one architecture at a time and combine the results using the ‘lipo’ tool if you have problems.

9.7 Installation Names

By default, ‘make install’ installs the package’s commands under ‘/usr/local/bin’, include files under ‘/usr/local/include’, etc. You can specify an installation

prefix other than '/usr/local' by giving 'configure' the option '-prefix=P-
REFIX', where PREFIX must be an absolute file name.

You can specify separate installation prefixes for architecture-specific
files and architecture-independent files. If you pass the option '-exec-prefix=P-
REFIX' to 'configure', the package uses PREFIX as the prefix for installing
programs and libraries. Documentation and other data files still use the
regular prefix.

In addition, if you use an unusual directory layout you can give options
like '-bindir=DIR' to specify different values for particular kinds of files.
Run 'configure -help' for a list of the directories you can set and what
kinds of files go in them. In general, the default for these options is
expressed in terms of '${prefix}', so that specifying just '-prefix' will
affect all of the other directory specifications that were not explicitly
provided.

The most portable way to affect installation locations is to pass the correct
locations to 'configure'; however, many packages provide one or both of the
following shortcuts of passing variable assignments to the 'make install'
command line to change installation locations without having to reconfigure
or recompile.

The first method involves providing an override variable for each affected
directory. For example, 'make install prefix=/alternate/directory' will
choose an alternate location for all directory configuration variables that
were expressed in terms of '${prefix}'. Any directories that were specified
during 'configure', but not in terms of '${prefix}', must each be overridden
at install time for the entire installation to be relocated. The approach
of makefile variable overrides for each directory variable is required by
the GNU Coding Standards, and ideally causes no recompilation. However,
some platforms have known limitations with the semantics of shared libraries
that end up requiring recompilation when using this method, particularly
noticeable in packages that use GNU Libtool.

The second method involves providing the 'DESTDIR' variable. For example,
'make install DESTDIR=/alternate/directory' will prepend '/alternate/directory'
before all installation names. The approach of 'DESTDIR' overrides is not
required by the GNU Coding Standards, and does not work on platforms that
have drive letters. On the other hand, it does better at avoiding recompilation
issues, and works well even when some directory options were not specified
in terms of '${prefix}' at 'configure' time.

9.8 Optional Features

If the package supports it, you can cause programs to be installed with an
extra prefix or suffix on their names by giving 'cmake' the option '-program-prefix=P-
REFIX' or '-program-suffix=SUFFIX'.

Some packages pay attention to '-enable-FEATURE' options to 'configure',
where FEATURE indicates an optional part of the package. They may also
pay attention to '-with-PACKAGE' options, where PACKAGE is something like
'gnu-as' or 'x' (for the X Window System). The 'README' should mention any
'-enable-' and '-with-' options that the package recognizes.

For packages that use the X Window System, 'configure' can usually find the
X include and library files automatically, but if it doesn't, you can use
the 'configure' options '-x-includes=DIR' and '-x-libraries=DIR' to specify
their locations.

Some packages offer the ability to configure how verbose the execution of
'make' will be. For these packages, running './configure -enable-silent-rules'

sets the default to minimal output, which can be overridden with ‘make V=1’; while running ‘./configure –disable-silent-rules’ sets the default to verbose, which can be overridden with ‘make V=0’.

9.9 Particular systems

On HP-UX, the default C compiler is not ANSI C compatible. If GNU CC is not installed, it is recommended to use the following options in order to use an ANSI C compiler:

```
./configure CC="cc -Ae -D_XOPEN_SOURCE=500"
```

and if that doesn’t work, install pre-built binaries of GCC for HP-UX.

On OSF/1 a.k.a. Tru64, some versions of the default C compiler cannot parse its ‘<wchar.h>’ header file. The option ‘-nodtk’ can be used as a workaround. If GNU CC is not installed, it is therefore recommended to try

```
./configure CC="cc"
```

and if that doesn’t work, try

```
./configure CC="cc -nodtk"
```

On Solaris, don’t put ‘/usr/ucb’ early in your ‘PATH’. This directory contains several dysfunctional programs; working variants of these programs are available in ‘/usr/bin’. So, if you need ‘/usr/ucb’ in your ‘PATH’, put it *after* ‘/usr/bin’.

On Haiku, software installed for all users goes in ‘/boot/common’, not ‘/usr/local’. It is recommended to use the following options:

```
./cmake -DCMAKE_INSTALL_PREFIX=/boot/common
```

9.10 Specifying the System Type

There may be some features ‘configure’ cannot figure out automatically, but needs to determine by the type of machine the package will run on. Usually, assuming the package is built to be run on the *same* architectures, ‘configure’ can figure that out, but if it prints a message saying it cannot guess the machine type, give it the ‘–build=TYPE’ option. TYPE can either be a short name for the system type, such as ‘sun4’, or a canonical name which has the form CPU-COMPANY-SYSTEM

where SYSTEM can have one of these forms:

- OS
- KERNEL-OS

  See the file ‘config.sub’ for the possible values of each field. If ‘config.sub’ isn’t included in this package, then this package doesn’t need to know the machine type.

  If you are *building* compiler tools for cross-compiling, you should use the option ‘–target=TYPE’ to select the type of system they will produce code for.

  If you want to *use* a cross compiler, that generates code for a platform different from the build platform, you should specify the "host" platform (i.e., that on which the generated programs will eventually be run) with ‘–host=TYPE’.

9.11 Sharing Defaults

If you want to set default values for 'configure' scripts to share, you can create a site shell script called 'config.site' that gives default values for variables like 'CC', 'cache_file', and 'prefix'. 'configure' looks for 'PREFIX/share/config.site' if it exists, then 'PREFIX/etc/config.site' if it exists. Or, you can set the 'CONFIG_SITE' environment variable to the location of the site script. A warning: not all 'configure' scripts look for a site script.

9.12 Defining Variables

Variables not defined in a site shell script can be set in the environment passed to 'configure'. However, some packages may run configure again during the build, and the customized values of these variables may be lost. In order to avoid this problem, you should set them in the 'configure' command line, using 'VAR=value'. For example:

```
./configure CC=/usr/local2/bin/gcc
```

causes the specified 'gcc' to be used as the C compiler (unless it is overridden in the site shell script).

Unfortunately, this technique does not work for 'CONFIG_SHELL' due to an Autoconf bug. Until the bug is fixed you can use this workaround:

```
CONFIG_SHELL=/bin/bash /bin/bash ./configure CONFIG_SHELL=/bin/bash
```

9.13 'cmake' Invocation

'cmake' recognizes the following options to control how it operates.

- '-help', '-h' print a summary of all of the options to 'cmake', and exit.
- '-help=short', '-help=recursive' print a summary of the options unique to this package's 'configure', and exit. The 'short' variant lists options used only in the top level, while the 'recursive' variant lists options also present in any nested packages.
- '-version', '-V' print the version of Autoconf used to generate the 'configure' script, and exit.
- '-cache-file=FILE' enable the cache: use and save the results of the tests in FILE, traditionally 'config.cache'. FILE defaults to '/dev/null' to disable caching.
- '-config-cache', '-C' alias for '-cache-file=config.cache'.
- '-quiet', '-silent', '-q' do not print messages saying which checks are being made. To suppress all normal output, redirect it to '/dev/null' (any error messages will still be shown).
- '-srcdir=DIR' look for the package's source code in directory DIR. Usually 'configure' can determine that directory automatically.
- '-prefix=DIR' use DIR as the installation prefix.

See Also

Installation Names for more details, including other options available for fine-tuning the installation locations.

- '-no-create', '-n' run the configure checks, but stop before creating any output files.

'cmake' also accepts some other, not widely useful, options. Run 'cmake' -help' for more details.

The 'cmake' script produces an ouput like this:

```
export LIBSUFFIX_4_CMAKE="-DLIB_SUFFIX=64"
export INSTALL_BASEDIR=/home/user/dev/deliveries
cmake -DCMAKE_INSTALL_PREFIX=${INSTALL_BASEDIR}/airinv-0.5.0 \
 -DWITH_STDAIR_PREFIX=${INSTALL_BASEDIR}/stdair-stable \
 -DWITH_AIRRAC_PREFIX=${INSTALL_BASEDIR}/airrac-stable \
 -DWITH_RMOL_PREFIX=${INSTALL_BASEDIR}/rmol-stable \
 -DCMAKE_BUILD_TYPE:STRING=Debug -DINSTALL_DOC:BOOL=ON ${LIBSUFFIX_4_CMAKE} ..
-- The C compiler identification is GNU
-- The CXX compiler identification is GNU
-- Check for working C compiler: /usr/lib64/ccache/gcc
-- Check for working C compiler: /usr/lib64/ccache/gcc -- works
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working CXX compiler: /usr/lib64/ccache/c++
-- Check for working CXX compiler: /usr/lib64/ccache/c++ -- works
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
-- Requires Git without specifying any version
-- Current Git revision name: 0ee8dcc3e3dd1d1d442c4054fbfa4cacc1182e6a trunk
-- Requires Boost-1.41
-- Boost version: 1.46.0
-- Found the following Boost libraries:
--   regex
--   program_options
--   date_time
--   iostreams
--   serialization
--   filesystem
--   unit_test_framework
--   python
-- Found Boost version: 1.46.0
-- Found BoostWrapper: /usr/include (Required is at least version "1.41")
-- Requires Readline without specifying any version
-- Found Readline: /usr/include
-- Found Readline version: 6.2
-- Requires MySQL without specifying any version
-- Using mysql-config: /usr/bin/mysql_config
-- Found MySQL: /usr/lib64/mysql/libmysqlclient.so
-- Found MySQL version: 5.5.14
-- Requires SOCI-3.0
-- Using soci-config: /usr/bin/soci-config
-- SOCI headers are buried
-- Found SOCI: /usr/lib64/libsoci_core.so (Required is at least version "3.0")
-- Found SOCIMySQL: /usr/lib64/libsoci_mysql.so (Required is at least version "3.0")
-- Found SOCI with MySQL back-end support version: 3.0.0
-- Requires StdAir-0.37
-- Found StdAir version: 0.38.0
-- Requires Doxygen without specifying any version
-- Found Doxygen: /usr/bin/doxygen
-- Found DoxygenWrapper: /usr/bin/doxygen
-- Found Doxygen version: 1.7.4
-- Had to set the linker language for 'airraclib' to CXX
-- Had to set the linker language for 'rmollib' to CXX
-- Had to set the linker language for 'airinvlib' to CXX
-- Test 'InventoryTestSuite' to be built with 'InventoryTestSuite.cpp'
--
-- ===========================================================
-- -----------------------------------
-- ---     Project Information    ---
```

```
-- ---------------------------------
-- PROJECT_NAME ................... : airinv
-- PACKAGE_PRETTY_NAME ............ : AirInv
-- PACKAGE ........................ : airinv
-- PACKAGE_NAME ................... : AIRINV
-- PACKAGE_BRIEF .................. : C++ Simulated Airline Inventory Management System library
-- PACKAGE_VERSION ................ : 0.5.0
-- GENERIC_LIB_VERSION ............ : 0.5.0
-- GENERIC_LIB_SOVERSION .......... : 0.5
--
-- ---------------------------------
-- ---     Build Configuration    ---
-- ---------------------------------
-- Modules to build ............... : airrac;rmol;airinv
-- Libraries to build/install ..... : airraclib;rmollib;airinvlib
-- Binaries to build/install ...... : airrac;rmol;airinv_parseInventory;airinv
-- Modules to test ................ : airinv
-- Binaries to test ............... : InventoryTestSuitetst
--
-- * Module ....................... : airrac
--   + Layers to build ............ : .;basic;bom;factory;command;service
--   + Dependencies on other layers :
--   + Libraries to build/install . : airraclib
--   + Executables to build/install : airrac
--   + Tests to perform ........... :
-- * Module ....................... : rmol
--   + Layers to build ............ : .;basic;bom;factory;command;service
--   + Dependencies on other layers : airraclib
--   + Libraries to build/install . : rmollib
--   + Executables to build/install : rmol
--   + Tests to perform ........... :
-- * Module ....................... : airinv
--   + Layers to build ............ : .;basic;bom;factory;command;service
--   + Dependencies on other layers : airraclib;rmollib
--   + Libraries to build/install . : airinvlib
--   + Executables to build/install : airinv_parseInventory;airinv
--   + Tests to perform ........... : InventoryTestSuitetst
--
-- BUILD_SHARED_LIBS .............. : ON
-- CMAKE_BUILD_TYPE ............... : Debug
--  * CMAKE_C_FLAGS ............... :
--  * CMAKE_CXX_FLAGS ............. : -Wall -Werror
--  * BUILD_FLAGS ................. :
--  * COMPILE_FLAGS ............... :
-- CMAKE_MODULE_PATH .............. : /home/dan/dev/sim/airinv/airinvgithub/config/
-- CMAKE_INSTALL_PREFIX ........... : /home/dan/dev/deliveries/airinv-0.5.0
--
-- * Doxygen:
--   - DOXYGEN_VERSION ............. : 1.7.4
--   - DOXYGEN_EXECUTABLE .......... : /usr/bin/doxygen
--   - DOXYGEN_DOT_EXECUTABLE ...... : /usr/bin/dot
--   - DOXYGEN_DOT_PATH ............ : /usr/bin
--
-- ---------------------------------
-- --- Installation Configuration ---
-- ---------------------------------
-- INSTALL_LIB_DIR ................ : /home/dan/dev/deliveries/airinv-0.5.0/lib64
-- INSTALL_BIN_DIR ................ : /home/dan/dev/deliveries/airinv-0.5.0/bin
-- INSTALL_INCLUDE_DIR ............ : /home/dan/dev/deliveries/airinv-0.5.0/include
-- INSTALL_DATA_DIR ............... : /home/dan/dev/deliveries/airinv-0.5.0/share
-- INSTALL_SAMPLE_DIR ............. : /home/dan/dev/deliveries/airinv-0.5.0/share/airinv/samples
-- INSTALL_DOC .................... : ON
--
-- ---------------------------------
-- ---   Packaging Configuration  ---
-- ---------------------------------
-- CPACK_PACKAGE_CONTACT .......... : Denis Arnaud <denis_arnaud - at - users dot sourceforge dot net>
-- CPACK_PACKAGE_VENDOR ........... : Denis Arnaud
-- CPACK_PACKAGE_VERSION .......... : 0.5.0
-- CPACK_PACKAGE_DESCRIPTION_FILE . : /home/dan/dev/sim/airinv/airinvgithub/README
-- CPACK_RESOURCE_FILE_LICENSE .... : /home/dan/dev/sim/airinv/airinvgithub/COPYING
-- CPACK_GENERATOR ................ : TBZ2
-- CPACK_DEBIAN_PACKAGE_DEPENDS ... :
```

```
-- CPACK_SOURCE_GENERATOR ......... : TBZ2;TGZ
-- CPACK_SOURCE_PACKAGE_FILE_NAME . : airinv-0.5.0
--
-- ---------------------------------
-- ---     External libraries    ---
-- ---------------------------------
--
-- * Boost:
--   - Boost_VERSION ............... : 104600
--   - Boost_LIB_VERSION ........... : 1_46
--   - Boost_HUMAN_VERSION ......... : 1.46.0
--   - Boost_INCLUDE_DIRS .......... : /usr/include
--   - Boost required components .. : regex;program_options;date_time;iostreams;serialization;filesystem;unit_
--   - Boost required libraries ... : optimized;/usr/lib64/libboost_regex-mt.so;debug;/usr/lib64/libboost_rege
--
-- * Readline:
--   - READLINE_VERSION ............ : 6.2
--   - READLINE_INCLUDE_DIR ........ : /usr/include
--   - READLINE_LIBRARY ............ : /usr/lib64/libreadline.so
--
-- * MySQL:
--   - MYSQL_VERSION ............... : 5.5.14
--   - MYSQL_INCLUDE_DIR ........... : /usr/include/mysql
--   - MYSQL_LIBRARIES ............. : /usr/lib64/mysql/libmysqlclient.so
--
-- * SOCI:
--   - SOCI_VERSION ................ : 3.0.0
--   - SOCI_INCLUDE_DIR ............ : /usr/include/soci
--   - SOCIMYSQL_INCLUDE_DIR ....... : /usr/include/soci
--   - SOCI_LIBRARIES .............. : /usr/lib64/libsoci_core.so
--   - SOCIMYSQL_LIBRARIES ......... : /usr/lib64/libsoci_mysql.so
--
-- * StdAir:
--   - STDAIR_VERSION .............. : 0.38.0
--   - STDAIR_BINARY_DIRS .......... : /home/dan/dev/deliveries/stdair-0.38.0/bin
--   - STDAIR_EXECUTABLES .......... : stdair
--   - STDAIR_LIBRARY_DIRS ......... : /home/dan/dev/deliveries/stdair-0.38.0/lib64
--   - STDAIR_LIBRARIES ............ : stdairlib;stdairuicllib
--   - STDAIR_INCLUDE_DIRS ......... : /home/dan/dev/deliveries/stdair-0.38.0/include
--   - STDAIR_SAMPLE_DIR ........... : /home/dan/dev/deliveries/stdair-0.38.0/share/stdair/samples
--
-- Change a value with: cmake -D<Variable>=<Value>
-- ================================================================
--
-- Configuring done
-- Generating done
-- Build files have been written to: /home/dan/dev/sim/airinv/airinvgithub/build
```

It is recommended that you check if your library has been compiled and linked properly and works as expected. To do so, you should execute the testing process 'make check'. As a result, you should obtain a similar report:

```
[  0%] Built target hdr_cfg_airinv
[  0%] Built target hdr_cfg_airrac
[ 13%] Built target airraclib
[ 13%] Built target hdr_cfg_rmol
[ 38%] Built target rmollib
[ 98%] Built target airinvlib
[100%] Built target InventoryTestSuitetst
Scanning dependencies of target check_airinvtst
Test project /home/dan/dev/sim/airinv/airinvgithub/build/test/airinv
    Start 1: InventoryTestSuitetst
1/1 Test #1: InventoryTestSuitetst .............   Passed    0.08 sec

100% tests passed, 0 tests failed out of 1

Total Test time (real) =   0.35 sec
[100%] Built target check_airinvtst
Scanning dependencies of target check
[100%] Built target check
```

Check if all the executed tests PASSED. If not, please contact us by filling a bug-report.

Finally, you should install the compiled and linked library, include files and (optionally) HTML and PDF documentation by typing:

```
make install
```

Depending on the PREFIX settings during configuration, you might need the root (administrator) access to perform this step.

Eventually, you might invoke the following command

```
make clean
```

to remove all files created during compilation process, or even

```
cd ~/dev/sim/airinvgit
rm -rf build && mkdir build
cd build
```

to remove everything.

10 Linking with Airinv

10.1 Table of Contents

10.2 Introdution

There are two convenient methods of linking your programs with the Airinv library. The first one employs the 'pkg-config' command (see http://pkgconfig.freedesktop.org/), whereas the second one uses 'airinv-config' script. These methods are shortly described below.

10.3 Dependencies

The Airinv library depends on several other C++ components.

10.3.1 StdAir

Among them, as for now, only StdAir has been packaged. The support for StdAir is taken in charge by a dedicated M4 macro file (namely, 'stdair.m4'), from the configuration script (generated thanks to 'configure.ac').

Figure 1: Airinv Dependencies

10.4 Using the pkg-config command

'pkg-config' is a helper tool used when compiling applications and libraries. It helps you insert the correct compiler and linker options. The syntax of the 'pkg-config' is as follows:

```
pkg-config <options> <library_name>
```

For instance, assuming that you need to compile an Airinv based program 'my_prog.cpp', you should use the following command:

```
g++ `pkg-config --cflags airinv` -o my_prog my_prog.cpp `pkg-config --libs
      airinv`
```

For more information see the 'pkg-config' man pages.

10.5 Using the airinv-config script

Airinv provides a shell script called airinv-config, which is installed by default in '$prefix/bin' ('/usr/local/bin') directory. It can be used to simplify compilation and linking of Airinv based programs. The usage of this script is quite similar to the usage of the 'pkg-config' command.

Assuming that you need to compile the program 'my_prog.cpp' you can now do that with the following command:

```
g++ `airinv-config --cflags` -o my_prog_opt my_prog.cpp `airinv-config --libs`
```

A list of 'airinv-config' options can be obtained by typing:

```
airinv-config --help
```

If the 'airinv-config' command is not found by your shell, you should add its location '$prefix/bin' to the PATH environment variable, e.g.:

```
export PATH=/usr/local/bin:$PATH
```

10.6 M4 macro for the GNU Autotools

A M4 macro file is delivered with Airinv, namely 'airinv.m4', which can be found in, e.g., '/usr/share/aclocal'. When used by a 'configure' script, thanks to he 'AM_PATH_Airinv' macro (specified in the M4 macro file), the following Makefile variables are then defined:

- 'Airinv_VERSION' (e.g., defined to 0.23.0)
- 'Airinv_CFLAGS' (e.g., defined to '-I${prefix}/include')
- 'Airinv_LIBS' (e.g., defined to '-L${prefix}/lib -lairinv')

10.7 Using Airinv with dynamic linking

When using static linking some of the library routines in Airinv are copied into your executable program. This can lead to unnecessary large executables. To avoid having too large executable files you may use dynamic linking instead. Dynamic linking means that the actual linking is performed when the program is executed. This requires that the system is able to locate the shared Airinv library file during your program execution. If you install the Airinv library using a non-standard prefix, the 'LD_LIBRARY_PATH' environment variable might be used to inform the linker of the dynamic library location, e.g.:

```
export LD_LIBRARY_PATH=<Airinv installation prefix>/lib:$LD_LIBRARY_PATH
```

11 Test Rules

This section describes rules how the functionality of the IT++ library should be verified. In the 'tests' subdirectory test files are provided. All functionality should be tested using these test files.

11.1 The Test File

Each new IT++ module/class should be accompanied with a test file. The test file is an implementation in C++ that tests the functionality of a function/class or a group of functions/classes called modules. The test file should test relevant parameter settings and input/output relations to guarantee correct functionality of the corresponding classes/functions. The test files should be maintained using version control and updated whenever new functionality is added to the IT++ library.

The test file should print relevant data to a standard output that can be used to verify the functionality. All relevant parameter settings should be tested.

The test file should be placed in the 'tests' subdirectory and should have a name ending with '_test.cpp'.

11.2 The Reference File

Consider a test file named 'module_test.cpp'. A reference file named 'module_test.ref' should accompany the test file. The reference file contains a reference printout of the standard output generated when running the test program. The reference file should be maintained using version control and updated according to the test file.

11.3 Testing IT++ Library

One can compile and execute all test programs from 'tests' subdirectory by typing

```
% make check
```

after successful compilation of the IT++ library.

12 Users Guide

12.1 Table of Contents

12.2 Introduction

The `AirInv` library contains classes for airline business management. This document does not cover all the aspects of the `AirInv` library. It does however explain the most important things you need to know in order to start using `AirInv`.

12.3 Get Started

12.3.1 Get the AirInv library

Clone locally the full `Git project`:

```
cd ~
mkdir -p dev/sim
cd ~/dev/sim
git clone git://airinv.git.sourceforge.net/gitroot/airinv/airinv airinvgit
cd airinvgit
git checkout trunk
```

12.3.2 Build the AirInv project

Link with StdAir, create the distribution package (say, 0.5.0) and compile using the following commands:

```
cd ~/dev/sim/airinvgit
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=~/dev/deliveries/airinv-0.5.0 \
 -DWITH_STDAIR_PREFIX=~/dev/deliveries/stdair-stable \
 -DCMAKE_BUILD_TYPE:STRING=Debug -DINSTALL_DOC:BOOL=ON ..
make
```

12.3.3 Build and Run the Tests

After building the AirInv project, the following commands run the tests:

```
cd ~/dev/sim/airinvgit
cd build
make check
```

As a result, you should obtain a similar report:

```
[  0%] Built target hdr_cfg_airinv
[ 96%] Built target airinvlib
[100%] Built target AirlineScheduleTestSuitetst
Scanning dependencies of target check_airinvtst
Test project /home/dan/dev/sim/airinv/airinvgithub/build/test/airinv
    Start 1: AirlineScheduleTestSuitetst
1/1 Test #1: AirlineScheduleTestSuitetst ......   Passed    0.15 sec

100% tests passed, 0 tests failed out of 1

Total Test time (real) =   0.40 sec
[100%] Built target check_airinvtst
Scanning dependencies of target check
[100%] Built target check
```

12.3.4 Install the AirInv Project (Binaries, Documentation)

After the step Build the AirInv project, to install the library and its header files, type:

```
cd ~/dev/sim/airinvgit
cd build
make install
```

You can check that the executables and other required files have been copied into the given final directory:

```
cd ~dev/deliveries/airinv-0.5.0
```

To generate the AirInv project documentation, the commands are:

```
cd ~/dev/sim/airinvgit
cd build
make doc
```

The AirInv project documentation is available in the following formats: HTML, LaTeX. Those documents are available in a subdirectory:

```
cd ~/dev/sim/airinvgit
cd build
cd doc
```

12.4 Input file of AirInv Project

The schedule input file structure should look like the following sample:

Each line, beyond the header, represents a schedule entry, i.e., the specification of a given flight-period (see `AIRINV::FlightPeriodStruct`). The fields are as follows:

- Flights section

  - AirlineCode (e.g., BA)
  - FlightNumber (e.g., 9)
  - Start of the flight departure period (e.g., 2007-04-20)
  - End of the flight departure period (e.g., 2007-06-30)
  - Day-Of-the-Week for the flight departure period (DOW) (e.g., 0000011)
  - Leg section
  - Segment section
- Leg section
  - BoardPoint (e.g., LHR)
  - OffPoint (e.g., BKK)
  - BoardTime (e.g., 22:00)
  - ArrivalTime (e.g., 15:15)
  - ArrivalDateOffSet (e.g., +1)
  - ElapsedTime (e.g., 11:15)
  - Leg-cabin section
- Leg-cabin section
  - Cabin code (e.g., F, J, W or Y)
  - Capacity (e.g., respectively 5, 12, 20 or 300)
- Segment section
  - Specificity flag:
    * 0 means that all the segments behave the same way, i.e., have got the same dressing (distribution and order of the booking classes per cabin)
    * 1 means that each segment bahave differently. The full specification of each of those segments must therefore be given.
  - Segment-cabin section
  - Fare family section
- Segment-cabin section
  - Cabin code (e.g., F, J, W or Y)
  - List of (one-letter-code) booking classes for the cabin (e.g, respectively FA, JCDI, WT or YBHKMLSQ)
- Fare family section
  - Fare family code (e.g., 1)
  - List of (one-letter-code) booking classes for the fare family (e.g, respectively FA, JCDI, WT or YBHKMLSQ)

Some fare input examples (including the example above named schedule03.csv) are given in the StdAirproject.

12.5 The schedule BOM Tree

The schedule-related Business Object Model (BOM) tree is a structure allowing to store all the AIRINV::FlightPeriodStruct objects of the simulation. That is why parsing an input file, containing the specification for all the flight-periods, is more convenient (

See Also

the previous section Input file of AirInv Project).

As it may be time consuming, and it for sure requires some know-how, to first build such a schedule input file, a small sample BOM tree is provided by default when needed.

12.5.1 Build of the schedule BOM tree

First, a BOM root object (i.e., a root for all the classes in the project) is instantiated by the `stdair::STDAIR_ServiceContext` context object, when the `stdair::STDAIR_Service` is itself instantiated (during the instantiation of the `AIRINV::AIRINV_Service` object).

The corresponding `type` (class) `stdair::BomRoot` is defined in the StdAir library.

Then, the BOM root can be either constructed thanks to the `AIRINV::AIRINV_Service::buildSampleBom()` method:

```
void buildSampleBom();
```

or can be constructed using the schedule input file described above thanks to the `AIRINV::AIRINV_Service::parseAndLoad (const stdair::Filename_T&)` method:

```
void parseAndLoad (const stdair::Filename_T& iInventoryFilename);
```

12.5.2 Display of the schedule BOM tree

Note

That feature (of BOM tree display) has not been implemented yet. Do not hesitate to `open a ticket` if you would like to have it implemented more quickly.

The schedule BOM tree can be displayed as done in the `batches::airinv.cpp` program:

When the default BOM tree is used (`-b/-builtin` option of the main program `airinv.cpp`), the schedule BOM tree display (for now, corresponding to `schedule01.csv` parsed by `AIRINV::parseInventory`) should look like:

```
============================================================
BomRoot:  -- ROOT --
============================================================
++++++++++++++++++++++++++++++++++++++++++++++++
Inventory: SQ
++++++++++++++++++++++++++++++++++++++++++++++++
****************************************
FlightDate: SQ11, 2010-Jan-15
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-15, SIN-BKK, 2010-Jan-15, 08:20:00, 2010-Jan-15, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 2, 298
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 1, 0, 0, 0, 2, 298, 0,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 2, 0, 0, 0, 2, 298, 0,
```

```
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 1, Y, 300 (0), 0, 0, 0, 2, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Jan-16
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-16, SIN-BKK, 2010-Jan-16, 08:20:00, 2010-Jan-16, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 1.83244e-319, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Jan-17
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-17, SIN-BKK, 2010-Jan-17, 08:20:00, 2010-Jan-17, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 1.58896e-319, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
```

```
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Jan-18
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-18, SIN-BKK, 2010-Jan-18, 08:20:00, 2010-Jan-18, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Jan-19
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-19, SIN-BKK, 2010-Jan-19, 08:20:00, 2010-Jan-19, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
```

```
****************************************
****************************************
FlightDate: SQ11, 2010-Jan-20
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-20, SIN-BKK, 2010-Jan-20, 08:20:00, 2010-Jan-20, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Jan-21
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-21, SIN-BKK, 2010-Jan-21, 08:20:00, 2010-Jan-21, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Jan-22
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-22, SIN-BKK, 2010-Jan-22, 08:20:00, 2010-Jan-22, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Jan-23
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-23, SIN-BKK, 2010-Jan-23, 08:20:00, 2010-Jan-23, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 300, 300, 0, 0, 0, 0, 0, 0, 6.64029e-
      319, 0, 300, 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Jan-24
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-24, SIN-BKK, 2010-Jan-24, 08:20:00, 2010-Jan-24, 11:00:00, 07:40:
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      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
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Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 2, 0, 0, 0, 0, 300, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Jan-25
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****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-25, SIN-BKK, 2010-Jan-25, 08:20:00, 2010-Jan-25, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Jan-26
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-26, SIN-BKK, 2010-Jan-26, 08:20:00, 2010-Jan-26, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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****************************************
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 2, 0, 0, 0, 0, 300, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Jan-27
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****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-27, SIN-BKK, 2010-Jan-27, 08:20:00, 2010-Jan-27, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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****************************************
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 2, 0, 0, 0, 0, 300, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Jan-28
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-28, SIN-BKK, 2010-Jan-28, 08:20:00, 2010-Jan-28, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Jan-29
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****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-29, SIN-BKK, 2010-Jan-29, 08:20:00, 2010-Jan-29, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Jan-30
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-30, SIN-BKK, 2010-Jan-30, 08:20:00, 2010-Jan-30, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0, 0,
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****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Jan-31
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-31, SIN-BKK, 2010-Jan-31, 08:20:00, 2010-Jan-31, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Feb-01
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-01, SIN-BKK, 2010-Feb-01, 08:20:00, 2010-Feb-01, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 1, 0, 0, 0, 0, 300, 0,
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SQ11 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Feb-02
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-02, SIN-BKK, 2010-Feb-02, 08:20:00, 2010-Feb-02, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Feb-03
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-03, SIN-BKK, 2010-Feb-03, 08:20:00, 2010-Feb-03, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
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Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-04
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-04, SIN-BKK, 2010-Feb-04, 08:20:00, 2010-Feb-04, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-05
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-05, SIN-BKK, 2010-Feb-05, 08:20:00, 2010-Feb-05, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
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      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-06
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-06, SIN-BKK, 2010-Feb-06, 08:20:00, 2010-Feb-06, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-07
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-07, SIN-BKK, 2010-Feb-07, 08:20:00, 2010-Feb-07, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-08
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-08, SIN-BKK, 2010-Feb-08, 08:20:00, 2010-Feb-08, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-09
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-09, SIN-BKK, 2010-Feb-09, 08:20:00, 2010-Feb-09, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 2, 0, 0, 0, 0, 300, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-10
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
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SQ11 2010-Feb-10, SIN-BKK, 2010-Feb-10, 08:20:00, 2010-Feb-10, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-11
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-11, SIN-BKK, 2010-Feb-11, 08:20:00, 2010-Feb-11, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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****************************************
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 2, 0, 0, 0, 0, 300, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Feb-12
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****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-12, SIN-BKK, 2010-Feb-12, 08:20:00, 2010-Feb-12, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Feb-13
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-13, SIN-BKK, 2010-Feb-13, 08:20:00, 2010-Feb-13, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 2, 0, 0, 0, 0, 300, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Feb-14
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-14, SIN-BKK, 2010-Feb-14, 08:20:00, 2010-Feb-14, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Feb-15
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-15, SIN-BKK, 2010-Feb-15, 08:20:00, 2010-Feb-15, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-16
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-16, SIN-BKK, 2010-Feb-16, 08:20:00, 2010-Feb-16, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Feb-17
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****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-17, SIN-BKK, 2010-Feb-17, 08:20:00, 2010-Feb-17, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Feb-18
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****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-18, SIN-BKK, 2010-Feb-18, 08:20:00, 2010-Feb-18, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
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SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Feb-19
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-19, SIN-BKK, 2010-Feb-19, 08:20:00, 2010-Feb-19, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-20
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-20, SIN-BKK, 2010-Feb-20, 08:20:00, 2010-Feb-20, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
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Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Feb-21
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-21, SIN-BKK, 2010-Feb-21, 08:20:00, 2010-Feb-21, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 2, 0, 0, 0, 0, 300, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Feb-22
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****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-22, SIN-BKK, 2010-Feb-22, 08:20:00, 2010-Feb-22, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 2, 0, 0, 0, 0, 300, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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SQ11 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Feb-23
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-23, SIN-BKK, 2010-Feb-23, 08:20:00, 2010-Feb-23, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Feb-24
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-24, SIN-BKK, 2010-Feb-24, 08:20:00, 2010-Feb-24, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-25
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-25, SIN-BKK, 2010-Feb-25, 08:20:00, 2010-Feb-25, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ11, 2010-Feb-26
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-26, SIN-BKK, 2010-Feb-26, 08:20:00, 2010-Feb-26, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Feb-27
****************************************
****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
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      Elapsed, Distance, Capacity,
SQ11 2010-Feb-27, SIN-BKK, 2010-Feb-27, 08:20:00, 2010-Feb-27, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 2, 0, 0, 0, 0, 300, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ11, 2010-Feb-28
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-28, SIN-BKK, 2010-Feb-28, 08:20:00, 2010-Feb-28, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Jan-15
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-15, SIN-HND, 2010-Jan-15, 09:20:00, 2010-Jan-15, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 200, 200, 2.082e+121, 5.53287e-48, 5.
      20268e-90, 0, 1.31346e-47, 1.05119e-153, 2.78986e+179, 0, 200, 9, 3.66962e-62, 1
      .0854e-71, 6.74783e-67, 6.9835e-77, 0,
****************************************
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Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 1, Y13856, 200 (0), 0, 0, 0, 0, 0 (0)
      , 0, 0, 0, 0, 0, 0,
SQ12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Jan-16
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-16, SIN-HND, 2010-Jan-16, 09:20:00, 2010-Jan-16, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 2.63638e-319, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Jan-17
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****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-17, SIN-HND, 2010-Jan-17, 09:20:00, 2010-Jan-17, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
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SQ12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 2.39291e-319, 0, 0, 0, 0,
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****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Jan-18
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-18, SIN-HND, 2010-Jan-18, 09:20:00, 2010-Jan-18, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 2.14469e-319, 0, 0, 0, 0,
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Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Jan-19
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-19, SIN-HND, 2010-Jan-19, 09:20:00, 2010-Jan-19, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Jan-20
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-20, SIN-HND, 2010-Jan-20, 09:20:00, 2010-Jan-20, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Jan-21
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-21, SIN-HND, 2010-Jan-21, 09:20:00, 2010-Jan-21, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Jan-22
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-22, SIN-HND, 2010-Jan-22, 09:20:00, 2010-Jan-22, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Jan-23
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-23, SIN-HND, 2010-Jan-23, 09:20:00, 2010-Jan-23, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Jan-24
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-24, SIN-HND, 2010-Jan-24, 09:20:00, 2010-Jan-24, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Jan-25
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-25, SIN-HND, 2010-Jan-25, 09:20:00, 2010-Jan-25, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
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SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Jan-26
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-26, SIN-HND, 2010-Jan-26, 09:20:00, 2010-Jan-26, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Jan-27
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-27, SIN-HND, 2010-Jan-27, 09:20:00, 2010-Jan-27, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Jan-28
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Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-28, SIN-HND, 2010-Jan-28, 09:20:00, 2010-Jan-28, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Jan-29
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-29, SIN-HND, 2010-Jan-29, 09:20:00, 2010-Jan-29, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Jan-30
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-30, SIN-HND, 2010-Jan-30, 09:20:00, 2010-Jan-30, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Jan-31
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-31, SIN-HND, 2010-Jan-31, 09:20:00, 2010-Jan-31, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Feb-01
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-01, SIN-HND, 2010-Feb-01, 09:20:00, 2010-Feb-01, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Feb-02
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-02, SIN-HND, 2010-Feb-02, 09:20:00, 2010-Feb-02, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Feb-03
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-03, SIN-HND, 2010-Feb-03, 09:20:00, 2010-Feb-03, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
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      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Feb-04
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****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-04, SIN-HND, 2010-Feb-04, 09:20:00, 2010-Feb-04, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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****************************************
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Feb-05
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****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-05, SIN-HND, 2010-Feb-05, 09:20:00, 2010-Feb-05, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Feb-06
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-06, SIN-HND, 2010-Feb-06, 09:20:00, 2010-Feb-06, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Feb-07
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****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-07, SIN-HND, 2010-Feb-07, 09:20:00, 2010-Feb-07, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Feb-08
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-08, SIN-HND, 2010-Feb-08, 09:20:00, 2010-Feb-08, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Feb-09
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-09, SIN-HND, 2010-Feb-09, 09:20:00, 2010-Feb-09, 12:00:00, 07:40:
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
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Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
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FlightDate: SQ12, 2010-Feb-10
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-10, SIN-HND, 2010-Feb-10, 09:20:00, 2010-Feb-10, 12:00:00, 07:40:
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
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Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
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FlightDate: SQ12, 2010-Feb-11
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-11, SIN-HND, 2010-Feb-11, 09:20:00, 2010-Feb-11, 12:00:00, 07:40:
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
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Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
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      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
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FlightDate: SQ12, 2010-Feb-12
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-12, SIN-HND, 2010-Feb-12, 09:20:00, 2010-Feb-12, 12:00:00, 07:40:
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Feb-13
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-13, SIN-HND, 2010-Feb-13, 09:20:00, 2010-Feb-13, 12:00:00, 07:40:
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
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FlightDate: SQ12, 2010-Feb-14
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-14, SIN-HND, 2010-Feb-14, 09:20:00, 2010-Feb-14, 12:00:00, 07:40:
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Feb-15
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-15, SIN-HND, 2010-Feb-15, 09:20:00, 2010-Feb-15, 12:00:00, 07:40:
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
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SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
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FlightDate: SQ12, 2010-Feb-16
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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Feb-17
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
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SQ12 2010-Feb-17, SIN-HND, 2010-Feb-17, 09:20:00, 2010-Feb-17, 12:00:00, 07:40:
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
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FlightDate: SQ12, 2010-Feb-18
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-18, SIN-HND, 2010-Feb-18, 09:20:00, 2010-Feb-18, 12:00:00, 07:40:
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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****************************************
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Feb-19
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-19, SIN-HND, 2010-Feb-19, 09:20:00, 2010-Feb-19, 12:00:00, 07:40:
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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****************************************
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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****************************************
FlightDate: SQ12, 2010-Feb-20
****************************************
****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-20, SIN-HND, 2010-Feb-20, 09:20:00, 2010-Feb-20, 12:00:00, 07:40:
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LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 2, 0, 0, 0, 0, 200, 0,
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****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
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FlightDate: SQ12, 2010-Feb-21
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****************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-21, SIN-HND, 2010-Feb-21, 09:20:00, 2010-Feb-21, 12:00:00, 07:40:
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LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Feb-22
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-22, SIN-HND, 2010-Feb-22, 09:20:00, 2010-Feb-22, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
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```
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Feb-23
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-23, SIN-HND, 2010-Feb-23, 09:20:00, 2010-Feb-23, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Feb-24
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-24, SIN-HND, 2010-Feb-24, 09:20:00, 2010-Feb-24, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
```

```
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Feb-25
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-25, SIN-HND, 2010-Feb-25, 09:20:00, 2010-Feb-25, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Feb-26
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-26, SIN-HND, 2010-Feb-26, 09:20:00, 2010-Feb-26, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 1, 0, 0, 0, 0, 200, 0,
```

```
SQ12 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Feb-27
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-27, SIN-HND, 2010-Feb-27, 09:20:00, 2010-Feb-27, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
****************************************
FlightDate: SQ12, 2010-Feb-28
****************************************
****************************************
Leg-Dates:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-28, SIN-HND, 2010-Feb-28, 09:20:00, 2010-Feb-28, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
****************************************
****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
****************************************
****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
****************************************
****************************************
SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 2, 0, 0, 0, 0, 200, 0,
****************************************
****************************************
Subclasses:
-----------
```

```
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
****************************************
```

12.6 Exploring the Predefined BOM Tree

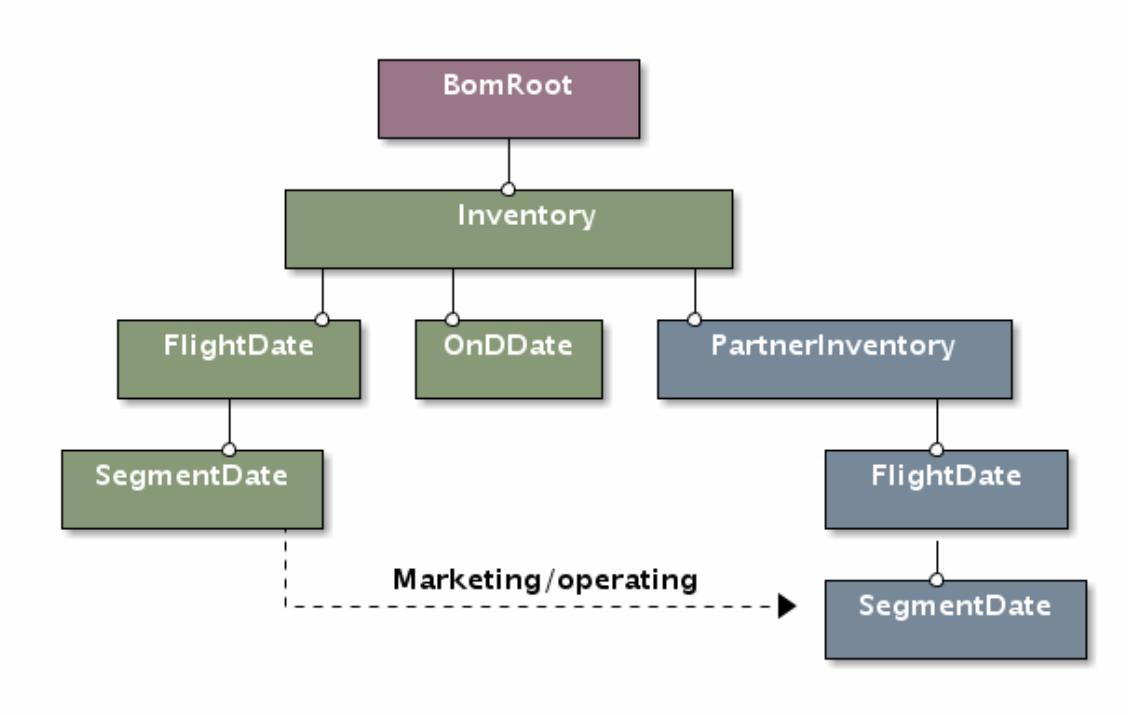


Figure 2: AirInv BOM tree

`AirInv` predefines a BOM (Business Object Model) tree specific to the airline IT arena.

12.6.1 Airline Network BOM Tree

- `AIRINV::ReachableUniverse`
- `AIRINV::OriginDestinationSet`
- `AIRINV::SegmentPathPeriod`

12.6.2 Airline Schedule BOM Tree

- `stdair::Inventory`
- `stdair::FlightPeriod`
- `stdair::SegmentPeriod`
- `stdair::OnDPeriod`

12.7 Extending the BOM Tree

12.8 The travel solution calculation procedure

The project AirInv aims at calculating a list of `travel solutions` for every incoming `booking request`.

13 Supported Systems

13.1 Table of Contents

13.2 Introdution

This page is intended to provide a list of AirInv supported systems, i.e. the systems on which configuration, installation and testing process of the AirInv library has been sucessful. Results are grouped based on minor release number. Therefore, only the latest tests for bug-fix releases are included. Besides, the information on this page is divided into sections dependent on the operating system.

Where necessary, some extra information is given for each tested configuration, e.g. external libraries installed, configuration commands used, etc.

If you manage to compile, install and test the AirInv library on a system not mentioned below, please let us know, so we could update this database.

14 AirInv Supported Systems (Previous Releases)

14.1 AirInv 3.9.1

14.2 AirInv 3.9.0

14.3 AirInv 3.8.1

15 Tutorials

15.1 Table of Contents

15.2 Preparing the AirSched Project for Development

The source code for these examples can be found in the `batches` and `test/airsched` directories. They are compiled along with the rest of the `AirSched` project. See the Users Guide for more details on how to build the `AirSched` project.

15.3 Your first networkBuilde

15.3.1 Summary of the different steps

All the steps below can be found in the same order in the batch `AirSched.cpp` program.

First, we instanciate the AIRSCHED_Service object:

Then, we construct a default sample list of travel solutions and a default booking request (as mentionned in ug_procedure_bookingrequest and ug_procedure_travelsolution parts):

For basic use, the default BOM tree can be built using:

The main step is the network building (see The travel solution calculation procedure):

15.3.2 Result of the Batch Program

When the `AirSched.cpp` program is run (with the `-b` option), the log output file should look like:

What is interesting is to compare the travel solution list (here reduced to a single travel solution) displayed before:

and after the network building:

Between the two groups of dashes, we can see that a network option structure has been added by the network builder: the price is 450 EUR for the Y class, the ticket is refundable but there are exchange fees and the customer must stay over on saturday night.

Let's return to our default BOM tree display: the only network rule stored was a match for the travel solution into consideration (same origin airport, same destination airport, flight date included in the network rule date range, same airline "BA", ...).

By looking at the network rule trip type "RT", we can guess we face a round trip network: that means the price given in the default bom tree construction in `stdair::CmdBomManager.hpp` has been divided by 2 because we are considering either an inbound trip or an outbound one.

15.4 Network building with an input file

15.4.1 How to build a network input file?

The objective here is to build a network input file to network builde the default travel solution list built using:

This travel solution list, reduced to a singleton, can be displayed as done before:

We deduce:

- we need a network rule whose origin-destination couple is "LHR, SYD".
- the date range must include the date "2011-06-10".
- the time range must include the time "21:45".
- the airline operating is "BA", so it must be the airline pricing.

We can deduce a part of our network rule file :

We have no information about stay duration and advance purchase (such information are contained into the booking request): so let us put "0" to embrace all the requests possible.

No information for the point-of-sale and the channel too: let us consider all the channels ("IN", "DN", "IF" and DF") and all the points of sale (the origin "LHR", the destination "SYD" and the rest-of-the-world "ROW") existing. To access this information, we could look into the default booking request.

The input file is now:

Let us say we have just the Economy cabin "Y" and Bristish Airways prices ticket for class "Y".

No information about the trip type, so we duplicate all the network rules for both type: one-way "OW" and round-trip "RT" (to access this information, we could look to the default booking request).

The network options are all set to a default value "T" (meaning true) and the network values are chosen to be all distinct.

We obtain:

15.4.2 Building the BOM tree with an input file

The steps are the same as before Summary of the different steps except the bom tree must be built using the network input file :

15.4.3 Result of the Batch Program

When the `AirSched.cpp` program is run with the `-f` option linking with the file built just above:

```
~/AirSched -f ~/<YourFileName>.csv
```

the last lines of the log output should look like:

```
[D]~/AirSchedgit/AirSched/batches/AirSched.cpp:223: Travel solutions:
    [0] [0] BA, 9, 2011-06-10, LHR, SYD, 21:45 --- Y, 145, 1 1 1 ---
```

We have just one network option added to the travel solution. We can deduce from the price value 145 that the network builder used the network rule number 15 to price the travel solution. We have an inbound or outbound trip of a round trip: the total price 290 has been divided by 2.

16 Command-Line Test to Demonstrate How To Test the AirInv Project

```
 */
// //////////////////////////////////////////////////////////////////////
// Import section
// //////////////////////////////////////////////////////////////////////
// STL
#include <sstream>
#include <fstream>
#include <string>
// Boost Unit Test Framework (UTF)
#define BOOST_TEST_DYN_LINK
#define BOOST_TEST_MAIN
#define BOOST_TEST_MODULE InventoryTestSuite
#include <boost/test/unit_test.hpp>
// StdAir
#include <stdair/basic/BasLogParams.hpp>
#include <stdair/basic/BasDBParams.hpp>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/bom/TravelSolutionStruct.hpp>
#include <stdair/bom/BookingRequestStruct.hpp>
#include <stdair/service/Logger.hpp>
#include <stdair/stdair_exceptions.hpp>
// Airinv
#include <airinv/AIRINV_Types.hpp>
#include <airinv/AIRINV_Master_Service.hpp>
#include <airinv/config/airinv-paths.hpp>

namespace boost_utf = boost::unit_test;
```

```
// (Boost) Unit Test XML Report
std::ofstream utfReportStream ("InventoryTestSuite_utfresults.xml");

struct UnitTestConfig {
  UnitTestConfig() {
    boost_utf::unit_test_log.set_stream (utfReportStream);
    boost_utf::unit_test_log.set_format (boost_utf::XML);
    boost_utf::unit_test_log.set_threshold_level (boost_utf::log_test_units);
    //boost_utf::unit_test_log.set_threshold_level
       (boost_utf::log_successful_tests);
  }

  ~UnitTestConfig() {
  }
};

// ////////////////////////////////////////////////////////////////////
bool testInventoryHelper (const unsigned short iTestFlag,
                          const stdair::Filename_T& iInventoryInputFilename,
                          const stdair::Filename_T& iScheduleInputFilename,
                          const stdair::Filename_T& iODInputFilename,
                          const stdair::Filename_T& iYieldInputFilename,
                          const bool isBuiltin,
                          const bool isForSchedule) {

  // Output log File
  std::ostringstream oStr;
  oStr << "InventoryTestSuite_" << iTestFlag << ".log";
  const stdair::Filename_T lLogFilename (oStr.str());

  // Set the log parameters
  std::ofstream logOutputFile;
  // Open and clean the log outputfile
  logOutputFile.open (lLogFilename.c_str());
  logOutputFile.clear();

  // Initialise the AirInv service object
  const bool lForceMultipleInit = true;
  stdair::BasLogParams lLogParams (stdair::LOG::DEBUG,
                                   logOutputFile,
                                   lForceMultipleInit);

  // Initialise the inventory service
  AIRINV::AIRINV_Master_Service airinvService (
      lLogParams);

  // Parameters for the sale
  std::string lSegmentDateKey;
  stdair::ClassCode_T lClassCode;
  const stdair::PartySize_T lPartySize (2);

  // Check wether or not a (CSV) input file should be read
  if (isBuiltin == true) {

    // Build the default sample BOM tree (filled with inventories) for AirInv
   airinvService.buildSampleBom();

   // Define a specific segment-date key for the sample BOM tree
   lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
   lClassCode = "Q";

  } else {

    if (isForSchedule == true) {
      // Build the BOM tree from parsing a schedule file (and O&D list)
      AIRRAC::YieldFilePath lYieldFilePath (iYieldInputFilename);
      airinvService.parseAndLoad (iScheduleInputFilename, iODInputFilename,
                                  lYieldFilePath);

      // Define a specific segment-date key for the schedule-based inventory
      lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
      lClassCode = "Y";

    } else {

      // Build the BOM tree from parsing an inventory dump file
      airinvService.parseAndLoad (iInventoryInputFilename);

      // Define a specific segment-date key for the inventory parsed file
      //const std::string lSegmentDateKey ("SV, 5, 2010-03-11, KBP, JFK,
       08:00:00");
      lSegmentDateKey =  "SV, 5, 2010-03-11, KBP, JFK, 08:00:00";
      lClassCode = "J";
    }

  }
```

```
  // Make a booking
  const bool hasSaleBeenSuccessful =
    airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);

  // DEBUG: Display the list of travel solutions
  const std::string& lCSVDump = airinvService.csvDisplay();
  STDAIR_LOG_DEBUG (lCSVDump);

  // Close the log file
  logOutputFile.close();

  if (hasSaleBeenSuccessful == false) {
    STDAIR_LOG_DEBUG ("No sale can be made for '" << lSegmentDateKey
                      << "'");
  }

  return hasSaleBeenSuccessful;

}

// ///////////////// Main: Unit Test Suite ///////////////

// Set the UTF configuration (re-direct the output to a specific file)
BOOST_GLOBAL_FIXTURE (UnitTestConfig);

// Start the test suite
BOOST_AUTO_TEST_SUITE (master_test_suite)


BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell) {

  // Input file name
  const stdair::Filename_T lInventoryInputFilename (STDAIR_SAMPLE_DIR
                                                    "/invdump01.csv");

  // State whether the BOM tree should be built-in or parsed from an input file
  const bool isBuiltin = false;
  // State whether the BOM tree should be built from a schedule file (instead
       of from an inventory dump)
  const bool isForSchedule = false;

  // Try sell a default segment.
  bool hasTestBeenSuccessful = false;
  BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
                        testInventoryHelper (0, lInventoryInputFilename,
                                             " ", " ", " ", isBuiltin,
      isForSchedule));
  BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);

}

BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_built_in) {

  // State whether the BOM tree should be built-in or parsed from an input file
  const bool isBuiltin = true;
  // State whether the BOM tree should be built from a schedule file (instead
       of from an inventory dump)
  const bool isForSchedule = false;

  // Try sell a default segment.
  bool hasTestBeenSuccessful = false;
  BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
                        testInventoryHelper (1, " ", " ", " ", " ",
                                             isBuiltin, isForSchedule));
  BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);

}

BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_schedule) {

  // Input file names
  const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
                                                   "/schedule01.csv");
  const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
                                             "/ond01.csv");
  const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
                                                "/yieldstore01.csv");

  // State whether the BOM tree should be built-in or parsed from an input file
  const bool isBuiltin = false;
  // State whether the BOM tree should be built from a schedule file (instead
       of from an inventory dump)
  const bool isForSchedule = true;

  // Try sell a default segment.
  bool hasTestBeenSuccessful = false;
  BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
```

```
                        testInventoryHelper (2, " ",
                                             lScheduleInputFilename,
                                             lODInputFilename,
                                             lYieldInputFilename,
                                             isBuiltin, isForSchedule));
  BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);

}

BOOST_AUTO_TEST_CASE (airinv_error_inventory_input_file) {

  // Inventory input file name
  const stdair::Filename_T lMissingInventoryFilename (STDAIR_SAMPLE_DIR
                                                      "/missingFile.csv");

  // State whether the BOM tree should be built-in or parsed from an input file
  const bool isBuiltin = false;
  // State whether the BOM tree should be built from a schedule file (instead
       of from an inventory dump)
  const bool isForSchedule = false;

  // Try sell a default segment.
  BOOST_CHECK_THROW (testInventoryHelper (3, lMissingInventoryFilename,
                                          " ", " ", " ", isBuiltin,
      isForSchedule),
                     AIRINV::InventoryInputFileNotFoundException
      );

}

BOOST_AUTO_TEST_CASE (airinv_error_schedule_input_file) {

  // Schedule input file name
  const stdair::Filename_T lMissingScheduleFilename (STDAIR_SAMPLE_DIR
                                                     "/missingFile.csv");

  // State whether the BOM tree should be built-in or parsed from an input file
  const bool isBuiltin = false;
  // State whether the BOM tree should be built from a schedule file (instead
       of from an inventory dump)
  const bool isForSchedule = true;

  // Try sell a default segment.
  BOOST_CHECK_THROW (testInventoryHelper (4, " ", lMissingScheduleFilename,
                                          " ", " ", isBuiltin, isForSchedule),
                     AIRINV::ScheduleInputFileNotFoundException
      );

}

BOOST_AUTO_TEST_CASE (airinv_error_yield_input_file) {

  // Input file names
  const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
                                                   "/schedule01.csv");
  const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
                                             "/ond01.csv");
  const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
                                                "/missingFile.csv");

  // State whether the BOM tree should be built-in or parsed from an input file
  const bool isBuiltin = false;
  // State whether the BOM tree should be built from a schedule file (instead
       of from an inventory dump)
  const bool isForSchedule = true;

  // Try sell a default segment.
  BOOST_CHECK_THROW (testInventoryHelper (5, " ",
                                          lScheduleInputFilename,
                                          lODInputFilename,
                                          lYieldInputFilename,
                                          isBuiltin, isForSchedule),
                     AIRRAC::YieldInputFileNotFoundException);

}

BOOST_AUTO_TEST_CASE (airinv_error_flight_date_duplication) {

  // Input file names
  const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
                                                   "/scheduleError01.csv");
  const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
                                             "/ond01.csv");
  const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
                                                "/missingFile.csv");

  // State whether the BOM tree should be built-in or parsed from an input file
```

```
  const bool isBuiltin = false;
  // State whether the BOM tree should be built from a schedule file (instead
       of from an inventory dump)
  const bool isForSchedule = true;

  // Try sell a default segment.
  BOOST_CHECK_THROW (testInventoryHelper (6, " ",
                                          lScheduleInputFilename,
                                          lODInputFilename,
                                          lYieldInputFilename,
                                          isBuiltin, isForSchedule),
                     AIRINV::FlightDateDuplicationException
      );

}

BOOST_AUTO_TEST_CASE (airinv_error_schedule_parsing_failed) {

  // Input file names
  const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
                                                   "/scheduleError02.csv");
  const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
                                             "/ond01.csv");
  const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
                                                "/yieldstore01.csv");

  // State whether the BOM tree should be built-in or parsed from an input file
  const bool isBuiltin = false;
  // State whether the BOM tree should be built from a schedule file (instead
       of from an inventory dump)
  const bool isForSchedule = true;

  // Try sell a default segment.
  BOOST_CHECK_THROW (testInventoryHelper (7, " ",
                                          lScheduleInputFilename,
                                          lODInputFilename,
                                          lYieldInputFilename,
                                          isBuiltin, isForSchedule),
                     AIRINV::ScheduleFileParsingFailedException
      );

}

// End the test suite
BOOST_AUTO_TEST_SUITE_END()

/*!
```

17 Namespace Index

17.1 Namespace List

Here is a list of all namespaces with brief descriptions:

18 Class Index

18.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

19 Class Index

19.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

20 File Index

20.1 File List

Here is a list of all files with brief descriptions:

21 Namespace Documentation

21.1 AIRINV Namespace Reference

Namespaces

- namespace InventoryParserHelper
- namespace ScheduleParserHelper
- namespace DCPParserHelper

Classes

- class AIRINV_Master_Service

  Interface for the AIRINV Services.
- class AIRINV_Service

  Interface for the AIRINV Services.
- class InventoryFileParsingFailedException
- class ScheduleFileParsingFailedException
- class SegmentDateNotFoundException
- class InventoryInputFileNotFoundException
- class ScheduleInputFileNotFoundException
- class FlightDateDuplicationException

- class BookingException
- struct DefaultMap
- struct FlightTypeCode
- struct FlightVisibilityCode
- class BomAbstract
- class BomRootHelper
- class BookingClassHelper
- struct BookingClassStruct
- struct BucketStruct

  Utility Structure for the parsing of Bucket structures.
- struct DCPEventStruct
- struct FareFamilyStruct

  Utility Structure for the parsing of fare family details.
- class FlightDateHelper
- struct FlightDateStruct
- struct FlightPeriodStruct
- class GuillotineBlockHelper
- class InventoryHelper
- class LegCabinHelper
- struct LegCabinStruct
- struct LegStruct
- class SegmentCabinHelper

  Class representing the actual business functions for an airline segment-cabin.
- struct SegmentCabinStruct

  Utility Structure for the parsing of SegmentCabin details.
- class SegmentDateHelper
- struct SegmentStruct
- class InventoryBuilder

  Class handling the generation / instantiation of the Inventory BOM.
- class InventoryGenerator

  Class handling the generation / instantiation of the Inventory BOM.
- class InventoryManager
- class InventoryParser

  Class wrapping the parser entry point.
- class InventoryFileParser
- class ScheduleParser

  Class wrapping the parser entry point.
- class FlightPeriodFileParser
- class DCPEventGenerator
- class DCPParser
- class DCPRuleFileParser
- class FacAirinvMasterServiceContext

  Factory for Bucket.
- class FacAirinvServiceContext
- class FacBomAbstract
- class FacServiceAbstract
- class FacSupervisor
- struct FlightRequestStatus
- class AirInvServer
- class Connection
- struct header
- struct Reply
- struct Request

- class RequestHandler

  The common handler for all incoming requests.
- class RequestParser

  Parser for incoming requests.
- class AIRINV_Master_ServiceContext
- class AIRINV_ServiceContext

  Class holding the context of the AirInv services.
- class ServiceAbstract

Typedefs

- typedef boost::shared_ptr < AIRINV_Service > AIRINV_ServicePtr_T
- typedef boost::shared_ptr < AIRINV_Master_Service > AIRINV_Master_ServicePtr_T
- typedef std::map< const stdair::AirlineCode_T, AIRINV_ServicePtr_T > AIRINV_ServicePtr_Map_T
- typedef std::map< const stdair::DTD_T, double > FRAT5Curve_T
- typedef char char_t
- typedef boost::spirit::classic::file_iterator < char_t > iterator_t
- typedef boost::spirit::classic::scanner < iterator_t > scanner_t
- typedef boost::spirit::classic::rule < scanner_t > rule_t
- typedef boost::spirit::classic::int_parser < unsigned int, 10, 1, 1 > int1_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 2, 2 > uint2_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 2 > uint1_2_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 3 > uint1_3_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 4, 4 > uint4_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 4 > uint1_4_p_t
- typedef boost::spirit::classic::chset < char_t > chset_t
- typedef boost::spirit::classic::impl::loop_traits < chset_t, unsigned int, unsigned int >::type repeat_p_t

- typedef boost::spirit::classic::bounded < uint2_p_t, unsigned int > bounded2_p_t
- typedef boost::spirit::classic::bounded < uint1_2_p_t, unsigned int > bounded1_2_p_t
- typedef boost::spirit::classic::bounded < uint1_3_p_t, unsigned int > bounded1_3_p_t
- typedef boost::spirit::classic::bounded < uint4_p_t, unsigned int > bounded4_p_t
- typedef boost::spirit::classic::bounded < uint1_4_p_t, unsigned int > bounded1_4_p_t
- typedef std::set < stdair::AirportCode_T > AirportList_T
- typedef std::vector < stdair::AirportCode_T > AirportOrderedList_T
- typedef std::vector < BookingClassStruct > BookingClassStructList_T
- typedef std::vector< BucketStruct > BucketStructList_T
- typedef std::vector < FareFamilyStruct > FareFamilyStructList_T
- typedef std::vector < LegCabinStruct > LegCabinStructList_T
- typedef std::vector< LegStruct > LegStructList_T
- typedef std::vector < SegmentCabinStruct > SegmentCabinStructList_T
- typedef std::vector < SegmentStruct > SegmentStructList_T
- typedef std::map< const stdair::Date_T, stdair::SegmentCabin * > DepartureDateSegmentCabinMap_T
- typedef std::map< const std::string, DepartureDateSegmentCabinMap_T > SimilarSegmentCabinSetMap_T
- typedef boost::shared_ptr < boost::thread > ThreadShrPtr_T
- typedef std::vector < ThreadShrPtr_T > ThreadShrPtrList_T
- typedef boost::shared_ptr < Connection > ConnectionShrPtr_T

Variables

- const std::string DEFAULT_AIRLINE_CODE = "BA"
- const FRAT5Curve_T DEFAULT_PICKUP_FRAT5_CURVE

21.1.1 Typedef Documentation

21.1.1.1 typedef boost::shared_ptr<AIRINV_Service> AIRINV::AIRINV_ServicePtr_T

(Smart) Pointer on the AirInv (slave) service handler.

Definition at line 110 of file AIRINV_Types.hpp.

21.1.1.2 typedef boost::shared_ptr<AIRINV_Master_Service> AIRINV::AIRINV_Master_ServicePtr_T

(Smart) Pointer on the AirInv master service handler.

Definition at line 115 of file AIRINV_Types.hpp.

21.1.1.3 typedef std::map<const stdair::AirlineCode_T, AIRINV_ServicePtr_T> AIRINV::AIRINV_ServicePtr_Map_T

Type defining a map of airline codes and the corresponding airline inventories.

Definition at line 122 of file AIRINV_Types.hpp.

21.1.1.4 typedef std::map<const stdair::DTD_T, double> AIRINV::FRAT5Curve_T

Define the FRAT5 curve.

Definition at line 127 of file AIRINV_Types.hpp.

21.1.1.5 typedef char AIRINV::char_t

Definition at line 31 of file BasParserTypes.hpp.

21.1.1.6 typedef boost::spirit::classic::file_iterator<char_t> AIRINV::iterator_t

Definition at line 35 of file BasParserTypes.hpp.

21.1.1.7 typedef boost::spirit::classic::scanner<iterator_t> AIRINV::scanner_t

Definition at line 36 of file BasParserTypes.hpp.

21.1.1.8 typedef boost::spirit::classic::rule<scanner_t> AIRINV::rule_t

Definition at line 37 of file BasParserTypes.hpp.

21.1.1.9 typedef boost::spirit::classic::int_parser<unsigned int, 10, 1, 1> AIRINV::int1_p_t

1-digit-integer parser

Definition at line 45 of file BasParserTypes.hpp.

21.1.1.10 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 2, 2> AIRINV::uint2_p_t

2-digit-integer parser

Definition at line 48 of file BasParserTypes.hpp.

21.1.1.11 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 2> AIRINV::uint1_2_p_t

Up-to-2-digit-integer parser

Definition at line 51 of file BasParserTypes.hpp.

21.1.1.12 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 3> AIRINV::uint1_3_p_t

Up-to-3-digit-integer parser

Definition at line 54 of file BasParserTypes.hpp.

21.1.1.13 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 4, 4> AIRINV::uint4_p_t

4-digit-integer parser

Definition at line 57 of file BasParserTypes.hpp.

21.1.1.14 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 4> AIRINV::uint1_4_p_t

Up-to-4-digit-integer parser

Definition at line 60 of file BasParserTypes.hpp.

21.1.1.15 typedef boost::spirit::classic::chset<char_t> AIRINV::chset_t

character set

Definition at line 63 of file BasParserTypes.hpp.

21.1.1.16 typedef boost::spirit::classic::impl::loop_traits<chset_t, unsigned int, unsigned int>::type AIRINV::repeat_p_t

(Repeating) sequence of a given number of characters: repeat_p(min, max)

Definition at line 69 of file BasParserTypes.hpp.

21.1.1.17 typedef boost::spirit::classic::bounded<uint2_p_t, unsigned int> AIRINV::bounded2_p_t

Bounded-number-of-integers parser

Definition at line 72 of file BasParserTypes.hpp.

21.1.1.18 typedef boost::spirit::classic::bounded<uint1_2_p_t, unsigned int> AIRINV::bounded1_2_p_t

Definition at line 73 of file BasParserTypes.hpp.

21.1.1.19 typedef boost::spirit::classic::bounded<uint1_3_p_t, unsigned int> AIRINV::bounded1_3_p_t

Definition at line 74 of file BasParserTypes.hpp.

21.1.1.20 typedef boost::spirit::classic::bounded<uint4_p_t, unsigned int> AIRINV::bounded4_p_t

Definition at line 75 of file BasParserTypes.hpp.

21.1.1.21 typedef boost::spirit::classic::bounded<uint1_4_p_t, unsigned int> AIRINV::bounded1_4_p_t

Definition at line 76 of file BasParserTypes.hpp.

21.1.1.22 typedef std::set<stdair::AirportCode_T> AIRINV::AirportList_T

Define lists of Airport Codes.

Definition at line 16 of file AirportList.hpp.

21.1.1.23 typedef std::vector<stdair::AirportCode_T> AIRINV::AirportOrderedList_T

Definition at line 17 of file AirportList.hpp.

21.1.1.24 typedef std::vector<BookingClassStruct> AIRINV::BookingClassStructList_T

List of BookingClass structures.

Definition at line 60 of file BookingClassStruct.hpp.

21.1.1.25 typedef std::vector<BucketStruct> AIRINV::BucketStructList_T

List of Bucket structures.

Definition at line 44 of file BucketStruct.hpp.

21.1.1.26 typedef std::vector<FareFamilyStruct> AIRINV::FareFamilyStructList_T

List of FareFamily-Detail structures.

Definition at line 56 of file FareFamilyStruct.hpp.

21.1.1.27 typedef std::vector<LegCabinStruct> AIRINV::LegCabinStructList_T

List of LegCabin-Detail strucutres.

Definition at line 52 of file LegCabinStruct.hpp.

21.1.1.28 typedef std::vector<LegStruct> AIRINV::LegStructList_T

List of Leg structures.

Definition at line 55 of file LegStruct.hpp.

21.1.1.29 typedef std::vector<SegmentCabinStruct> AIRINV::SegmentCabinStructList_T

List of SegmentCabin-Detail strucutres.

Definition at line 48 of file SegmentCabinStruct.hpp.

21.1.1.30 typedef std::vector<SegmentStruct> AIRINV::SegmentStructList_T

List of Segment strucutres.

Definition at line 43 of file SegmentStruct.hpp.

21.1.1.31 typedef std::map<const stdair::Date_T, stdair::SegmentCabin*> AIRINV::DepartureDateSegmentCabinMap_T

Definition at line 29 of file InventoryManager.hpp.

21.1.1.32 typedef std::map<const std::string, DepartureDateSegmentCabinMap_T> AIRINV::SimilarSegmentCabinSetMap_T

Definition at line 31 of file InventoryManager.hpp.

21.1.1.33 typedef boost::shared_ptr<boost::thread> AIRINV::ThreadShrPtr_T

Definition at line 15 of file AirInvServer_ASIO.cpp.

21.1.1.34 typedef std::vector<ThreadShrPtr_T> AIRINV::ThreadShrPtrList_T

Definition at line 16 of file AirInvServer_ASIO.cpp.

21.1.1.35 typedef boost::shared_ptr<Connection> AIRINV::ConnectionShrPtr_T

Shared pointer on a Connection object.

Definition at line 71 of file Connection.hpp.

21.1.2 Variable Documentation

21.1.2.1 const std::string AIRINV::DEFAULT_AIRLINE_CODE = "BA"

Default airline name for the AIRINV_Service.

Definition at line 11 of file BasConst.cpp.

21.1.2.2 const FRAT5Curve_T AIRINV::DEFAULT_PICKUP_FRAT5_CURVE

Initial value:

```
DefaultMap::createPickupFRAT5Curve()
```

Default pick-up FRAT5 curve for Q-equivalent booking conversion.

Definition at line 14 of file BasConst.cpp.

21.2 AIRINV::DCPParserHelper Namespace Reference

Classes

- struct ParserSemanticAction
- struct storeDCPId
- struct storeOrigin
- struct storeDestination
- struct storeDateRangeStart
- struct storeDateRangeEnd
- struct storeStartRangeTime
- struct storeEndRangeTime
- struct storePOS
- struct storeCabinCode
- struct storeChannel
- struct storeAdvancePurchase
- struct storeSaturdayStay
- struct storeChangeFees
- struct storeNonRefundable
- struct storeMinimumStay
- struct storeDCP
- struct storeAirlineCode
- struct storeClass
- struct doEndDCP
- struct DCPRuleParser

Variables

- stdair::int1_p_t int1_p
- stdair::uint2_p_t uint2_p
- stdair::uint4_p_t uint4_p
- stdair::uint1_4_p_t uint1_4_p
- stdair::hour_p_t hour_p
- stdair::minute_p_t minute_p
- stdair::second_p_t second_p
- stdair::year_p_t year_p
- stdair::month_p_t month_p
- stdair::day_p_t day_p

21.2.1 Variable Documentation

21.2.1.1 stdair::int1_p_t AIRINV::DCPParserHelper::int1_p

Namespaces. 1-digit-integer parser

Definition at line 427 of file DCPParserHelper.cpp.

21.2.1.2 stdair::uint2_p_t AIRINV::DCPParserHelper::uint2_p

2-digit-integer parser

Definition at line 430 of file DCPParserHelper.cpp.

21.2.1.3 stdair::uint4_p_t AIRINV::DCPParserHelper::uint4_p

4-digit-integer parser

Definition at line 433 of file DCPParserHelper.cpp.

21.2.1.4 stdair::uint1_4_p_t AIRINV::DCPParserHelper::uint1_4_p

Up-to-4-digit-integer parser

Definition at line 436 of file DCPParserHelper.cpp.

Referenced by AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser().

21.2.1.5 stdair::hour_p_t AIRINV::DCPParserHelper::hour_p

Time element parsers.

Definition at line 439 of file DCPParserHelper.cpp.

Referenced by AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser().

21.2.1.6 stdair::minute_p_t AIRINV::DCPParserHelper::minute_p

Definition at line 440 of file DCPParserHelper.cpp.

Referenced by AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser().

21.2.1.7 stdair::second_p_t AIRINV::DCPParserHelper::second_p

Definition at line 441 of file DCPParserHelper.cpp.

Referenced by AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser().

21.2.1.8 stdair::year_p_t AIRINV::DCPParserHelper::year_p

Date element parsers.

Definition at line 444 of file DCPParserHelper.cpp.

Referenced by AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser().

21.2.1.9 stdair::month_p_t AIRINV::DCPParserHelper::month_p

Definition at line 445 of file DCPParserHelper.cpp.

Referenced by AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser().

21.2.1.10 stdair::day_p_t AIRINV::DCPParserHelper::day_p

Definition at line 446 of file DCPParserHelper.cpp.

Referenced by AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser().

21.3 AIRINV::InventoryParserHelper Namespace Reference

Classes

- struct ParserSemanticAction
- struct storeSnapshotDate
- struct storeAirlineCode
- struct storeFlightNumber
- struct storeFlightDate
- struct storeFlightTypeCode
- struct storeFlightVisibilityCode

- struct storeLegBoardingPoint
- struct storeLegOffPoint
- struct storeBoardingDate
- struct storeBoardingTime
- struct storeOffDate
- struct storeOffTime
- struct storeLegCabinCode
- struct storeSaleableCapacity
- struct storeAU
- struct storeUPR
- struct storeBookingCounter
- struct storeNAV
- struct storeGAV
- struct storeACP
- struct storeETB
- struct storeYieldUpperRange
- struct storeBucketAvaibality
- struct storeSeatIndex
- struct storeSegmentBoardingPoint
- struct storeSegmentOffPoint
- struct storeSegmentCabinCode
- struct storeSegmentCabinBookingCounter
- struct storeClassCode
- struct storeSubclassCode
- struct storeParentClassCode
- struct storeParentSubclassCode
- struct storeCumulatedProtection
- struct storeProtection
- struct storeNego
- struct storeNoShow
- struct storeOverbooking
- struct storeNbOfBkgs
- struct storeNbOfGroupBkgs
- struct storeNbOfPendingGroupBkgs
- struct storeNbOfStaffBkgs
- struct storeNbOfWLBkgs
- struct storeClassETB
- struct storeClassAvailability
- struct storeSegmentAvailability
- struct storeRevenueAvailability
- struct storeFamilyCode
- struct storeFClasses
- struct doEndFlightDate
- struct InventoryParser

Functions

- repeat_p_t airline_code_p (chset_t("0-9A-Z").derived(), 2, 3)
- bounded1_4_p_t flight_number_p (uint1_4_p.derived(), 0u, 9999u)
- bounded2_p_t year_p (uint2_p.derived(), 0u, 99u)
- bounded2_p_t month_p (uint2_p.derived(), 1u, 12u)
- bounded2_p_t day_p (uint2_p.derived(), 1u, 31u)
- repeat_p_t dow_p (chset_t("0-1").derived().derived(), 7, 7)
- repeat_p_t airport_p (chset_t("0-9A-Z").derived(), 3, 3)

- bounded1_2_p_t hours_p (uint1_2_p.derived(), 0u, 24u)
- bounded2_p_t minutes_p (uint2_p.derived(), 0u, 59u)
- bounded2_p_t seconds_p (uint2_p.derived(), 0u, 59u)
- chset_t cabin_code_p ("A-Z")
- chset_t class_code_p ("A-Z")
- chset_t passenger_type_p ("A-Z")
- repeat_p_t class_code_list_p (chset_t("A-Z").derived(), 1, 26)
- bounded1_3_p_t stay_duration_p (uint1_3_p.derived(), 0u, 999u)

Variables

- int1_p_t int1_p
- uint2_p_t uint2_p
- uint1_2_p_t uint1_2_p
- uint1_3_p_t uint1_3_p
- uint4_p_t uint4_p
- uint1_4_p_t uint1_4_p
- int1_p_t family_code_p

21.3.1 Function Documentation

21.3.1.1 repeat_p_t AIRINV::InventoryParserHelper::airline_code_p (chset_t("0-9A-Z").derived() , 2 , 3)

Airline Code Parser: repeat_p(2,3)[chset_p("0-9A-Z")]

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.2 bounded1_4_p_t AIRINV::InventoryParserHelper::flight_number_p (uint1_4_p. *derived()*, 0u , 9999u)

Flight Number Parser: limit_d(0u, 9999u)[uint1_4_p]

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.3 bounded2_p_t AIRINV::InventoryParserHelper::year_p (uint2_p. *derived()*, 0u , 99u)

Year Parser: limit_d(00u, 99u)[uint4_p]

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.4 bounded2_p_t AIRINV::InventoryParserHelper::month_p (uint2_p. *derived()*, 1u , 12u)

Month Parser: limit_d(1u, 12u)[uint2_p]

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.5 bounded2_p_t AIRINV::InventoryParserHelper::day_p (uint2_p. *derived()*, 1u , 31u)

Day Parser: limit_d(1u, 31u)[uint2_p]

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.6 repeat_p_t AIRINV::InventoryParserHelper::dow_p (chset_t("0-1").derived().derived() , 7 , 7)

DOW (Day-Of-the-Week) Parser: repeat_p(7)[chset_p("0-1")]

21.3.1.7 repeat_p_t AIRINV::InventoryParserHelper::airport_p (chset_t("0-9A-Z").derived() , 3 , 3)

Airport Parser: repeat_p(3)[chset_p("0-9A-Z")]

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.8 bounded1_2_p_t AIRINV::InventoryParserHelper::hours_p (uint1_2_p. *derived()*, 0u , 24u)

Hour Parser: limit_d(0u, 24u)[uint2_p]

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.9 bounded2_p_t AIRINV::InventoryParserHelper::minutes_p (uint2_p. *derived()*, 0u , 59u)

Minute Parser: limit_d(0u, 59u)[uint2_p]

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.10 bounded2_p_t AIRINV::InventoryParserHelper::seconds_p (uint2_p. *derived()*, 0u , 59u)

Second Parser: limit_d(0u, 59u)[uint2_p]

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.11 chset_t AIRINV::InventoryParserHelper::cabin_code_p ("A-Z")

Cabin code parser: chset_p("A-Z")

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.12 chset_t AIRINV::InventoryParserHelper::class_code_p ("A-Z")

Booking class code parser: chset_p("A-Z")

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.13 chset_t AIRINV::InventoryParserHelper::passenger_type_p ("A-Z")

Passenger type parser: chset_p("A-Z")

21.3.1.14 repeat_p_t AIRINV::InventoryParserHelper::class_code_list_p (chset_t("A-Z").derived() , 1 , 26)

Class Code List Parser: repeat_p(1,26)[chset_p("A-Z")]

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.1.15 bounded1_3_p_t AIRINV::InventoryParserHelper::stay_duration_p (uint1_3_p. *derived()*, 0u , 999u)

Stay duration Parser: limit_d(0u, 999u)[uint3_p]

21.3.2 Variable Documentation

21.3.2.1 int1_p_t AIRINV::InventoryParserHelper::int1_p

1-digit-integer parser

Definition at line 791 of file InventoryParserHelper.cpp.

21.3.2.2 uint2_p_t AIRINV::InventoryParserHelper::uint2_p

2-digit-integer parser

Definition at line 794 of file InventoryParserHelper.cpp.

21.3.2.3 uint1_2_p_t AIRINV::InventoryParserHelper::uint1_2_p

Up-to-2-digit-integer parser

Definition at line 797 of file InventoryParserHelper.cpp.

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.2.4 uint1_3_p_t AIRINV::InventoryParserHelper::uint1_3_p

Up-to-3-digit-integer parser

Definition at line 800 of file InventoryParserHelper.cpp.

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.3.2.5 uint4_p_t AIRINV::InventoryParserHelper::uint4_p

4-digit-integer parser

Definition at line 803 of file InventoryParserHelper.cpp.

21.3.2.6 uint1_4_p_t AIRINV::InventoryParserHelper::uint1_4_p

Up-to-4-digit-integer parser

Definition at line 806 of file InventoryParserHelper.cpp.

21.3.2.7 int1_p_t AIRINV::InventoryParserHelper::family_code_p

Family code parser

Definition at line 848 of file InventoryParserHelper.cpp.

Referenced by AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition().

21.4 AIRINV::ScheduleParserHelper Namespace Reference

Classes

- struct ParserSemanticAction
- struct storeAirlineCode
- struct storeFlightNumber
- struct storeDateRangeStart
- struct storeDateRangeEnd
- struct storeDow
- struct storeLegBoardingPoint
- struct storeLegOffPoint
- struct storeBoardingTime
- struct storeOffTime
- struct storeElapsedTime
- struct storeLegCabinCode
- struct storeCapacity
- struct storeSegmentSpecificity
- struct storeSegmentBoardingPoint
- struct storeSegmentOffPoint
- struct storeSegmentCabinCode
- struct storeClasses
- struct storeFamilyCode
- struct storeFClasses
- struct doEndFlight
- struct FlightPeriodParser

Functions

- repeat_p_t airline_code_p (chset_t("0-9A-Z").derived(), 2, 3)
- bounded1_4_p_t flight_number_p (uint1_4_p.derived(), 0u, 9999u)

- bounded4_p_t year_p (uint4_p.derived(), 2000u, 2099u)
- bounded2_p_t month_p (uint2_p.derived(), 1u, 12u)
- bounded2_p_t day_p (uint2_p.derived(), 1u, 31u)
- repeat_p_t dow_p (chset_t("0-1").derived().derived(), 7, 7)
- repeat_p_t airport_p (chset_t("0-9A-Z").derived(), 3, 3)
- bounded2_p_t hours_p (uint2_p.derived(), 0u, 23u)
- bounded2_p_t minutes_p (uint2_p.derived(), 0u, 59u)
- bounded2_p_t seconds_p (uint2_p.derived(), 0u, 59u)
- chset_t cabin_code_p ("A-Z")
- repeat_p_t class_code_list_p (chset_t("A-Z").derived(), 1, 26)

Variables

- int1_p_t int1_p
- uint2_p_t uint2_p
- uint4_p_t uint4_p
- uint1_4_p_t uint1_4_p
- int1_p_t family_code_p

21.4.1 Function Documentation

21.4.1.1 repeat_p_t AIRINV::ScheduleParserHelper::airline_code_p (chset_t("0-9A-Z").derived() , 2 , 3)

Airline Code Parser: repeat_p(2,3)[chset_p("0-9A-Z")]

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.1.2 bounded1_4_p_t AIRINV::ScheduleParserHelper::flight_number_p (uint1_4_p. *derived()*, 0u , 9999u)

Flight Number Parser: limit_d(0u, 9999u)[uint1_4_p]

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.1.3 bounded4_p_t AIRINV::ScheduleParserHelper::year_p (uint4_p. *derived()*, 2000u , 2099u)

Year Parser: limit_d(2000u, 2099u)[uint4_p]

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.1.4 bounded2_p_t AIRINV::ScheduleParserHelper::month_p (uint2_p. *derived()*, 1u , 12u)

Month Parser: limit_d(1u, 12u)[uint2_p]

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.1.5 bounded2_p_t AIRINV::ScheduleParserHelper::day_p (uint2_p. *derived()*, 1u , 31u)

Day Parser: limit_d(1u, 31u)[uint2_p]

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.1.6 repeat_p_t AIRINV::ScheduleParserHelper::dow_p (chset_t("0-1").derived().derived() , 7 , 7)

DOW (Day-Of-the-Week) Parser: repeat_p(7)[chset_p("0-1")]

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.1.7 repeat_p_t AIRINV::ScheduleParserHelper::airport_p (chset_t("0-9A-Z").derived() , 3 , 3)

Airport Parser: repeat_p(3)[chset_p("0-9A-Z")]

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.1.8 bounded2_p_t AIRINV::ScheduleParserHelper::hours_p (uint2_p. *derived()*, 0u , 23u)

Hour Parser: limit_d(0u, 23u)[uint2_p]

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.1.9 bounded2_p_t AIRINV::ScheduleParserHelper::minutes_p (uint2_p. *derived()*, 0u , 59u)

Minute Parser: limit_d(0u, 59u)[uint2_p]

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.1.10 bounded2_p_t AIRINV::ScheduleParserHelper::seconds_p (uint2_p. *derived()*, 0u , 59u)

Second Parser: limit_d(0u, 59u)[uint2_p]

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.1.11 chset_t AIRINV::ScheduleParserHelper::cabin_code_p ("A-Z")

Cabin Code Parser: chset_p("A-Z")

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.1.12 repeat_p_t AIRINV::ScheduleParserHelper::class_code_list_p (chset_t("A-Z").derived() , 1 , 26)

Class Code List Parser: repeat_p(1,26)[chset_p("A-Z")]

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.2 Variable Documentation

21.4.2.1 int1_p_t AIRINV::ScheduleParserHelper::int1_p

1-digit-integer parser

Definition at line 409 of file ScheduleParserHelper.cpp.

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.4.2.2 uint2_p_t AIRINV::ScheduleParserHelper::uint2_p

2-digit-integer parser

Definition at line 412 of file ScheduleParserHelper.cpp.

21.4.2.3 uint4_p_t AIRINV::ScheduleParserHelper::uint4_p

4-digit-integer parser

Definition at line 415 of file ScheduleParserHelper.cpp.

21.4.2.4 uint1_4_p_t AIRINV::ScheduleParserHelper::uint1_4_p

Up-to-4-digit-integer parser

Definition at line 418 of file ScheduleParserHelper.cpp.

21.4.2.5 int1_p_t AIRINV::ScheduleParserHelper::family_code_p

Family code parser

Definition at line 454 of file ScheduleParserHelper.cpp.

Referenced by AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition().

21.5 stdair Namespace Reference

Forward declarations.

Classes

- struct BomPropertyTree

21.5.1 Detailed Description

Forward declarations.

21.6 swift Namespace Reference

The wrapper namespace.

Classes

- class SKeymap

  The readline keymap wrapper.
- class SReadline

  The readline library wrapper.

21.6.1 Detailed Description

The wrapper namespace. The namespace is also used for other library elements.

22 Class Documentation

22.1 AIRINV::AIRINV_Master_Service Class Reference

Interface for the AIRINV Services.

`#include <airinv/AIRINV_Master_Service.hpp>`

Public Member Functions

- AIRINV_Master_Service (const stdair::BasLogParams &, const stdair::BasDBParams &)
- AIRINV_Master_Service (const stdair::BasLogParams &)
- AIRINV_Master_Service (stdair::STDAIR_ServicePtr_T)
- void parseAndLoad (const stdair::Filename_T &iInventoryFilename)
- void parseAndLoad (const stdair::Filename_T &iScheduleFilename, const stdair::Filename_T &iODInputFilename, const AIRRAC::YieldFilePath &iYieldFilename)
- ~AIRINV_Master_Service ()
- void initSnapshotAndRMEvents (const stdair::Date_T &, const stdair::Date_T &)
- void buildSampleBom ()
- void calculateAvailability (stdair::TravelSolutionStruct &, const stdair::PartnershipTechnique &)
- bool sell (const std::string &iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- bool cancel (const std::string &iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- void takeSnapshots (const stdair::SnapshotStruct &)

- void optimise (const stdair::RMEventStruct &, const stdair::ForecastingMethod &, const stdair::PartnershipTechnique &)
- std::string jsonExport (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const
- std::string list (const stdair::AirlineCode_T &iAirlineCode="all", const stdair::FlightNumber_T &iFlightNumber=0) const
- bool check (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const
- std::string csvDisplay () const
- std::string csvDisplay (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const

22.1.1 Detailed Description

Interface for the AIRINV Services.

Definition at line 41 of file AIRINV_Master_Service.hpp.

22.1.2 Constructor & Destructor Documentation

22.1.2.1 AIRINV::AIRINV_Master_Service::AIRINV_Master_Service (const stdair::BasLogParams & *iLogParams,* const stdair::BasDBParams & *iDBParams*)

Constructor.

The initSlaveAirinvService() method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.

Moreover, database connection parameters are given, so that a session can be created on the corresponding database.

Parameters

const	stdair::BasLogParams& Parameters for the output log stream.
const	stdair::BasDBParams& Parameters for the database access.

Definition at line 44 of file AIRINV_Master_Service.cpp.

22.1.2.2 AIRINV::AIRINV_Master_Service::AIRINV_Master_Service (const stdair::BasLogParams & *iLogParams*)

Constructor.

The initSlaveAirinvService() method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.

Parameters

const	stdair::BasLogParams& Parameters for the output log stream.

Definition at line 66 of file AIRINV_Master_Service.cpp.

22.1.2.3 AIRINV::AIRINV_Master_Service::AIRINV_Master_Service (stdair::STDAIR_ServicePtr_T *ioSTDAIR_Service_ptr*)

Constructor.

The initSlaveAirinvService() method is called; see the corresponding documentation for more details.

Moreover, as no reference on any output stream is given, it is assumed that the StdAir log service has already been initialised with the proper log output stream by some other methods in the calling chain (for instance, when the AIRINV_Master_Service is itself being initialised by another library service such as SIMCRS_Service).

Parameters

stdair::STDAIR_ServicePtr_T	Reference on the STDAIR service.

Definition at line 87 of file AIRINV_Master_Service.cpp.

22.1.2.4 AIRINV::AIRINV_Master_Service::~AIRINV_Master_Service ( )

Destructor.

Definition at line 103 of file AIRINV_Master_Service.cpp.

22.1.3 Member Function Documentation

22.1.3.1 void AIRINV::AIRINV_Master_Service::parseAndLoad (const stdair::Filename_T & *iInventoryFilename*)

Parse the inventory dump and load it into memory.

The CSV file, describing the airline inventory for the simulator, is parsed and instantiated in memory accordingly.

Parameters

const	stdair::Filename_T& Filename of the input demand file.

Definition at line 204 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::parseAndLoad().

22.1.3.2 void AIRINV::AIRINV_Master_Service::parseAndLoad (const stdair::Filename_T & *iScheduleFilename,* const stdair::Filename_T & *iODInputFilename,* const AIRRAC::YieldFilePath & *iYieldFilename*)

Parse the schedule and O&D input files, and load them into memory.

The CSV files, describing the airline schedule and the O&Ds for the simulator, are parsed and instantiated in memory accordingly.

Parameters

const	stdair::Filename_T& Filename of the input schedule file.
const	stdair::Filename_T& Filename of the input O&D file.
const	AIRRAC::YieldFilePath& Filename of the input yield file.

Definition at line 227 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::parseAndLoad().

22.1.3.3 void AIRINV::AIRINV_Master_Service::initSnapshotAndRMEvents (const stdair::Date_T & *iStartDate,* const stdair::Date_T & *iEndDate*)

Initialise the snapshot and RM events for the inventories.

Parameters

const	stdiar::Date_T& Parameters for the start date.
const	stdiar::Date_T& Parameters for the end date.

Definition at line 429 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::initRMEvents().

22.1.3.4 void AIRINV::AIRINV_Master_Service::buildSampleBom ( )

Build a sample BOM tree, and attach it to the BomRoot instance.

The BOM tree is based on two actual inventories (one for BA, another for AF). Each inventory contains one flight. One of those flights has two legs (and therefore three segments).

Definition at line 252 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::buildSampleBom().

22.1.3.5 void AIRINV::AIRINV_Master_Service::calculateAvailability (stdair::TravelSolutionStruct & *ioTravelSolution,* const stdair::PartnershipTechnique & *iPartnershipTechnique*)

Compute the availability for the given travel solution.

Definition at line 468 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::calculateAvailability().

22.1.3.6 bool AIRINV::AIRINV_Master_Service::sell (const std::string & *iSegmentDateKey,* const stdair::ClassCode_T & *iClassCode,* const stdair::PartySize_T & *iPartySize*)

Register a booking.

Parameters

const	std::string& Key for the segment on which the sale is made.
const	stdair::ClassCode_T& Class code where the sale is made.
const	stdair::PartySize_T& Party size.

Returns

bool Whether or not the sale was successfull

Definition at line 499 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::sell().

22.1.3.7 bool AIRINV::AIRINV_Master_Service::cancel (const std::string & *iSegmentDateKey,* const stdair::ClassCode_T & *iClassCode,* const stdair::PartySize_T & *iPartySize*)

Register a cancellation.

Parameters

const	std::string& Key for the segment on which the cancellation is made.
const	stdair::ClassCode_T& Class code where the sale is made.
const	stdair::PartySize_T& Party size.

Returns

bool Whether or not the sale was successfull

Definition at line 541 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::cancel().

22.1.3.8 void AIRINV::AIRINV_Master_Service::takeSnapshots (const stdair::SnapshotStruct & *iSnapshot*)

Take inventory snapshots.

Definition at line 584 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::takeSnapshots().

22.1.3.9 void AIRINV::AIRINV_Master_Service::optimise (const stdair::RMEventStruct & *iRMEvent,* const stdair::ForecastingMethod & *iForecastingMethod,* const stdair::PartnershipTechnique & *iPartnershipTechnique*)

Optimise (revenue management) an flight-date/network-date

Definition at line 610 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::optimise().

22.1.3.10 std::string AIRINV::AIRINV_Master_Service::jsonExport (const stdair::AirlineCode_T & *iAirlineCode,* const stdair::FlightNumber_T & *iFlightNumber,* const stdair::Date_T & *iDepartureDate*) const

Recursively dump, in the returned string and in JSON format, the flight-date corresponding to the parameters given as input.

Parameters

const	stdair::AirlineCode_T& Airline code of the flight to dump.
const	stdair::FlightNumber_T& Flight number of the flight to dump.
const	stdair::Date_T& Departure date of the flight to dump.

Returns

std::string Output string in which the BOM tree is JSON-ified.

Definition at line 304 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::jsonExport().

22.1.3.11 std::string AIRINV::AIRINV_Master_Service::list (const stdair::AirlineCode_T & *iAirlineCode* = `"all"`, const stdair::FlightNumber_T & *iFlightNumber* = `0`) const

Display the list of flight-dates (contained within the BOM tree) corresponding to the parameters given as input.

Parameters

const	AirlineCode& Airline for which the flight-dates should be displayed. If set to "all" (the default), all the inventories will be displayed.
const	FlightNumber_T& Flight number for which all the departure dates should be displayed. If set to 0 (the default), all the flight numbers will be displayed.

Returns

std::string Output string in which the BOM tree is logged/dumped.

Definition at line 330 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::list().

22.1.3.12 bool AIRINV::AIRINV_Master_Service::check (const stdair::AirlineCode_T & *iAirlineCode,* const stdair::FlightNumber_T & *iFlightNumber,* const stdair::Date_T & *iDepartureDate*) const

Check whether the given flight-date is a valid one.

Parameters

const	stdair::AirlineCode_T& Airline code of the flight to check.
const	stdair::FlightNumber_T& Flight number of the flight to check.
const	stdair::Date_T& Departure date of the flight to check.

Returns

bool Whether or not the given flight date is valid.

Definition at line 355 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::check().

22.1.3.13 std::string AIRINV::AIRINV_Master_Service::csvDisplay ( ) const

Recursively display (dump in the returned string) the objects of the BOM tree.

Returns

std::string Output string in which the BOM tree is logged/dumped.

Definition at line 380 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::csvDisplay().

22.1.3.14 std::string AIRINV::AIRINV_Master_Service::csvDisplay (const stdair::AirlineCode_T & *iAirlineCode,* const stdair::FlightNumber_T & *iFlightNumber,* const stdair::Date_T & *iDepartureDate*) const

Recursively display (dump in the returned string) the flight-date corresponding to the parameters given as input.

Parameters

const	stdair::AirlineCode_T& Airline code of the flight to display.
const	stdair::FlightNumber_T& Flight number of the flight to display.
const	stdair::Date_T& Departure date of the flight to display.

Returns

std::string Output string in which the BOM tree is logged/dumped.

Definition at line 403 of file AIRINV_Master_Service.cpp.

References AIRINV::AIRINV_Service::csvDisplay().

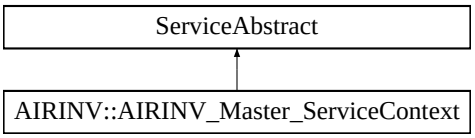
The documentation for this class was generated from the following files:

- airinv/AIRINV_Master_Service.hpp
- airinv/service/AIRINV_Master_Service.cpp

22.2 AIRINV::AIRINV_Master_ServiceContext Class Reference

`#include <airinv/service/AIRINV_Master_ServiceContext.hpp>`

Inheritance diagram for AIRINV::AIRINV_Master_ServiceContext:



Friends

- class AIRINV_Master_Service
- class FacAirinvMasterServiceContext

22.2.1 Detailed Description

Class holding the context of the Airinv services.

Definition at line 26 of file AIRINV_Master_ServiceContext.hpp.

22.2.2 Friends And Related Function Documentation

22.2.2.1 friend class AIRINV_Master_Service [friend]

The AIRINV_Master_Service class should be the sole class to get access to ServiceContext content: general users do not want to bother with a context interface.

Definition at line 32 of file AIRINV_Master_ServiceContext.hpp.

22.2.2.2 friend class FacAirinvMasterServiceContext [friend]

Definition at line 33 of file AIRINV_Master_ServiceContext.hpp.

The documentation for this class was generated from the following files:

- airinv/service/AIRINV_Master_ServiceContext.hpp
- airinv/service/AIRINV_Master_ServiceContext.cpp

22.3 AIRINV::AIRINV_Service Class Reference

Interface for the AIRINV Services.

`#include <airinv/AIRINV_Service.hpp>`

Public Member Functions

- AIRINV_Service (const stdair::BasLogParams &, const stdair::BasDBParams &)
- AIRINV_Service (const stdair::BasLogParams &)
- AIRINV_Service (stdair::STDAIR_ServicePtr_T)
- void parseAndLoad (const stdair::Filename_T &iInventoryFilename)
- void parseAndLoad (const stdair::Filename_T &iScheduleFilename, const stdair::Filename_T &iODInputFilename, const AIRRAC::YieldFilePath &iYieldFilename)
- ~AIRINV_Service ()
- void buildSampleBom ()
- stdair::RMEventList_T initRMEvents (const stdair::Date_T &iStartDate, const stdair::Date_T &iEndDate)
- void calculateAvailability (stdair::TravelSolutionStruct &, const stdair::PartnershipTechnique &)
- bool sell (const std::string &iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- bool cancel (const std::string &iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- void takeSnapshots (const stdair::AirlineCode_T &, const stdair::DateTime_T &)
- void optimise (const stdair::AirlineCode_T &, const stdair::KeyDescription_T &, const stdair::DateTime_T &, const stdair::ForecastingMethod &, const stdair::PartnershipTechnique &)
- std::string jsonExport (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const
- std::string list (const stdair::AirlineCode_T &iAirlineCode="all", const stdair::FlightNumber_T &iFlightNumber=0) const
- bool check (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const
- std::string csvDisplay () const
- std::string csvDisplay (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const

22.3.1 Detailed Description

Interface for the AIRINV Services.

Definition at line 37 of file AIRINV_Service.hpp.

22.3.2 Constructor & Destructor Documentation

22.3.2.1 AIRINV::AIRINV_Service::AIRINV_Service (const stdair::BasLogParams & *iLogParams,* const stdair::BasDBParams & *iDBParams*)

Constructor.

The initAirinvService() method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.

Moreover, database connection parameters are given, so that a session can be created on the corresponding database.

Parameters

const	stdair::BasLogParams& Parameters for the output log stream.
const	stdair::BasDBParams& Parameters for the database access.

Definition at line 74 of file AIRINV_Service.cpp.

22.3.2.2 AIRINV::AIRINV_Service::AIRINV_Service (const stdair::BasLogParams & *iLogParams*)

Constructor.

The initAirinvService() method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.

Parameters

const	stdair::BasLogParams& Parameters for the output log stream.

Definition at line 48 of file AIRINV_Service.cpp.

22.3.2.3 AIRINV::AIRINV_Service::AIRINV_Service (stdair::STDAIR_ServicePtr_T *ioSTDAIR_Service_ptr*)

Constructor.

The initAirinvService() method is called; see the corresponding documentation for more details.

Moreover, as no reference on any output stream is given, it is assumed that the StdAir log service has already been initialised with the proper log output stream by some other methods in the calling chain (for instance, when the AIRINV_Master_Service is itself being initialised by another library service such as SIMCRS_Service).

Parameters

stdair::STDAIR_ServicePtr_T	Reference on the STDAIR service.
const	stdair::Filename_T& Filename of the input inventory file.

Definition at line 101 of file AIRINV_Service.cpp.

22.3.2.4 AIRINV::AIRINV_Service::~AIRINV_Service ( )

Destructor.

Definition at line 124 of file AIRINV_Service.cpp.

22.3.3 Member Function Documentation

22.3.3.1 void AIRINV::AIRINV_Service::parseAndLoad (const stdair::Filename_T & *iInventoryFilename*)

Parse the inventory dump and load it into memory.

The CSV file, describing the airline inventory for the simulator, is parsed and instantiated in memory accordingly.

Parameters

const	stdair::Filename_T& Filename of the input demand file.

Definition at line 251 of file AIRINV_Service.cpp.

References AIRINV::InventoryParser::buildInventory().

Referenced by AIRINV::AIRINV_Master_Service::parseAndLoad().

22.3.3.2 void AIRINV::AIRINV_Service::parseAndLoad (const stdair::Filename_T & *iScheduleFilename,* const stdair::Filename_T & *iODInputFilename,* const AIRRAC::YieldFilePath & *iYieldFilename*)

Parse the schedule and O&D input files, and load them into memory.

The CSV files, describing the airline schedule and the O&Ds for the simulator, are parsed and instantiated in memory accordingly.

Parameters

const	stdair::Filename_T& Filename of the input schedule file.
const	stdair::Filename_T& Filename of the input O&D file.
const	AIRRAC::YieldFilePath& Filename of the input yield file.

Definition at line 266 of file AIRINV_Service.cpp.

References AIRINV::ScheduleParser::generateInventories().

22.3.3.3 void AIRINV::AIRINV_Service::buildSampleBom ( )

Build a sample BOM tree, and attach it to the BomRoot instance.

The BOM tree is based on two actual inventories (one for BA, another for AF). Each inventory contains one flight. One of those flights has two legs (and therefore three segments).

Definition at line 290 of file AIRINV_Service.cpp.

References AIRINV::InventoryManager::buildSimilarSegmentCabinSets().

Referenced by AIRINV::AIRINV_Master_Service::buildSampleBom().

22.3.3.4 stdair::RMEventList_T AIRINV::AIRINV_Service::initRMEvents (const stdair::Date_T & *iStartDate,* const stdair::Date_T & *iEndDate*)

Initialise the RM events for the inventory.

Parameters

const	stdair::Date_T& Parameters for the start date.
const	stdair::Date_T& Parameters for the end date.

Definition at line 493 of file AIRINV_Service.cpp.

Referenced by AIRINV::AIRINV_Master_Service::initSnapshotAndRMEvents().

22.3.3.5 void AIRINV::AIRINV_Service::calculateAvailability (stdair::TravelSolutionStruct & *ioTravelSolution*, const stdair::PartnershipTechnique & *iPartnershipTechnique*)

Compute the availability for the given travel solution.

Definition at line 525 of file AIRINV_Service.cpp.

Referenced by AIRINV::AIRINV_Master_Service::calculateAvailability().

22.3.3.6 bool AIRINV::AIRINV_Service::sell (const std::string & *iSegmentDateKey*, const stdair::ClassCode_T & *iClassCode*, const stdair::PartySize_T & *iPartySize*)

Register a booking.

Parameters

const	std::string& Key for the segment on which the sale is made
const	stdair::ClassCode_T& Class code where the sale is made
const	stdair::PartySize_T& Party size

Returns

bool Whether or not the sale was successfull

Definition at line 552 of file AIRINV_Service.cpp.

Referenced by AIRINV::AIRINV_Master_Service::sell().

22.3.3.7 bool AIRINV::AIRINV_Service::cancel (const std::string & *iSegmentDateKey*, const stdair::ClassCode_T & *iClassCode*, const stdair::PartySize_T & *iPartySize*)

Register a cancellation.

Parameters

const	std::string& Key for the segment on which the cancellation is made
const	stdair::ClassCode_T& Class code where the sale is made
const	stdair::PartySize_T& Party size

Returns

bool Whether or not the sale was successfull

Definition at line 593 of file AIRINV_Service.cpp.

Referenced by AIRINV::AIRINV_Master_Service::cancel().

22.3.3.8 void AIRINV::AIRINV_Service::takeSnapshots (const stdair::AirlineCode_T & *iAirlineCode*, const stdair::DateTime_T & *iSnapshotTime*)

Take inventory snapshots.

Definition at line 637 of file AIRINV_Service.cpp.

Referenced by AIRINV::AIRINV_Master_Service::takeSnapshots().

22.3.3.9 void AIRINV::AIRINV_Service::optimise (const stdair::AirlineCode_T & *iAirlineCode*, const stdair::KeyDescription_T & *iFDDescription*, const stdair::DateTime_T & *iRMEventTime*, const stdair::ForecastingMethod & *iForecastingMethod*, const stdair::PartnershipTechnique & *iPartnershipTechnique*)

Optimise (revenue management) an flight-date/network-date

Definition at line 664 of file AIRINV_Service.cpp.

Referenced by AIRINV::AIRINV_Master_Service::optimise().

22.3.3.10 std::string AIRINV::AIRINV_Service::jsonExport (const stdair::AirlineCode_T & *iAirlineCode,* const stdair::FlightNumber_T & *iFlightNumber,* const stdair::Date_T & *iDepartureDate*) const

Recursively dump, in the returned string and in JSON format, the flight-date corresponding to the parameters given as input.

Parameters

const	stdair::AirlineCode_T& Airline code of the flight to dump.
const	stdair::FlightNumber_T& Flight number of the flight to dump.
const	stdair::Date_T& Departure date of the flight to dump.

Returns

std::string Output string in which the BOM tree is JSON-ified.

Definition at line 376 of file AIRINV_Service.cpp.

Referenced by AIRINV::AIRINV_Master_Service::jsonExport().

22.3.3.11 std::string AIRINV::AIRINV_Service::list (const stdair::AirlineCode_T & *iAirlineCode* = `"all"`, const stdair::FlightNumber_T & *iFlightNumber* = `0`) const

Display the list of flight-dates (contained within the BOM tree) corresponding to the parameters given as input.

Parameters

const	AirlineCode& Airline for which the flight-dates should be displayed. If set to "all" (the default), all the inventories will be displayed.
const	FlightNumber_T& Flight number for which all the departure dates should be displayed. If set to 0 (the default), all the flight numbers will be displayed.

Returns

std::string Output string in which the BOM tree is logged/dumped.

Definition at line 400 of file AIRINV_Service.cpp.

Referenced by AIRINV::AIRINV_Master_Service::list().

22.3.3.12 bool AIRINV::AIRINV_Service::check (const stdair::AirlineCode_T & *iAirlineCode,* const stdair::FlightNumber_T & *iFlightNumber,* const stdair::Date_T & *iDepartureDate*) const

Check whether the given flight-date is a valid one.

Parameters

const	stdair::AirlineCode_T& Airline code of the flight to check.
const	stdair::FlightNumber_T& Flight number of the flight to check.
const	stdair::Date_T& Departure date of the flight to check.

Returns

bool Whether or not the given flight date is valid.

Definition at line 424 of file AIRINV_Service.cpp.

Referenced by AIRINV::AIRINV_Master_Service::check().

22.3.3.13 std::string AIRINV::AIRINV_Service::csvDisplay ( ) const

Recursively display (dump in the returned string) the objects of the BOM tree.

Returns

std::string Output string in which the BOM tree is logged/dumped.

Definition at line 448 of file AIRINV_Service.cpp.

Referenced by AIRINV::AIRINV_Master_Service::csvDisplay().

22.3.3.14 std::string AIRINV::AIRINV_Service::csvDisplay (const stdair::AirlineCode_T & *iAirlineCode*, const stdair::FlightNumber_T & *iFlightNumber*, const stdair::Date_T & *iDepartureDate*) const

Recursively display (dump in the returned string) the flight-date corresponding to the parameters given as input.

Parameters

const	stdair::AirlineCode_T& Airline code of the flight to display
const	stdair::FlightNumber_T& Flight number of the flight to display.
const	stdair::Date_T& Departure date of the flight to display.

Returns

std::string Output string in which the BOM tree is logged/dumped.

Definition at line 469 of file AIRINV_Service.cpp.

The documentation for this class was generated from the following files:

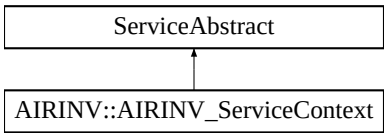
- airinv/AIRINV_Service.hpp
- airinv/service/AIRINV_Service.cpp

22.4 AIRINV::AIRINV_ServiceContext Class Reference

Class holding the context of the AirInv services.

`#include <airinv/service/AIRINV_ServiceContext.hpp>`

Inheritance diagram for AIRINV::AIRINV_ServiceContext:



Friends

- class AIRINV_Service
- class FacAirinvServiceContext

22.4.1 Detailed Description

Class holding the context of the AirInv services.

Definition at line 26 of file AIRINV_ServiceContext.hpp.

22.4.2 Friends And Related Function Documentation

22.4.2.1 friend class AIRINV_Service [friend]

The AIRINV_Service class should be the sole class to get access to ServiceContext content: general users do not want to bother with a context interface.

Definition at line 32 of file AIRINV_ServiceContext.hpp.

22.4.2.2 friend class FacAirinvServiceContext [friend]

Definition at line 33 of file AIRINV_ServiceContext.hpp.

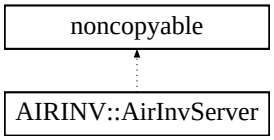
The documentation for this class was generated from the following files:

- airinv/service/AIRINV_ServiceContext.hpp
- airinv/service/AIRINV_ServiceContext.cpp

22.5 AIRINV::AirInvServer Class Reference

`#include <airinv/server/AirInvServer.hpp>`

Inheritance diagram for AIRINV::AirInvServer:



Public Member Functions

- AirInvServer (const std::string &address, const std::string &port, const stdair::AirlineCode_T &iAirlineCode, std::size_t thread_pool_size)
- ~AirInvServer ()
- void run ()
- void stop ()

22.5.1 Detailed Description

The top-level class of the AirInv server.

Definition at line 23 of file AirInvServer.hpp.

22.5.2 Constructor & Destructor Documentation

22.5.2.1 AIRINV::AirInvServer::AirInvServer (const std::string & *address*, const std::string & *port*, const stdair::AirlineCode_T & *iAirlineCode*, std::size_t *thread_pool_size*)

Constructor.

Construct the server to listen on the specified TCP address and port, and serve up files from the given directory.

Definition at line 20 of file AirInvServer_ASIO.cpp.

22.5.2.2 AIRINV::AirInvServer::~AirInvServer ( )

Destructor.

Definition at line 46 of file AirInvServer_ASIO.cpp.

22.5.3 Member Function Documentation

22.5.3.1 void AIRINV::AirInvServer::run ( )

Run the server's io_service loop.

Definition at line 50 of file AirInvServer_ASIO.cpp.

Referenced by main().

22.5.3.2 void AIRINV::AirInvServer::stop ( )

Stop the server.

Definition at line 69 of file AirInvServer_ASIO.cpp.

The documentation for this class was generated from the following files:

- airinv/server/AirInvServer.hpp
- airinv/server/AirInvServer_ASIO.cpp

22.6 AIRINV::BomAbstract Class Reference

`#include <airinv/bom/BomAbstract.hpp>`

Public Member Functions

- virtual void toStream (std::ostream &ioOut) const =0
- virtual void fromStream (std::istream &ioIn)=0
- virtual std::string toString () const =0
- virtual std::string describeKey () const =0
- virtual std::string describeShortKey () const =0

Protected Member Functions

- BomAbstract ()
- BomAbstract (const BomAbstract &)
- virtual ~BomAbstract ()

Friends

- class FacBomAbstract

22.6.1 Detailed Description

Base class for the Business Object Model (BOM) layer.

Definition at line 14 of file BomAbstract.hpp.

22.6.2 Constructor & Destructor Documentation

22.6.2.1 AIRINV::BomAbstract::BomAbstract ( ) [inline], [protected]

Protected Default Constructor to ensure this class is abtract.

Definition at line 40 of file BomAbstract.hpp.

22.6.2.2 AIRINV::BomAbstract::BomAbstract (const BomAbstract &) [inline], [protected]

Definition at line 41 of file BomAbstract.hpp.

22.6.2.3 virtual AIRINV::BomAbstract::~BomAbstract ( ) [inline], [protected], [virtual]

Destructor.

Definition at line 44 of file BomAbstract.hpp.

22.6.3 Member Function Documentation

22.6.3.1 virtual void AIRINV::BomAbstract::toStream (std::ostream & *ioOut*) const [pure virtual]

Dump a Business Object into an output stream.

Parameters

ostream&	the output stream.

22.6.3.2 virtual void AIRINV::BomAbstract::fromStream (std::istream & *ioIn*) [pure virtual]

Read a Business Object from an input stream.

Parameters

istream&	the input stream.

Referenced by operator>>().

22.6.3.3 virtual std::string AIRINV::BomAbstract::toString ( ) const [pure virtual]

Get the serialised version of the Business Object.

22.6.3.4 virtual std::string AIRINV::BomAbstract::describeKey ( ) const [pure virtual]

Get a string describing the whole key (differentiating two objects at any level).

22.6.3.5 virtual std::string AIRINV::BomAbstract::describeShortKey ( ) const [pure virtual]

Get a string describing the short key (differentiating two objects at the same level).

22.6.4 Friends And Related Function Documentation

22.6.4.1 friend class FacBomAbstract [friend]

Definition at line 15 of file BomAbstract.hpp.

The documentation for this class was generated from the following file:

- airinv/bom/BomAbstract.hpp

22.7 stdair::BomPropertyTree Struct Reference

`#include <airinv/server/BomPropertyTree.hpp>`

Public Member Functions

- void load (const std::string &iBomTree)
- std::string save () const

Public Attributes

- stdair::AirlineCode_T _airlineCode
- stdair::FlightNumber_T _flightNumber
- stdair::Date_T _departureDate
- std::set< stdair::AirportCode_T > _airportCodeList

22.7.1 Detailed Description

Structure representing a list of airports.

Definition at line 19 of file BomPropertyTree.hpp.

22.7.2 Member Function Documentation

22.7.2.1 void stdair::BomPropertyTree::load (const std::string & *iBomTree*)

Update the current BOM tree (∗this) with the parsed stream, which is JSON formatted.

Definition at line 17 of file BomPropertyTree.cpp.

References _airlineCode, _departureDate, and _flightNumber.

22.7.2.2 std::string stdair::BomPropertyTree::save ( ) const

Dump the BOM tree (∗this) into the stream with a JSON format.

Definition at line 60 of file BomPropertyTree.cpp.

References _airlineCode, _airportCodeList, _departureDate, and _flightNumber.

22.7.3 Member Data Documentation

22.7.3.1 stdair::AirlineCode_T stdair::BomPropertyTree::_airlineCode

Airline code.

Definition at line 33 of file BomPropertyTree.hpp.

Referenced by load(), and save().

22.7.3.2 stdair::FlightNumber_T stdair::BomPropertyTree::_flightNumber

Flight number.

Definition at line 36 of file BomPropertyTree.hpp.

Referenced by load(), and save().

22.7.3.3 stdair::Date_T stdair::BomPropertyTree::_departureDate

Departure date.

Definition at line 39 of file BomPropertyTree.hpp.

Referenced by load(), and save().

22.7.3.4 std::set<stdair::AirportCode_T> stdair::BomPropertyTree::_airportCodeList

Just to have a list, for now.

Definition at line 42 of file BomPropertyTree.hpp.

Referenced by save().

The documentation for this struct was generated from the following files:

- airinv/server/BomPropertyTree.hpp
- airinv/server/BomPropertyTree.cpp

22.8 AIRINV::BomRootHelper Class Reference

`#include <airinv/bom/BomRootHelper.hpp>`

Static Public Member Functions

- static void fillFromRouting (const stdair::BomRoot &)

22.8.1 Detailed Description

Class representing the actual business functions for an airline bom root.

Definition at line 16 of file BomRootHelper.hpp.

22.8.2 Member Function Documentation

22.8.2.1 void AIRINV::BomRootHelper::fillFromRouting (const stdair::BomRoot & *iBomRoot*) [static]

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 16 of file BomRootHelper.cpp.

Referenced by AIRINV::InventoryManager::createDirectAccesses().

The documentation for this class was generated from the following files:

- airinv/bom/BomRootHelper.hpp
- airinv/bom/BomRootHelper.cpp

22.9 AIRINV::BookingClassHelper Class Reference

`#include <airinv/bom/BookingClassHelper.hpp>`

22.9.1 Detailed Description

Class representing the actual business functions for an airline booking class.

Definition at line 19 of file BookingClassHelper.hpp.

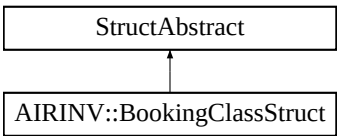
The documentation for this class was generated from the following file:

- airinv/bom/BookingClassHelper.hpp

22.10 AIRINV::BookingClassStruct Struct Reference

`#include <airinv/bom/BookingClassStruct.hpp>`

Inheritance diagram for AIRINV::BookingClassStruct:



Public Member Functions

- stdair::ClassCode_T getFullSubclassCode () const
- void fill (stdair::BookingClass &) const
- const std::string describe () const
- BookingClassStruct ()

Public Attributes

- stdair::ClassCode_T _classCode
- stdair::SubclassCode_T _subclassCode
- stdair::ClassCode_T _parentClassCode
- stdair::SubclassCode_T _parentSubclassCode
- stdair::AuthorizationLevel_T _cumulatedProtection
- stdair::AuthorizationLevel_T _protection
- stdair::NbOfSeats_T _nego
- stdair::OverbookingRate_T _noShowPercentage
- stdair::OverbookingRate_T _overbookingPercentage
- stdair::NbOfBookings_T _nbOfBookings
- stdair::NbOfBookings_T _nbOfGroupBookings
- stdair::NbOfBookings_T _nbOfPendingGroupBookings
- stdair::NbOfBookings_T _nbOfStaffBookings
- stdair::NbOfBookings_T _nbOfWLBookings
- stdair::NbOfBookings_T _etb
- stdair::Availability_T _netClassAvailability
- stdair::Availability_T _segmentAvailability
- stdair::Availability_T _netRevenueAvailability

22.10.1 Detailed Description

Utility Structure for the parsing of BookingClass structures.

Definition at line 24 of file BookingClassStruct.hpp.

22.10.2 Constructor & Destructor Documentation

22.10.2.1 AIRINV::BookingClassStruct::BookingClassStruct ( )

Default Constructor.

Definition at line 16 of file BookingClassStruct.cpp.

22.10.3 Member Function Documentation

22.10.3.1 stdair::ClassCode_T AIRINV::BookingClassStruct::getFullSubclassCode ( ) const

Returns the concatenation of the class and subclass codes.

Definition at line 20 of file BookingClassStruct.cpp.

References _classCode, and _subclassCode.

22.10.3.2 void AIRINV::BookingClassStruct::fill (stdair::BookingClass & *ioBookingClass*) const

Fill the BookingClass objects with the attributes of the BookingClassStruct.

Definition at line 44 of file BookingClassStruct.cpp.

22.10.3.3 const std::string AIRINV::BookingClassStruct::describe ( ) const

Give a description of the structure (for display purposes).

Definition at line 27 of file BookingClassStruct.cpp.

References _classCode, _cumulatedProtection, _etb, _nbOfBookings, _nbOfGroupBookings, _nbOfPendingGroupBookings, _nbOfStaffBookings, _nbOfWLBookings, _nego, _netClassAvailability, _netRevenueAvailability, _noShowPercentage, _overbookingPercentage, _parentClassCode, _parentSubclassCode, _protection, _segmentAvailability, and _subclassCode.

Referenced by AIRINV::FareFamilyStruct::describe().

22.10.4 Member Data Documentation

22.10.4.1 stdair::ClassCode_T AIRINV::BookingClassStruct::_classCode

Definition at line 26 of file BookingClassStruct.hpp.

Referenced by describe(), getFullSubclassCode(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), and AIRINV::InventoryParserHelper::storeFClasses::operator()().

22.10.4.2 stdair::SubclassCode_T AIRINV::BookingClassStruct::_subclassCode

Definition at line 27 of file BookingClassStruct.hpp.

Referenced by describe(), getFullSubclassCode(), and AIRINV::InventoryParserHelper::storeSubclassCode::operator()().

22.10.4.3 stdair::ClassCode_T AIRINV::BookingClassStruct::_parentClassCode

Definition at line 28 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeParentClassCode::operator()().

22.10.4.4 stdair::SubclassCode_T AIRINV::BookingClassStruct::_parentSubclassCode

Definition at line 29 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()().

22.10.4.5 stdair::AuthorizationLevel_T AIRINV::BookingClassStruct::_cumulatedProtection

Definition at line 30 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()().

22.10.4.6 stdair::AuthorizationLevel_T AIRINV::BookingClassStruct::_protection

Definition at line 31 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeProtection::operator()().

22.10.4.7 stdair::NbOfSeats_T AIRINV::BookingClassStruct::_nego

Definition at line 32 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeNego::operator()().

22.10.4.8 stdair::OverbookingRate_T AIRINV::BookingClassStruct::_noShowPercentage

Definition at line 33 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeNoShow::operator()().

22.10.4.9 stdair::OverbookingRate_T AIRINV::BookingClassStruct::_overbookingPercentage

Definition at line 34 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeOverbooking::operator()().

22.10.4.10 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_nbOfBookings

Definition at line 35 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()().

22.10.4.11 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_nbOfGroupBookings

Definition at line 36 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()().

22.10.4.12 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_nbOfPendingGroupBookings

Definition at line 37 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()().

22.10.4.13 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_nbOfStaffBookings

Definition at line 38 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()().

22.10.4.14 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_nbOfWLBookings

Definition at line 39 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()().

22.10.4.15 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_etb

Definition at line 40 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeClassETB::operator()().

22.10.4.16 stdair::Availability_T AIRINV::BookingClassStruct::_netClassAvailability

Definition at line 41 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeClassAvailability::operator()().

22.10.4.17 stdair::Availability_T AIRINV::BookingClassStruct::_segmentAvailability

Definition at line 42 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()().

22.10.4.18 stdair::Availability_T AIRINV::BookingClassStruct::_netRevenueAvailability

Definition at line 43 of file BookingClassStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()().

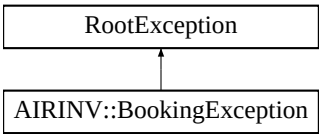
The documentation for this struct was generated from the following files:

- airinv/bom/BookingClassStruct.hpp
- airinv/bom/BookingClassStruct.cpp

22.11 AIRINV::BookingException Class Reference

`#include <airinv/AIRINV_Types.hpp>`

Inheritance diagram for AIRINV::BookingException:



22.11.1 Detailed Description

Specific exception related to bookings made against the inventory.

Definition at line 102 of file AIRINV_Types.hpp.

The documentation for this class was generated from the following file:

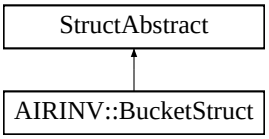
- airinv/AIRINV_Types.hpp

22.12 AIRINV::BucketStruct Struct Reference

Utility Structure for the parsing of Bucket structures.

`#include <airinv/bom/BucketStruct.hpp>`

Inheritance diagram for AIRINV::BucketStruct:



Public Member Functions

- void fill (stdair::Bucket &) const
- const std::string describe () const
- BucketStruct ()

Public Attributes

- stdair::Yield_T _yieldRangeUpperValue
- stdair::CabinCapacity_T _availability
- stdair::NbOfSeats_T _nbOfSeats
- stdair::SeatIndex_T _seatIndex

22.12.1 Detailed Description

Utility Structure for the parsing of Bucket structures.

Definition at line 26 of file BucketStruct.hpp.

22.12.2 Constructor & Destructor Documentation

22.12.2.1 AIRINV::BucketStruct::BucketStruct ( )

Default Constructor.

Definition at line 16 of file BucketStruct.cpp.

22.12.3 Member Function Documentation

22.12.3.1 void AIRINV::BucketStruct::fill (stdair::Bucket & *ioBucket*) const

Fill the Bucket objects with the attributes of the BucketStruct.

Definition at line 29 of file BucketStruct.cpp.

References _availability, _nbOfSeats, and _yieldRangeUpperValue.

22.12.3.2 const std::string AIRINV::BucketStruct::describe ( ) const

Give a description of the structure (for display purposes).

Definition at line 20 of file BucketStruct.cpp.

References _availability, _nbOfSeats, _seatIndex, and _yieldRangeUpperValue.

Referenced by AIRINV::LegCabinStruct::describe().

22.12.4 Member Data Documentation

22.12.4.1 stdair::Yield_T AIRINV::BucketStruct::_yieldRangeUpperValue

Definition at line 28 of file BucketStruct.hpp.

Referenced by describe(), fill(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), and AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()().

22.12.4.2 stdair::CabinCapacity_T AIRINV::BucketStruct::_availability

Definition at line 29 of file BucketStruct.hpp.

Referenced by describe(), fill(), and AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()().

22.12.4.3 stdair::NbOfSeats_T AIRINV::BucketStruct::_nbOfSeats

Definition at line 30 of file BucketStruct.hpp.

Referenced by describe(), and fill().

22.12.4.4 stdair::SeatIndex_T AIRINV::BucketStruct::_seatIndex

Definition at line 31 of file BucketStruct.hpp.

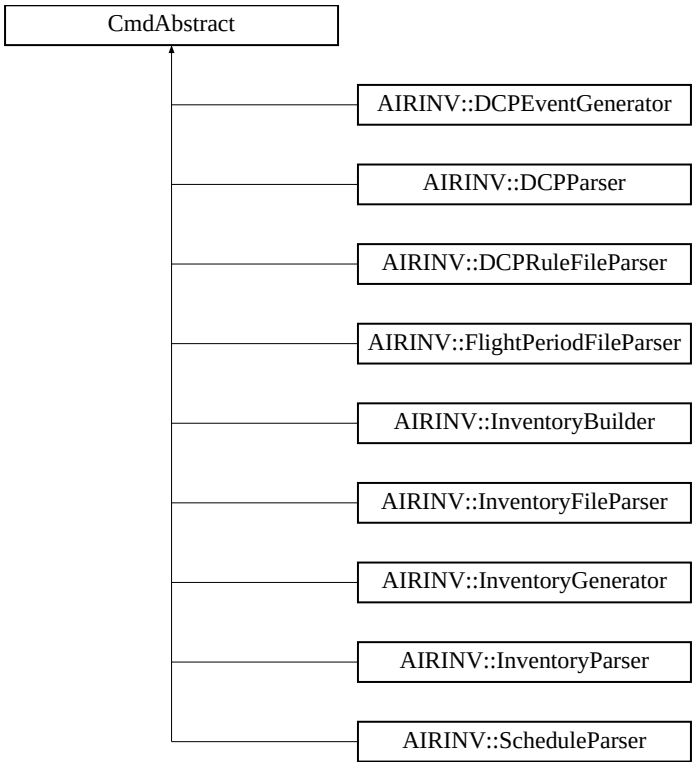
Referenced by describe(), and AIRINV::InventoryParserHelper::storeSeatIndex::operator()().

The documentation for this struct was generated from the following files:

- airinv/bom/BucketStruct.hpp
- airinv/bom/BucketStruct.cpp

22.13 CmdAbstract Class Reference

Inheritance diagram for CmdAbstract:



The documentation for this class was generated from the following file:

- airinv/command/InventoryBuilder.hpp

22.14 COMMAND Struct Reference

```
#include <airinv/ui/cmdline/readline_autocomp.hpp>
```

Public Attributes

- char const * name
- pt2Func * func
- char * doc

22.14.1 Detailed Description

A structure which contains information on the commands this program can understand.

Definition at line 41 of file readline_autocomp.hpp.

22.14.2 Member Data Documentation

22.14.2.1 char const* COMMAND::name

User printable name of the function.

Definition at line 45 of file readline_autocomp.hpp.

Referenced by com_help(), and find_command().

22.14.2.2 pt2Func* COMMAND::func

Function to call to do the job.

Definition at line 50 of file readline_autocomp.hpp.

Referenced by execute_line().

22.14.2.3 char* COMMAND::doc

Documentation for this function.

Definition at line 55 of file readline_autocomp.hpp.

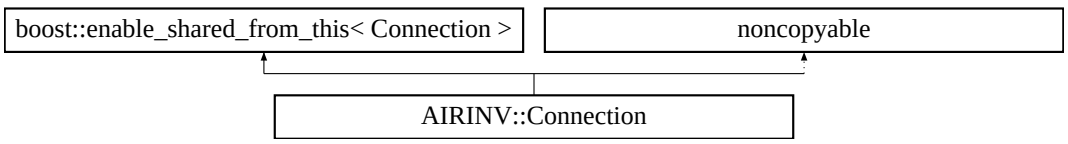
The documentation for this struct was generated from the following file:

- airinv/ui/cmdline/readline_autocomp.hpp

22.15 AIRINV::Connection Class Reference

`#include <airinv/server/Connection.hpp>`

Inheritance diagram for AIRINV::Connection:



Public Member Functions

- Connection (boost::asio::io_service &, RequestHandler &)
- boost::asio::ip::tcp::socket & socket ()
- void start ()

22.15.1 Detailed Description

Represents a single connection from a client.

Definition at line 25 of file Connection.hpp.

22.15.2 Constructor & Destructor Documentation

22.15.2.1 AIRINV::Connection::Connection (boost::asio::io_service & *ioService,* RequestHandler & *ioHandler*)

Constructor.

Construct a connection with the given io_service.

Definition at line 16 of file Connection.cpp.

22.15.3 Member Function Documentation

22.15.3.1 boost::asio::ip::tcp::socket & AIRINV::Connection::socket ( )

Get the socket associated with the connection.

Definition at line 22 of file Connection.cpp.

22.15.3.2 void AIRINV::Connection::start ( )

Start the first asynchronous operation for the connection.

Definition at line 27 of file Connection.cpp.

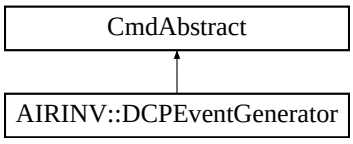
The documentation for this class was generated from the following files:

- airinv/server/Connection.hpp
- airinv/server/Connection.cpp

22.16 AIRINV::DCPEventGenerator Class Reference

`#include <airinv/command/vault/DCPEventGenerator.hpp>`

Inheritance diagram for AIRINV::DCPEventGenerator:



Friends

- class DCPFileParser
- struct DCPParserHelper::doEndDCP
- class DCPParser

22.16.1 Detailed Description

Class handling the generation / instantiation of the DCP BOM.

Definition at line 27 of file DCPEventGenerator.hpp.

22.16.2 Friends And Related Function Documentation

22.16.2.1 friend class DCPFileParser [friend]

Definition at line 31 of file DCPEventGenerator.hpp.

22.16.2.2 friend struct DCPParserHelper::doEndDCP [friend]

Definition at line 32 of file DCPEventGenerator.hpp.

22.16.2.3 friend class DCPParser [friend]

Definition at line 33 of file DCPEventGenerator.hpp.

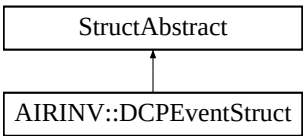
The documentation for this class was generated from the following files:

- airinv/command/vault/DCPEventGenerator.hpp
- airinv/command/vault/DCPEventGenerator.cpp

22.17 AIRINV::DCPEventStruct Struct Reference

`#include <airinv/bom/DCPEventStruct.hpp>`

Inheritance diagram for AIRINV::DCPEventStruct:



Public Member Functions

- DCPEventStruct ()
- stdair::Date_T getDate () const
- stdair::Duration_T getTime () const
- const std::string describe () const
- const unsigned int getAirlineListSize () const
- const unsigned int getClassCodeListSize () const
- const stdair::AirlineCode_T & getFirstAirlineCode () const
- void beginAirline ()
- bool hasNotReachedEndAirline () const
- stdair::AirlineCode_T getCurrentAirlineCode () const
- void iterateAirline ()
- const std::string & getFirstClassCode () const
- void beginClassCode ()
- bool hasNotReachedEndClassCode () const
- std::string getCurrentClassCode () const
- void iterateClassCode ()

Public Attributes

- stdair::year_t _itYear
- stdair::month_t _itMonth
- stdair::day_t _itDay

- stdair::hour_t _itHours
- stdair::minute_t _itMinutes
- stdair::second_t _itSeconds
- stdair::AirlineCodeList_T::iterator _itCurrentAirlineCode
- stdair::ClassList_StringList_T::iterator _itCurrentClassCode
- stdair::AirportCode_T _origin
- stdair::AirportCode_T _destination
- stdair::Date_T _dateRangeStart
- stdair::Date_T _dateRangeEnd
- stdair::Duration_T _timeRangeStart
- stdair::Duration_T _timeRangeEnd
- stdair::CabinCode_T _cabinCode
- stdair::CityCode_T _pos
- stdair::ChannelLabel_T _channel
- stdair::DayDuration_T _advancePurchase
- stdair::SaturdayStay_T _saturdayStay
- stdair::ChangeFees_T _changeFees
- stdair::NonRefundable_T _nonRefundable
- stdair::DayDuration_T _minimumStay
- stdair::PriceValue_T _DCP
- stdair::AirlineCode_T _airlineCode
- stdair::ClassCode_T _classCode
- stdair::AirlineCodeList_T _airlineCodeList
- stdair::ClassList_StringList_T _classCodeList

22.17.1 Detailed Description

Utility Structure for the parsing of Flight-Period structures.

Definition at line 21 of file DCPEventStruct.hpp.

22.17.2 Constructor & Destructor Documentation

22.17.2.1 AIRINV::DCPEventStruct::DCPEventStruct ( )

Default constructor.

Definition at line 18 of file DCPEventStruct.cpp.

22.17.3 Member Function Documentation

22.17.3.1 stdair::Date_T AIRINV::DCPEventStruct::getDate ( ) const

Get the date from the staging details.

Definition at line 38 of file DCPEventStruct.cpp.

References _itDay, _itMonth, and _itYear.

22.17.3.2 stdair::Duration_T AIRINV::DCPEventStruct::getTime ( ) const

Get the time from the staging details.

Definition at line 44 of file DCPEventStruct.cpp.

References _itHours, _itMinutes, and _itSeconds.

22.17.3.3 const std::string AIRINV::DCPEventStruct::describe ( ) const

Display of the structure.

Definition at line 53 of file DCPEventStruct.cpp.

References _advancePurchase, _airlineCodeList, _cabinCode, _changeFees, _channel, _classCodeList, _dateRangeEnd, _dateRangeStart, _DCP, _destination, _minimumStay, _nonRefundable, _origin, _pos, _saturdayStay, _timeRangeEnd, and _timeRangeStart.

22.17.3.4 const unsigned int AIRINV::DCPEventStruct::getAirlineListSize ( ) const [inline]

Get the size of the airline code list.

Definition at line 37 of file DCPEventStruct.hpp.

References _airlineCodeList.

22.17.3.5 const unsigned int AIRINV::DCPEventStruct::getClassCodeListSize ( ) const [inline]

Get the size of the class code list.

Definition at line 42 of file DCPEventStruct.hpp.

References _classCodeList.

22.17.3.6 const stdair::AirlineCode_T & AIRINV::DCPEventStruct::getFirstAirlineCode ( ) const

Get the first airline code.

Definition at line 87 of file DCPEventStruct.cpp.

References _airlineCodeList.

22.17.3.7 void AIRINV::DCPEventStruct::beginAirline ( )

Initialise the internal iterators on airline code: The current iterator is set on the first airline code, the next iterator is set on the second one.

Definition at line 95 of file DCPEventStruct.cpp.

References _airlineCodeList, and _itCurrentAirlineCode.

22.17.3.8 bool AIRINV::DCPEventStruct::hasNotReachedEndAirline ( ) const

States whether or not the end of the (airline code) list has been reached.

Definition at line 100 of file DCPEventStruct.cpp.

References _airlineCodeList, and _itCurrentAirlineCode.

22.17.3.9 stdair::AirlineCode_T AIRINV::DCPEventStruct::getCurrentAirlineCode ( ) const

Get the current element (airline code).

Definition at line 106 of file DCPEventStruct.cpp.

References _airlineCodeList, and _itCurrentAirlineCode.

22.17.3.10 void AIRINV::DCPEventStruct::iterateAirline ( )

Iterate for one element (airline code): increment both internal iterators on Buckets.

Definition at line 112 of file DCPEventStruct.cpp.

References _classCodeList, and _itCurrentAirlineCode.

22.17.3.11 const std::string & AIRINV::DCPEventStruct::getFirstClassCode ( ) const

Get the first class code list as a string.

Definition at line 119 of file DCPEventStruct.cpp.

References _classCodeList.

22.17.3.12 void AIRINV::DCPEventStruct::beginClassCode ( )

Initialise the internal iterators on class code: The current iterator is set on the first class code, the next iterator is set on the second one.

Definition at line 127 of file DCPEventStruct.cpp.

References _classCodeList, and _itCurrentClassCode.

22.17.3.13 bool AIRINV::DCPEventStruct::hasNotReachedEndClassCode ( ) const

States whether or not the end of the (class code) list has been reached.

Definition at line 132 of file DCPEventStruct.cpp.

References _classCodeList, and _itCurrentClassCode.

22.17.3.14 std::string AIRINV::DCPEventStruct::getCurrentClassCode ( ) const

Get the current element (class code).

Definition at line 138 of file DCPEventStruct.cpp.

References _classCodeList, and _itCurrentClassCode.

22.17.3.15 void AIRINV::DCPEventStruct::iterateClassCode ( )

Iterate for one element (classCode): increment both internal iterators on Buckets.

Definition at line 145 of file DCPEventStruct.cpp.

References _classCodeList, and _itCurrentClassCode.

22.17.4 Member Data Documentation

22.17.4.1 stdair::year_t AIRINV::DCPEventStruct::_itYear

Staging Date.

Definition at line 87 of file DCPEventStruct.hpp.

Referenced by getDate().

22.17.4.2 stdair::month_t AIRINV::DCPEventStruct::_itMonth

Definition at line 88 of file DCPEventStruct.hpp.

Referenced by getDate().

22.17.4.3 stdair::day_t AIRINV::DCPEventStruct::_itDay

Definition at line 89 of file DCPEventStruct.hpp.

Referenced by getDate().

22.17.4.4 stdair::hour_t AIRINV::DCPEventStruct::_itHours

Staging Time.

Definition at line 93 of file DCPEventStruct.hpp.

Referenced by getTime().

22.17.4.5 stdair::minute_t AIRINV::DCPEventStruct::_itMinutes

Definition at line 94 of file DCPEventStruct.hpp.

Referenced by getTime().

22.17.4.6 stdair::second_t AIRINV::DCPEventStruct::_itSeconds

Definition at line 95 of file DCPEventStruct.hpp.

Referenced by getTime().

22.17.4.7 stdair::AirlineCodeList_T::iterator AIRINV::DCPEventStruct::_itCurrentAirlineCode

Iterator for the current airline code list.

Definition at line 98 of file DCPEventStruct.hpp.

Referenced by beginAirline(), getCurrentAirlineCode(), hasNotReachedEndAirline(), and iterateAirline().

22.17.4.8 stdair::ClassList_StringList_T::iterator AIRINV::DCPEventStruct::_itCurrentClassCode

Iterator for the current class code.

Definition at line 101 of file DCPEventStruct.hpp.

Referenced by beginClassCode(), getCurrentClassCode(), hasNotReachedEndClassCode(), and iterateClassCode().

22.17.4.9 stdair::AirportCode_T AIRINV::DCPEventStruct::_origin

Origin.

Definition at line 104 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.10 stdair::AirportCode_T AIRINV::DCPEventStruct::_destination

Destination.

Definition at line 107 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.11 stdair::Date_T AIRINV::DCPEventStruct::_dateRangeStart

Start Range date available for this DCP event.

Definition at line 110 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.12 stdair::Date_T AIRINV::DCPEventStruct::_dateRangeEnd

Start Range date available for this DCP event.

Definition at line 113 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.13 stdair::Duration_T AIRINV::DCPEventStruct::_timeRangeStart

Start time from the time range available for this DCP event.

Definition at line 116 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.14 stdair::Duration_T AIRINV::DCPEventStruct::_timeRangeEnd

End time from the time range available for this DCP event.

Definition at line 119 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.15 stdair::CabinCode_T AIRINV::DCPEventStruct::_cabinCode

Cabin code.

Definition at line 122 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.16 stdair::CityCode_T AIRINV::DCPEventStruct::_pos

Point-of-sale.

Definition at line 125 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.17 stdair::ChannelLabel_T AIRINV::DCPEventStruct::_channel

Channel distribution.

Definition at line 128 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.18 stdair::DayDuration_T AIRINV::DCPEventStruct::_advancePurchase

Number of days that the ticket is sold before the flightDate.

Definition at line 131 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.19 stdair::SaturdayStay_T AIRINV::DCPEventStruct::_saturdayStay

Boolean saying whether a saturday is considered during the stay .

Definition at line 134 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.20 stdair::ChangeFees_T AIRINV::DCPEventStruct::_changeFees

Boolean saying whether the change fees option is requested or not.

Definition at line 137 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.21 stdair::NonRefundable_T AIRINV::DCPEventStruct::_nonRefundable

Boolean saying whether the refundable option is requested or not.

Definition at line 140 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.22 stdair::DayDuration_T AIRINV::DCPEventStruct::_minimumStay

Number of days that the customer spent into the destination city.

Definition at line 143 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.23 stdair::PriceValue_T AIRINV::DCPEventStruct::_DCP

Price.

Definition at line 146 of file DCPEventStruct.hpp.

Referenced by describe().

22.17.4.24 stdair::AirlineCode_T AIRINV::DCPEventStruct::_airlineCode

Airline code

Definition at line 149 of file DCPEventStruct.hpp.

22.17.4.25 stdair::ClassCode_T AIRINV::DCPEventStruct::_classCode

Code

Definition at line 152 of file DCPEventStruct.hpp.

22.17.4.26 stdair::AirlineCodeList_T AIRINV::DCPEventStruct::_airlineCodeList

Airline Code List

Definition at line 155 of file DCPEventStruct.hpp.

Referenced by beginAirline(), describe(), getAirlineListSize(), getCurrentAirlineCode(), getFirstAirlineCode(), and hasNotReachedEndAirline().

22.17.4.27 stdair::ClassList_StringList_T AIRINV::DCPEventStruct::_classCodeList

Numbers of different Airline Codes Class Code List

Definition at line 161 of file DCPEventStruct.hpp.

Referenced by beginClassCode(), describe(), getClassCodeListSize(), getCurrentClassCode(), getFirstClassCode(), hasNotReachedEndClassCode(), iterateAirline(), and iterateClassCode().

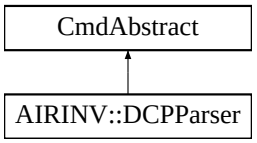
The documentation for this struct was generated from the following files:

- airinv/bom/DCPEventStruct.hpp
- airinv/bom/DCPEventStruct.cpp

22.18 AIRINV::DCPParser Class Reference

`#include <airinv/command/vault/DCPParser.hpp>`

Inheritance diagram for AIRINV::DCPParser:



Static Public Member Functions

- static void DCPRuleGeneration (const stdair::Filename_T &, stdair::BomRoot &)

22.18.1 Detailed Description

Class wrapping the parser entry point.

Definition at line 19 of file DCPParser.hpp.

22.18.2 Member Function Documentation

22.18.2.1 void AIRINV::DCPParser::DCPRuleGeneration (const stdair::Filename_T & *iFilename,* stdair::BomRoot & *ioBomRoot*) [static]

Parses the CSV file describing the DCPs for the simulator, and generates the event structures accordingly.

Parameters

const	stdair::Filename_T& The file-name of the CSV-formatted DCP input file.
stdair::BomRoot&	Root of the BOM tree.

Definition at line 16 of file DCPParser.cpp.

References AIRINV::DCPRuleFileParser::generateDCPRules().

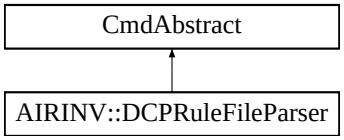
The documentation for this class was generated from the following files:

- airinv/command/vault/DCPParser.hpp
- airinv/command/vault/DCPParser.cpp

22.19 AIRINV::DCPRuleFileParser Class Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPRuleFileParser:



Public Member Functions

- DCPRuleFileParser (stdair::BomRoot &ioBomRoot, const stdair::Filename_T &iFilename)
- bool generateDCPRules ()

22.19.1 Detailed Description

Class wrapping the initialisation and entry point of the parser.

The seemingly redundancy is used to force the instantiation of the actual parser, which is a templatised Boost Spirit grammar. Hence, the actual parser is instantiated within that class object code.

Definition at line 337 of file DCPParserHelper.hpp.

22.19.2 Constructor & Destructor Documentation

22.19.2.1 AIRINV::DCPRuleFileParser::DCPRuleFileParser (stdair::BomRoot & *ioBomRoot,* const stdair::Filename_T & *iFilename*)

Constructor.

Definition at line 572 of file DCPParserHelper.cpp.

22.19.3 Member Function Documentation

22.19.3.1 bool AIRINV::DCPRuleFileParser::generateDCPRules ( )

Parse the input file and generate the Inventories.

Definition at line 593 of file DCPParserHelper.cpp.

Referenced by AIRINV::DCPParser::DCPRuleGeneration().

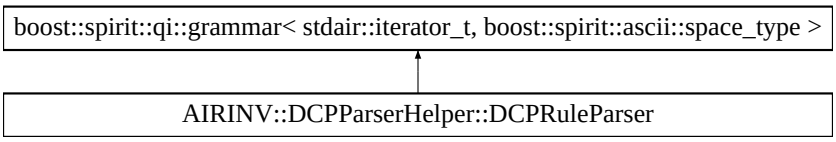
The documentation for this class was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.20 AIRINV::DCPParserHelper::DCPRuleParser Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::DCPRuleParser:



Public Member Functions

- DCPRuleParser (stdair::BomRoot &, DCPRuleStruct &)

Public Attributes

- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > start
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > comments
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > DCP_rule
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > DCP_rule_end
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > DCP_key

- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > DCP_id
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > origin
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > destination
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > dateRangeStart
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > dateRangeEnd
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > date
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > timeRangeStart
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > timeRangeEnd
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > time
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > position
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > cabinCode
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > channel
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > advancePurchase
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > saturdayStay
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > changeFees
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > nonRefundable
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > minimumStay
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > DCP
- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > segment

- boost::spirit::qi::rule
  < stdair::iterator_t,
  boost::spirit::ascii::space_type > list_class
- stdair::BomRoot & _bomRoot
- DCPRuleStruct & _DCPRule

22.20.1 Detailed Description

DCP: DCPID; OriginCity; DestinationCity; DateRangeStart; DateRangeEnd; DepartureTimeRangeStart; DepartureTimeRangeEnd; POS; AdvancePurchase; SaturdayNight; ChangeFees; NonRefundable; MinimumStay; Price; AirlineCode; Class;

DCPID OriginCity (3-char airport code) DestinationCity (3-char airport code) DateRangeStart (yyyy-mm-dd) DateRangeEnd (yyyy-mm-dd) DepartureTimeRangeStart (hh:mm) DepartureTimeRangeEnd (hh:mm) POS (3-char position city) Cabin Code (1-char cabin code) Channel (D=direct, I=indirect, N=oNline, F=oFfline) AdvancePurchase SaturdayNight (T=True, F=False) ChangeFees (T=True, F=False) NonRefundable (T=True, F=False) MinimumStay Price AirlineCode (2-char airline code) ClassList (List of 1-char class code)

Grammar: Demand ::= PrefDepDate ';' Origin ';' Destination ';' PassengerType ';' DemandParams ';' PosDist ';' ChannelDist ';' TripDist ';' StayDist ';' FfDist ';' PrefDepTimeDist ';' minWTP ';' TimeValueDist ';' DtdDist EndOfDemand PrefDepDate ::= date PassengerType ::= 'T' | 'F' DemandParams ::= DemandMean ';' DemandStdDev PosDist ::= PosPair (',' PosPair)* PosPair ::= PosCode ':' PosShare PosCode ::= AirportCode | "row" PosShare ::= real ChannelDist ::= ChannelPair (',' ChannelPair)* ChannelPair ::= Channel_Code ':' ChannelShare ChannelCode ::= "DF" | "DN" | "IF" | "IN" ChannelShare ::= real TripDist ::= TripPair (',' TripPair)* TripPair ::= TripCode ':' TripShare TripCode ::= "RO" | "RI" | "OW" TripShare ::= real StayDist ::= StayPair (',' StayPair)* StayPair ::= [0;3]-digit-integer ':' stay_share StayShare ::= real FFDist ::= FF_Pair (',' FF_Pair)* FFPair ::= FFCode ':' FFShare FFCode ::= 'P' | 'G' | 'S' | 'M' | 'N' FFShare ::= real PrefDepTimeDist ::= PrefDepTimePair (',' PrefDepTimePair)* PrefDepTimePair ::= time ':' PrefDepTimeShare PrefDepTimeShare ::= real minWTP ::= real TimeValueDist ::= TimeValuePair (',' TimeValuePair)* TimeValuePair ::= [0;2]-digit-integer ':' TimeValueShare TimeValueShare ::= real DTDDist ::= DTDPair (',' DTDPair)* DTDPair ::= real ':' DTDShare DTDShare ::= real EndOfDemand ::= ';'Grammar for the DCP-Rule parser.

Definition at line 304 of file DCPParserHelper.hpp.

22.20.2 Constructor & Destructor Documentation

22.20.2.1 AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser (stdair::BomRoot & *ioBomRoot*, DCPRuleStruct & *ioDCPRule*)

Definition at line 453 of file DCPParserHelper.cpp.

References _bomRoot, _DCPRule, advancePurchase, cabinCode, changeFees, channel, comments, date, dateRangeEnd, dateRangeStart, AIRINV::DCPParserHelper::day_p, DCP, DCP_id, DCP_key, DCP_rule, DCP_rule_end, destination, AIRINV::DCPParserHelper::hour_p, list_class, minimumStay, AIRINV::DCPParserHelper::minute_p, AIRINV::DCPParserHelper::month_p, nonRefundable, origin, position, saturdayStay, AIRINV::DCPParserHelper::second_p, segment, start, time, timeRangeEnd, timeRangeStart, AIRINV::DCPParserHelper::uint1_4_p, and AIRINV::DCPParserHelper::year_p.

22.20.3 Member Data Documentation

22.20.3.1 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::start

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.2 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::comments

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.3 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::DCP_rule

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.4 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::DCP_rule_end

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.5 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::DCP_key

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.6 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::DCP_id

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.7 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::origin

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.8 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::destination

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.9 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::dateRangeStart

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.10 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::dateRangeEnd

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.11 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::date

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.12 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::timeRangeStart

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.13 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::timeRangeEnd

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.14 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::time

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.15 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::position

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.16 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::cabinCode

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.17 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::channel

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.18 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::advancePurchase

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.19 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::saturdayStay

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.20 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::changeFees

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.21 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::nonRefundable

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.22 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::minimumStay

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.23 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::DCP

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.24 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::segment

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.25 boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type> AIRINV::DCPParserHelper::DCPRuleParser::list_class

Definition at line 313 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.26 stdair::BomRoot& AIRINV::DCPParserHelper::DCPRuleParser::_bomRoot

Definition at line 320 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

22.20.3.27 DCPRuleStruct& AIRINV::DCPParserHelper::DCPRuleParser::_DCPRule

Definition at line 321 of file DCPParserHelper.hpp.

Referenced by DCPRuleParser().

The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.21 AIRINV::DefaultMap Struct Reference

`#include <airinv/basic/BasConst_Curves.hpp>`

Static Public Member Functions

- static FRAT5Curve_T createPickupFRAT5Curve ()

22.21.1 Detailed Description

Default PoS probability mass.

Definition at line 16 of file BasConst_Curves.hpp.

22.21.2 Member Function Documentation

22.21.2.1 FRAT5Curve_T AIRINV::DefaultMap::createPickupFRAT5Curve ( ) [static]

Definition at line 16 of file BasConst.cpp.

The documentation for this struct was generated from the following files:

- airinv/basic/BasConst_Curves.hpp
- airinv/basic/BasConst.cpp

22.22 AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT > Struct Template Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Public Member Functions

- definition (InventoryParser const &self)
- boost::spirit::classic::rule < ScannerT > const & start () const

Public Attributes

- boost::spirit::classic::rule < ScannerT > flight_date_list
- boost::spirit::classic::rule < ScannerT > not_to_be_parsed
- boost::spirit::classic::rule < ScannerT > flight_date
- boost::spirit::classic::rule < ScannerT > flight_date_end
- boost::spirit::classic::rule < ScannerT > flight_key
- boost::spirit::classic::rule < ScannerT > airline_code
- boost::spirit::classic::rule < ScannerT > flight_number
- boost::spirit::classic::rule < ScannerT > flight_type_code
- boost::spirit::classic::rule < ScannerT > flight_visibility_code
- boost::spirit::classic::rule < ScannerT > date

- boost::spirit::classic::rule < ScannerT > leg_list
- boost::spirit::classic::rule < ScannerT > leg
- boost::spirit::classic::rule < ScannerT > leg_key
- boost::spirit::classic::rule < ScannerT > leg_details
- boost::spirit::classic::rule < ScannerT > leg_cabin_list
- boost::spirit::classic::rule < ScannerT > leg_cabin_details
- boost::spirit::classic::rule < ScannerT > bucket_list
- boost::spirit::classic::rule < ScannerT > bucket_details
- boost::spirit::classic::rule < ScannerT > time
- boost::spirit::classic::rule < ScannerT > segment_list
- boost::spirit::classic::rule < ScannerT > segment
- boost::spirit::classic::rule < ScannerT > segment_key
- boost::spirit::classic::rule < ScannerT > full_segment_cabin_details
- boost::spirit::classic::rule < ScannerT > segment_cabin_list
- boost::spirit::classic::rule < ScannerT > segment_cabin_key
- boost::spirit::classic::rule < ScannerT > segment_cabin_details
- boost::spirit::classic::rule < ScannerT > class_list
- boost::spirit::classic::rule < ScannerT > class_key
- boost::spirit::classic::rule < ScannerT > parent_subclass_code
- boost::spirit::classic::rule < ScannerT > class_protection
- boost::spirit::classic::rule < ScannerT > class_nego
- boost::spirit::classic::rule < ScannerT > class_details
- boost::spirit::classic::rule < ScannerT > family_cabin_list
- boost::spirit::classic::rule < ScannerT > family_cabin_details

22.22.1 Detailed Description

template<typename ScannerT>struct AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >

Definition at line 460 of file InventoryParserHelper.hpp.

22.22.2 Constructor & Destructor Documentation

22.22.2.1 template<typename ScannerT > AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition (InventoryParser const & *self*)

Definition at line 872 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::airline_code_p(), AIRINV::InventoryParserHelper::airport_p(), AIRINV::InventoryParserHelper::cabin_code_p(), AIRINV::InventoryParserHelper::class_code_list_p(), AIRINV::InventoryParserHelper::class_code_p(), AIRINV::InventoryParserHelper::day_p(), AIRINV::InventoryParserHelper::family_code_p, AIRINV::InventoryParserHelper::flight_number_p(), AIRINV::InventoryParserHelper::hours_p(), AIRINV::InventoryParserHelper::minutes_p(), AIRINV::InventoryParserHelper::month_p(), AIRINV::InventoryParserHelper::seconds_p(), AIRINV::InventoryParserHelper::uint1_2_p, AIRINV::InventoryParserHelper::uint1_3_p, and AIRINV::InventoryParserHelper::year_p().

22.22.3 Member Function Documentation

22.22.3.1 template<typename ScannerT > bsc::rule< ScannerT > const & AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::start ( ) const

Entry point of the parser.

Definition at line 1078 of file InventoryParserHelper.cpp.

22.22.4 Member Data Documentation

22.22.4.1 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_date_list

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.2 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::not_to_be_parsed

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.3 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_date

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.4 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_date_end

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.5 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_key

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.6 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::airline_code

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.7 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_number

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.8 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_type_code

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.9 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_visibility_code

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.10 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::date

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.11 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::leg_list

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.12 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::leg

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.13 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::leg_key

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.14 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::leg_details

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.15 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::leg_cabin_list

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.16 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::leg_cabin_details

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.17 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::bucket_list

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.18 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::bucket_details

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.19 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::time

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.20 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::segment_list

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.21 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::segment

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.22 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::segment_key

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.23 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::full_segment_cabin_details

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.24 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::segment_cabin_list

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.25 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::segment_cabin_key

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.26 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::segment_cabin_details

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.27 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_list

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.28 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_key

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.29 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::parent_subclass_code

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.30 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_protection

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.31 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_nego

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.32 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_details

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.33 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::family_cabin_list

Definition at line 464 of file InventoryParserHelper.hpp.

22.22.4.34 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::family_cabin_details

Definition at line 464 of file InventoryParserHelper.hpp.

The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.23 AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT > Struct Template Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Public Member Functions

- definition (FlightPeriodParser const &self)
- boost::spirit::classic::rule < ScannerT > const & start () const

Public Attributes

- boost::spirit::classic::rule < ScannerT > flight_period_list
- boost::spirit::classic::rule < ScannerT > not_to_be_parsed
- boost::spirit::classic::rule < ScannerT > flight_period
- boost::spirit::classic::rule < ScannerT > flight_period_end
- boost::spirit::classic::rule < ScannerT > flight_key
- boost::spirit::classic::rule < ScannerT > airline_code
- boost::spirit::classic::rule < ScannerT > flight_number
- boost::spirit::classic::rule < ScannerT > date
- boost::spirit::classic::rule < ScannerT > dow
- boost::spirit::classic::rule < ScannerT > time
- boost::spirit::classic::rule < ScannerT > date_offset

- boost::spirit::classic::rule < ScannerT > leg
- boost::spirit::classic::rule < ScannerT > leg_key
- boost::spirit::classic::rule < ScannerT > leg_details
- boost::spirit::classic::rule < ScannerT > leg_cabin_details
- boost::spirit::classic::rule < ScannerT > segment_section
- boost::spirit::classic::rule < ScannerT > segment_key
- boost::spirit::classic::rule < ScannerT > full_segment_cabin_details
- boost::spirit::classic::rule < ScannerT > segment_cabin_details
- boost::spirit::classic::rule < ScannerT > full_family_cabin_details
- boost::spirit::classic::rule < ScannerT > family_cabin_details
- boost::spirit::classic::rule < ScannerT > generic_segment
- boost::spirit::classic::rule < ScannerT > specific_segment_list

22.23.1 Detailed Description

template<typename ScannerT>struct AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >

Definition at line 255 of file ScheduleParserHelper.hpp.

22.23.2 Constructor & Destructor Documentation

22.23.2.1 template<typename ScannerT > AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition (FlightPeriodParser const & *self*)

Definition at line 475 of file ScheduleParserHelper.cpp.

References AIRINV::ScheduleParserHelper::airline_code_p(), AIRINV::ScheduleParserHelper::airport_p(), AIRINV::ScheduleParserHelper::cabin_code_p(), AIRINV::ScheduleParserHelper::class_code_list_p(), AIRINV::ScheduleParserHelper::day_p(), AIRINV::ScheduleParserHelper::dow_p(), AIRINV::ScheduleParserHelper::family_code_p, AIRINV::ScheduleParserHelper::flight_number_p(), AIRINV::ScheduleParserHelper::hours_p(), AIRINV::ScheduleParserHelper::int1_p, AIRINV::ScheduleParserHelper::minutes_p(), AIRINV::ScheduleParserHelper::month_p(), AIRINV::ScheduleParserHelper::seconds_p(), and AIRINV::ScheduleParserHelper::year_p().

22.23.3 Member Function Documentation

22.23.3.1 template<typename ScannerT > bsc::rule< ScannerT > const & AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::start ( ) const

Entry point of the parser.

Definition at line 617 of file ScheduleParserHelper.cpp.

22.23.4 Member Data Documentation

22.23.4.1 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::flight_period_list

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.2 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::not_to_be_parsed

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.3 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::flight_period

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.4 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::flight_period_end

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.5 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::flight_key

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.6 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::airline_code

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.7 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::flight_number

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.8 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::date

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.9 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::dow

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.10 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::time

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.11 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::date_offset

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.12 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::leg

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.13 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-FlightPeriodParser::definition< ScannerT >::leg_key

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.14 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-FlightPeriodParser::definition< ScannerT >::leg_details

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.15 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-FlightPeriodParser::definition< ScannerT >::leg_cabin_details

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.16 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-FlightPeriodParser::definition< ScannerT >::segment_section

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.17 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-FlightPeriodParser::definition< ScannerT >::segment_key

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.18 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-FlightPeriodParser::definition< ScannerT >::full_segment_cabin_details

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.19 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-FlightPeriodParser::definition< ScannerT >::segment_cabin_details

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.20 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-FlightPeriodParser::definition< ScannerT >::full_family_cabin_details

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.21 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-FlightPeriodParser::definition< ScannerT >::family_cabin_details

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.22 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-FlightPeriodParser::definition< ScannerT >::generic_segment

Definition at line 259 of file ScheduleParserHelper.hpp.

22.23.4.23 template<typename ScannerT > boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-FlightPeriodParser::definition< ScannerT >::specific_segment_list

Definition at line 259 of file ScheduleParserHelper.hpp.

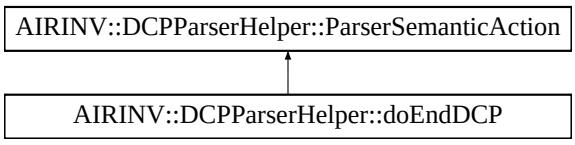
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.24 AIRINV::DCPParserHelper::doEndDCP Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::doEndDCP:



Public Member Functions

- doEndDCP (stdair::BomRoot &, DCPRuleStruct &)
- void operator() (boost::spirit::qi::unused_type, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- stdair::BomRoot & _bomRoot
- DCPRuleStruct & _DCPRule

22.24.1 Detailed Description

Mark the end of the DCP-rule parsing.

Definition at line 218 of file DCPParserHelper.hpp.

22.24.2 Constructor & Destructor Documentation

22.24.2.1 AIRINV::DCPParserHelper::doEndDCP::doEndDCP (stdair::BomRoot & *ioBomRoot*, DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 399 of file DCPParserHelper.cpp.

22.24.3 Member Function Documentation

22.24.3.1 void AIRINV::DCPParserHelper::doEndDCP::operator() (boost::spirit::qi::unused_type , boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 406 of file DCPParserHelper.cpp.

References _bomRoot, and AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.24.4 Member Data Documentation

22.24.4.1 stdair::BomRoot& AIRINV::DCPParserHelper::doEndDCP::_bomRoot

Actor Specific Context.

Definition at line 226 of file DCPParserHelper.hpp.

Referenced by operator()().

22.24.4.2 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and operator()().

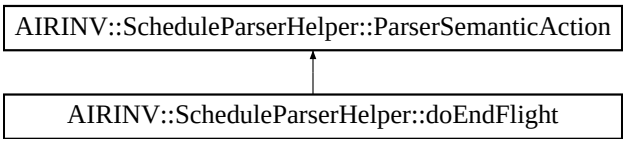
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.25 AIRINV::ScheduleParserHelper::doEndFlight Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::doEndFlight:



Public Member Functions

- doEndFlight (stdair::BomRoot &, FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- stdair::BomRoot & _bomRoot
- FlightPeriodStruct & _flightPeriod

22.25.1 Detailed Description

Mark the end of the flight-period parsing.

Definition at line 192 of file ScheduleParserHelper.hpp.

22.25.2 Constructor & Destructor Documentation

22.25.2.1 AIRINV::ScheduleParserHelper::doEndFlight::doEndFlight (stdair::BomRoot & *ioBomRoot*, FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 376 of file ScheduleParserHelper.cpp.

22.25.3 Member Function Documentation

22.25.3.1 void AIRINV::ScheduleParserHelper::doEndFlight::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 384 of file ScheduleParserHelper.cpp.

References _bomRoot, AIRINV::LegStruct::_cabinList, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::FlightPeriodStruct::_itLeg, AIRINV::FlightPeriodStruct::_legAlreadyDefined, AIRINV::FlightPeriodStruct::_legList, and AIRINV::FlightPeriodStruct::describe().

22.25.4 Member Data Documentation

22.25.4.1 stdair::BomRoot& AIRINV::ScheduleParserHelper::doEndFlight::_bomRoot

Actor Specific Context.

Definition at line 198 of file ScheduleParserHelper.hpp.

Referenced by operator()().

22.25.4.2 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and operator()().

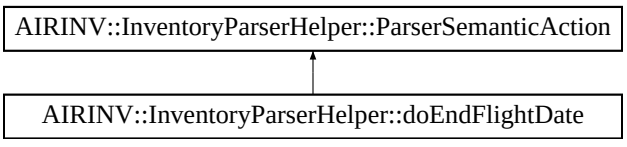
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.26 AIRINV::InventoryParserHelper::doEndFlightDate Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::doEndFlightDate:



Public Member Functions

- doEndFlightDate (stdair::BomRoot &, FlightDateStruct &, unsigned int &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- stdair::BomRoot & _bomRoot
- unsigned int & _nbOfFlights
- FlightDateStruct & _flightDate

22.26.1 Detailed Description

Mark the end of the inventory parsing.

Definition at line 425 of file InventoryParserHelper.hpp.

22.26.2 Constructor & Destructor Documentation

22.26.2.1 AIRINV::InventoryParserHelper::doEndFlightDate::doEndFlightDate (stdair::BomRoot & *ioBomRoot,* FlightDateStruct & *ioFlightDate,* unsigned int & *ioNbOfFlights*)

Actor Constructor.

Definition at line 746 of file InventoryParserHelper.cpp.

22.26.3 Member Function Documentation

22.26.3.1 void AIRINV::InventoryParserHelper::doEndFlightDate::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 755 of file InventoryParserHelper.cpp.

References _bomRoot, AIRINV::SegmentStruct::_cabinList, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itSegment, _nbOfFlights, and AIRINV::FlightDateStruct::_segmentList.

22.26.4 Member Data Documentation

22.26.4.1 stdair::BomRoot& AIRINV::InventoryParserHelper::doEndFlightDate::_bomRoot

Actor Specific Context.

Definition at line 432 of file InventoryParserHelper.hpp.

Referenced by operator()().

22.26.4.2 unsigned int& AIRINV::InventoryParserHelper::doEndFlightDate::_nbOfFlights

Definition at line 433 of file InventoryParserHelper.hpp.

Referenced by operator()().

22.26.4.3 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

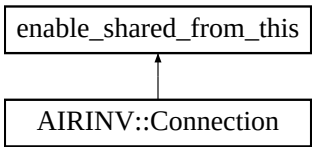
Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and operator()().

The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.27 enable_shared_from_this Class Reference

Inheritance diagram for enable_shared_from_this:



The documentation for this class was generated from the following file:

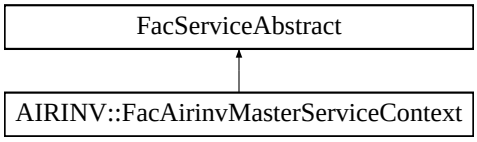
- airinv/server/Connection.hpp

22.28 AIRINV::FacAirinvMasterServiceContext Class Reference

Factory for Bucket.

`#include <airinv/factory/FacAirinvMasterServiceContext.hpp>`

Inheritance diagram for AIRINV::FacAirinvMasterServiceContext:



Public Member Functions

- ~FacAirinvMasterServiceContext ()
- AIRINV_Master_ServiceContext & create ()

Static Public Member Functions

- static FacAirinvMasterServiceContext & instance ()

Protected Member Functions

- FacAirinvMasterServiceContext ()

22.28.1 Detailed Description

Factory for Bucket.

Definition at line 20 of file FacAirinvMasterServiceContext.hpp.

22.28.2 Constructor & Destructor Documentation

22.28.2.1 AIRINV::FacAirinvMasterServiceContext::~FacAirinvMasterServiceContext ( )

Destructor.

The Destruction put the _instance to NULL in order to be clean for the next FacAirinvMasterServiceContext-::instance()

Definition at line 17 of file FacAirinvMasterServiceContext.cpp.

22.28.2.2 AIRINV::FacAirinvMasterServiceContext::FacAirinvMasterServiceContext ( ) [inline],[protected]

Default Constructor.

This constructor is protected in order to ensure the singleton pattern.

Definition at line 44 of file FacAirinvMasterServiceContext.hpp.

Referenced by instance().

22.28.3 Member Function Documentation

22.28.3.1 FacAirinvMasterServiceContext & AIRINV::FacAirinvMasterServiceContext::instance ( ) [static]

Provide the unique instance.

The singleton is instantiated when first used

Returns

FacAirinvMasterServiceContext&

Definition at line 22 of file FacAirinvMasterServiceContext.cpp.

References FacAirinvMasterServiceContext().

22.28.3.2 AIRINV_Master_ServiceContext & AIRINV::FacAirinvMasterServiceContext::create ( )

Create a new AIRINV_Master_ServiceContext object.

This new object is added to the list of instantiated objects.

Returns

AIRINV_Master_ServiceContext& The newly created object.

Definition at line 34 of file FacAirinvMasterServiceContext.cpp.

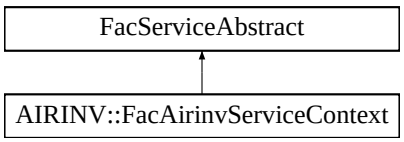
The documentation for this class was generated from the following files:

- airinv/factory/FacAirinvMasterServiceContext.hpp
- airinv/factory/FacAirinvMasterServiceContext.cpp

22.29 AIRINV::FacAirinvServiceContext Class Reference

`#include <airinv/factory/FacAirinvServiceContext.hpp>`

Inheritance diagram for AIRINV::FacAirinvServiceContext:



Public Member Functions

- ~FacAirinvServiceContext ()
- AIRINV_ServiceContext & create ()

Static Public Member Functions

- static FacAirinvServiceContext & instance ()

Protected Member Functions

- FacAirinvServiceContext ()

22.29.1 Detailed Description

Factory for Bucket.

Definition at line 18 of file FacAirinvServiceContext.hpp.

22.29.2 Constructor & Destructor Documentation

22.29.2.1 AIRINV::FacAirinvServiceContext::~FacAirinvServiceContext ( )

Destructor.

The Destruction put the _instance to NULL in order to be clean for the next FacAirinvServiceContext::instance()

Definition at line 17 of file FacAirinvServiceContext.cpp.

22.29.2.2 AIRINV::FacAirinvServiceContext::FacAirinvServiceContext ( ) [inline],[protected]

Default Constructor.

This constructor is protected in order to ensure the singleton pattern.

Definition at line 42 of file FacAirinvServiceContext.hpp.

Referenced by instance().

22.29.3 Member Function Documentation

22.29.3.1 FacAirinvServiceContext & AIRINV::FacAirinvServiceContext::instance ( ) [static]

Provide the unique instance.

The singleton is instantiated when first used

Returns

FacAirinvServiceContext&

Definition at line 22 of file FacAirinvServiceContext.cpp.

References FacAirinvServiceContext().

22.29.3.2 AIRINV_ServiceContext & AIRINV::FacAirinvServiceContext::create ( )

Create a new AIRINV_ServiceContext object.

This new object is added to the list of instantiated objects.

Returns

AIRINV_ServiceContext& The newly created object.

Definition at line 34 of file FacAirinvServiceContext.cpp.

The documentation for this class was generated from the following files:

- airinv/factory/FacAirinvServiceContext.hpp
- airinv/factory/FacAirinvServiceContext.cpp

22.30 AIRINV::FacBomAbstract Class Reference

`#include <airinv/factory/FacBomAbstract.hpp>`

Public Types

- typedef std::vector < BomAbstract * > BomPool_T

Static Public Member Functions

- static std::size_t getID (const BomAbstract *)
- static std::size_t getID (const BomAbstract &)
- static std::string getIDString (const BomAbstract *)
- static std::string getIDString (const BomAbstract &)

Protected Member Functions

- FacBomAbstract ()
- FacBomAbstract (const FacBomAbstract &)
- virtual ~FacBomAbstract ()

Protected Attributes

- BomPool_T _pool

Friends

- class FacSupervisor

22.30.1 Detailed Description

Base class for Factory layer.

Definition at line 17 of file FacBomAbstract.hpp.

22.30.2 Member Typedef Documentation

22.30.2.1 typedef std::vector<BomAbstract*> AIRINV::FacBomAbstract::BomPool_T

Define the list (pool) of Bom objects.

Definition at line 22 of file FacBomAbstract.hpp.

22.30.3 Constructor & Destructor Documentation

22.30.3.1 AIRINV::FacBomAbstract::FacBomAbstract ( ) [inline], [protected]

Default Constructor.

This constructor is protected to ensure the class is abstract.

Definition at line 41 of file FacBomAbstract.hpp.

22.30.3.2 AIRINV::FacBomAbstract::FacBomAbstract (const FacBomAbstract &) [inline], [protected]

Definition at line 42 of file FacBomAbstract.hpp.

22.30.3.3 AIRINV::FacBomAbstract::~FacBomAbstract ( ) [protected], [virtual]

Destructor.

Definition at line 16 of file FacBomAbstract.cpp.

22.30.4 Member Function Documentation

22.30.4.1 std::size_t AIRINV::FacBomAbstract::getID (const BomAbstract * *iBomAbstract_ptr*) [static]

Return the ID corresponding to the given object pointer.

Definition at line 35 of file FacBomAbstract.cpp.

Referenced by getID(), and getIDString().

22.30.4.2 std::size_t AIRINV::FacBomAbstract::getID (const BomAbstract & *iBomAbstract*) [static]

Return the ID corresponding to the given object reference.

Definition at line 43 of file FacBomAbstract.cpp.

References getID().

22.30.4.3 std::string AIRINV::FacBomAbstract::getIDString (const BomAbstract * *iBomAbstract_ptr*) [static]

Return the ID, as a string, corresponding to the given object pointer.

Definition at line 48 of file FacBomAbstract.cpp.

References getID().

Referenced by getIDString().

22.30.4.4 std::string AIRINV::FacBomAbstract::getIDString (const BomAbstract & *iBomAbstract*) [static]

Return the ID, as a string, corresponding to the given object reference.

Definition at line 56 of file FacBomAbstract.cpp.

References getIDString().

22.30.5 Friends And Related Function Documentation

22.30.5.1 friend class FacSupervisor [friend]

Definition at line 18 of file FacBomAbstract.hpp.

22.30.6 Member Data Documentation

22.30.6.1 BomPool_T AIRINV::FacBomAbstract::_pool [protected]

List of instantiated Business Objects

Definition at line 53 of file FacBomAbstract.hpp.

The documentation for this class was generated from the following files:

- airinv/factory/FacBomAbstract.hpp
- airinv/factory/FacBomAbstract.cpp

22.31 AIRINV::FacServiceAbstract Class Reference

```
#include <airinv/factory/FacServiceAbstract.hpp>
```

Public Types

- typedef std::vector < ServiceAbstract * > ServicePool_T

Public Member Functions

- virtual ~FacServiceAbstract ()
- void clean ()

Protected Member Functions

- FacServiceAbstract ()

Protected Attributes

- ServicePool_T _pool

22.31.1 Detailed Description

Base class for the (Service) Factory layer.

Definition at line 16 of file FacServiceAbstract.hpp.

22.31.2 Member Typedef Documentation

22.31.2.1 typedef std::vector<ServiceAbstract*> AIRINV::FacServiceAbstract::ServicePool_T

Define the list (pool) of Service objects.

Definition at line 20 of file FacServiceAbstract.hpp.

22.31.3 Constructor & Destructor Documentation

22.31.3.1 AIRINV::FacServiceAbstract::~FacServiceAbstract ( ) [virtual]

Destructor.

Definition at line 13 of file FacServiceAbstract.cpp.

References clean().

22.31.3.2 AIRINV::FacServiceAbstract::FacServiceAbstract ( ) [inline], [protected]

Default Constructor.

This constructor is protected to ensure the class is abstract.

Definition at line 31 of file FacServiceAbstract.hpp.

22.31.4 Member Function Documentation

22.31.4.1 void AIRINV::FacServiceAbstract::clean ( )

Destroyed all the object instantiated by this factory.

Definition at line 18 of file FacServiceAbstract.cpp.

References _pool.

Referenced by ~FacServiceAbstract().

22.31.5 Member Data Documentation

22.31.5.1 ServicePool_T AIRINV::FacServiceAbstract::_pool [protected]

List of instantiated Business Objects

Definition at line 34 of file FacServiceAbstract.hpp.

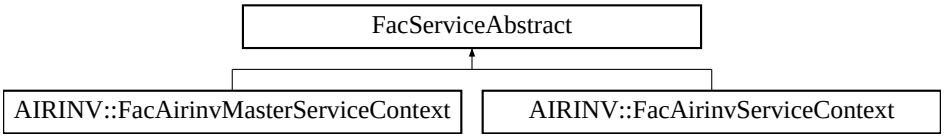
Referenced by clean().

The documentation for this class was generated from the following files:

- airinv/factory/FacServiceAbstract.hpp
- airinv/factory/FacServiceAbstract.cpp

22.32 FacServiceAbstract Class Reference

Inheritance diagram for FacServiceAbstract:



The documentation for this class was generated from the following file:

- airinv/factory/FacAirinvMasterServiceContext.hpp

22.33 AIRINV::FacSupervisor Class Reference

`#include <airinv/factory/FacSupervisor.hpp>`

Public Types

- typedef std::vector < FacBomAbstract * > BomFactoryPool_T
- typedef std::vector < FacServiceAbstract * > ServiceFactoryPool_T

Public Member Functions

- void registerBomFactory (FacBomAbstract *)
- void registerServiceFactory (FacServiceAbstract *)
- void cleanBomLayer ()
- void cleanServiceLayer ()
- ~FacSupervisor ()

Static Public Member Functions

- static FacSupervisor & instance ()
- static void cleanFactory ()

Protected Member Functions

- FacSupervisor ()
- FacSupervisor (const FacSupervisor &)

22.33.1 Detailed Description

Singleton class to register and clean all Factories.

Definition at line 17 of file FacSupervisor.hpp.

22.33.2 Member Typedef Documentation

22.33.2.1 typedef std::vector<FacBomAbstract*> AIRINV::FacSupervisor::BomFactoryPool_T

Define the pool (list) of factories.

Definition at line 21 of file FacSupervisor.hpp.

22.33.2.2 typedef std::vector<FacServiceAbstract*> AIRINV::FacSupervisor::ServiceFactoryPool_T

Definition at line 22 of file FacSupervisor.hpp.

22.33.3 Constructor & Destructor Documentation

22.33.3.1 AIRINV::FacSupervisor::~FacSupervisor ( )

Destructor

The static instance is deleted (and reset to NULL) by the static cleanFactory() method.

Definition at line 41 of file FacSupervisor.cpp.

References cleanBomLayer(), and cleanServiceLayer().

22.33.3.2 AIRINV::FacSupervisor::FacSupervisor ( ) [protected]

Default Constructor.

This constructor is protected to ensure the singleton pattern.

Definition at line 16 of file FacSupervisor.cpp.

Referenced by instance().

22.33.3.3 AIRINV::FacSupervisor::FacSupervisor (const FacSupervisor &) [inline], [protected]

Definition at line 66 of file FacSupervisor.hpp.

22.33.4 Member Function Documentation

22.33.4.1 FacSupervisor & AIRINV::FacSupervisor::instance ( ) [static]

Provides the unique instance.

The singleton is instantiated when first used.

Returns

FacSupervisor&

Definition at line 20 of file FacSupervisor.cpp.

References FacSupervisor().

22.33.4.2 void AIRINV::FacSupervisor::registerBomFactory (FacBomAbstract * *ioFacBomAbstract_ptr*)

Register a newly instantiated concrete factory for the Bom layer.

When a concrete Factory is firstly instantiated this factory have to register itself to the FacSupervisor

Parameters

FacAbstract&	the concrete Factory to register.

Definition at line 30 of file FacSupervisor.cpp.

22.33.4.3 void AIRINV::FacSupervisor::registerServiceFactory (FacServiceAbstract * *ioFacServiceAbstract_ptr*)

Register a newly instantiated concrete factory for the Service layer.

When a concrete Factory is firstly instantiated this factory have to register itself to the FacSupervisor.

Parameters

FacService-Abstract&	the concrete Factory to register.

Definition at line 36 of file FacSupervisor.cpp.

22.33.4.4 void AIRINV::FacSupervisor::cleanBomLayer ( )

Clean all created object.

Call the clean method of all the instantiated factories for the Bom layer.

Definition at line 47 of file FacSupervisor.cpp.

Referenced by cleanFactory(), and ~FacSupervisor().

22.33.4.5 void AIRINV::FacSupervisor::cleanServiceLayer ( )

Clean all Service created object.

Call the clean method of all the instantiated factories for the Service layer.

Definition at line 61 of file FacSupervisor.cpp.

Referenced by cleanFactory(), and ~FacSupervisor().

22.33.4.6 void AIRINV::FacSupervisor::cleanFactory ( ) [static]

Clean the static instance.

The singleton is deleted.

Definition at line 75 of file FacSupervisor.cpp.

References cleanBomLayer(), and cleanServiceLayer().

The documentation for this class was generated from the following files:

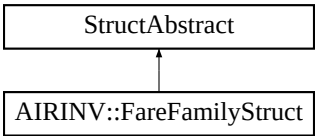
- airinv/factory/FacSupervisor.hpp
- airinv/factory/FacSupervisor.cpp

22.34 AIRINV::FareFamilyStruct Struct Reference

Utility Structure for the parsing of fare family details.

`#include <airinv/bom/FareFamilyStruct.hpp>`

Inheritance diagram for AIRINV::FareFamilyStruct:



Public Member Functions

- FareFamilyStruct ()
- FareFamilyStruct (const stdair::FamilyCode_T &, const stdair::ClassList_String_T &)
- void fill (stdair::FareFamily &) const
- const std::string describe () const

Public Attributes

- stdair::FamilyCode_T _familyCode
- stdair::ClassList_String_T _classes
- BookingClassStructList_T _classList

22.34.1 Detailed Description

Utility Structure for the parsing of fare family details.

Definition at line 26 of file FareFamilyStruct.hpp.

22.34.2 Constructor & Destructor Documentation

22.34.2.1 AIRINV::FareFamilyStruct::FareFamilyStruct ( )

Default constructor.

Definition at line 16 of file FareFamilyStruct.cpp.

22.34.2.2 AIRINV::FareFamilyStruct::FareFamilyStruct (const stdair::FamilyCode_T & *iFamilyCode*, const stdair::ClassList_String_T & *iClasses*)

Main constructor.

Definition at line 23 of file FareFamilyStruct.cpp.

22.34.3 Member Function Documentation

22.34.3.1 void AIRINV::FareFamilyStruct::fill (stdair::FareFamily & *ioFareFamily*) const

Fill the FareFamily objects with the attributes of the FareFamilyStruct.

Definition at line 47 of file FareFamilyStruct.cpp.

22.34.3.2 const std::string AIRINV::FareFamilyStruct::describe ( ) const

Give a description of the structure (for display purposes).

Definition at line 29 of file FareFamilyStruct.cpp.

References _classes, _classList, _familyCode, and AIRINV::BookingClassStruct::describe().

Referenced by AIRINV::SegmentCabinStruct::describe().

22.34.4 Member Data Documentation

22.34.4.1 stdair::FamilyCode_T AIRINV::FareFamilyStruct::_familyCode

Definition at line 28 of file FareFamilyStruct.hpp.

Referenced by describe(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::storeFamilyCode::operator()().

22.34.4.2 stdair::ClassList_String_T AIRINV::FareFamilyStruct::_classes

Definition at line 29 of file FareFamilyStruct.hpp.

Referenced by describe(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), and AIRINV::InventoryParserHelper::storeFClasses::operator()().

22.34.4.3 BookingClassStructList_T AIRINV::FareFamilyStruct::_classList

Definition at line 30 of file FareFamilyStruct.hpp.

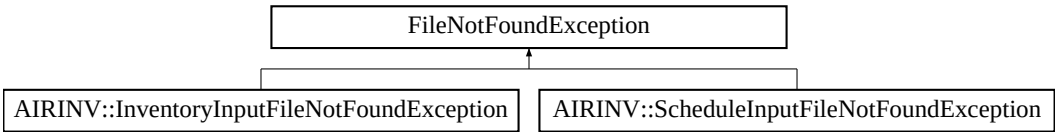
Referenced by describe(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), and AIRINV::InventoryParserHelper::storeFClasses::operator()().

The documentation for this struct was generated from the following files:

- airinv/bom/FareFamilyStruct.hpp
- airinv/bom/FareFamilyStruct.cpp

22.35 FileNotFoundException Class Reference

Inheritance diagram for FileNotFoundException:



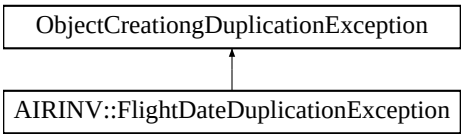
The documentation for this class was generated from the following file:

- airinv/AIRINV_Types.hpp

22.36 AIRINV::FlightDateDuplicationException Class Reference

`#include <airinv/AIRINV_Types.hpp>`

Inheritance diagram for AIRINV::FlightDateDuplicationException:



Public Member Functions

- FlightDateDuplicationException (const std::string &iWhat)

22.36.1 Detailed Description

Duplicated flight date object.

Definition at line 90 of file AIRINV_Types.hpp.

22.36.2 Constructor & Destructor Documentation

22.36.2.1 AIRINV::FlightDateDuplicationException::FlightDateDuplicationException (const std::string & *iWhat*) [inline]

Constructor.

Definition at line 95 of file AIRINV_Types.hpp.

The documentation for this class was generated from the following file:

- airinv/AIRINV_Types.hpp

22.37 AIRINV::FlightDateHelper Class Reference

`#include <airinv/bom/FlightDateHelper.hpp>`

Static Public Member Functions

- static void fillFromRouting (const stdair::FlightDate &)
- static void updateAvailablityPool (const stdair::FlightDate &, const stdair::CabinCode_T &)
- static void updateBookingControls (stdair::FlightDate &)

22.37.1 Detailed Description

Class representing the actual business functions for an airline flight-date.

Definition at line 19 of file FlightDateHelper.hpp.

22.37.2 Member Function Documentation

22.37.2.1 void AIRINV::FlightDateHelper::fillFromRouting (const stdair::FlightDate & *iFlightDate*) [static]

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 51 of file FlightDateHelper.cpp.

22.37.2.2 void AIRINV::FlightDateHelper::updateAvailablityPool (const stdair::FlightDate & *iFlightDate,* const stdair::CabinCode_T & *iCabinCode*) [static]

Update the availability pool of all the segment-cabins after a reservation.

Definition at line 67 of file FlightDateHelper.cpp.

Referenced by AIRINV::SegmentCabinHelper::updateFromReservation().

22.37.2.3 void AIRINV::FlightDateHelper::updateBookingControls (stdair::FlightDate & *ioFlightDate*) [static]

Update booking controls after optimisation.

Definition at line 22 of file FlightDateHelper.cpp.

References AIRINV::SegmentCabinHelper::buildPseudoBidPriceVector(), and AIRINV::SegmentCabinHelper::updateBookingControlsUsingPseudoBidPriceVector().

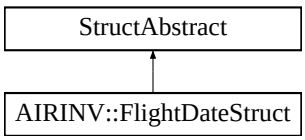
The documentation for this class was generated from the following files:

- airinv/bom/FlightDateHelper.hpp
- airinv/bom/FlightDateHelper.cpp

22.38 AIRINV::FlightDateStruct Struct Reference

`#include <airinv/bom/FlightDateStruct.hpp>`

Inheritance diagram for AIRINV::FlightDateStruct:



Public Member Functions

- stdair::Date_T getDate () const
- stdair::Duration_T getTime () const
- const std::string describe () const
- void addAirport (const stdair::AirportCode_T &)
- void buildSegments ()
- void addSegmentCabin (const SegmentStruct &, const SegmentCabinStruct &)
- void addSegmentCabin (const SegmentCabinStruct &)
- void addFareFamily (const SegmentStruct &, const SegmentCabinStruct &, const FareFamilyStruct &)
- void addFareFamily (const SegmentCabinStruct &, const FareFamilyStruct &)
- FlightDateStruct ()

Public Attributes

- stdair::AirlineCode_T _airlineCode
- stdair::FlightNumber_T _flightNumber
- stdair::Date_T _flightDate
- FlightTypeCode _flightTypeCode
- FlightVisibilityCode _flightVisibilityCode
- LegStructList_T _legList
- SegmentStructList_T _segmentList

- unsigned int _itYear
- unsigned int _itMonth
- unsigned int _itDay
- int _dateOffSet
- long _itHours
- long _itMinutes
- long _itSeconds
- AirportList_T _airportList
- AirportOrderedList_T _airportOrderedList
- bool _legAlreadyDefined
- LegStruct _itLeg
- LegCabinStruct _itLegCabin
- BucketStruct _itBucket
- bool _areSegmentDefinitionsSpecific
- SegmentStruct _itSegment
- SegmentCabinStruct _itSegmentCabin
- BookingClassStruct _itBookingClass

22.38.1 Detailed Description

Utility Structure for the parsing of Flight-Date structures.

Definition at line 27 of file FlightDateStruct.hpp.

22.38.2 Constructor & Destructor Documentation

22.38.2.1 AIRINV::FlightDateStruct::FlightDateStruct ( )

Constructor.

Definition at line 17 of file FlightDateStruct.cpp.

22.38.3 Member Function Documentation

22.38.3.1 stdair::Date_T AIRINV::FlightDateStruct::getDate ( ) const

Set the date from the staging details.

Definition at line 25 of file FlightDateStruct.cpp.

References _itDay, _itMonth, and _itYear.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), and AIRINV::InventoryParserHelper::storeOffDate::operator()().

22.38.3.2 stdair::Duration_T AIRINV::FlightDateStruct::getTime ( ) const

Set the time from the staging details.

Definition at line 30 of file FlightDateStruct.cpp.

References _itHours, _itMinutes, and _itSeconds.

Referenced by AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), and AIRINV::InventoryParserHelper::storeOffTime::operator()().

22.38.3.3 const std::string AIRINV::FlightDateStruct::describe ( ) const

Give a description of the structure (for display purposes).

Definition at line 37 of file FlightDateStruct.cpp.

References _airlineCode, _flightDate, _flightNumber, _flightTypeCode, _flightVisibilityCode, _legList, _segmentList, AIRINV::SegmentStruct::describe(), AIRINV::LegStruct::describe(), AIRINV::FlightVisibilityCode::getCode(), and AIRINV::FlightVisibilityCode::NORMAL.

22.38.3.4 void AIRINV::FlightDateStruct::addAirport (const stdair::AirportCode_T & *iAirport*)

Add the given airport to the internal lists (if not already existing).

Definition at line 67 of file FlightDateStruct.cpp.

References _airportList, and _airportOrderedList.

Referenced by AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), and AIRINV::InventoryParserHelper::storeLegOffPoint::operator()().

22.38.3.5 void AIRINV::FlightDateStruct::buildSegments ( )

Build the list of SegmentStruct objects.

Definition at line 83 of file FlightDateStruct.cpp.

References _airportList, _airportOrderedList, AIRINV::SegmentStruct::_boardingPoint, AIRINV::SegmentStruct::_offPoint, and _segmentList.

22.38.3.6 void AIRINV::FlightDateStruct::addSegmentCabin (const SegmentStruct & *iSegment,* const SegmentCabinStruct & *iCabin*)

Add, to the Segment structure whose key corresponds to the given (board point, off point) pair, the specific segment cabin details (mainly, the list of the class codes).

Note that the Segment structure is retrieved from the internal list, already filled by a previous step (the buildSegments() method).

Definition at line 116 of file FlightDateStruct.cpp.

References AIRINV::SegmentStruct::_boardingPoint, AIRINV::SegmentStruct::_cabinList, AIRINV::SegmentStruct::_offPoint, and _segmentList.

22.38.3.7 void AIRINV::FlightDateStruct::addSegmentCabin (const SegmentCabinStruct & *iCabin*)

Add, to all the Segment structures, the general segment cabin details (mainly, the list of the class codes).

Note that the Segment structures are stored within the internal list, already filled by a previous step (the buildSegments() method).

Definition at line 153 of file FlightDateStruct.cpp.

References AIRINV::SegmentStruct::_cabinList, and _segmentList.

22.38.3.8 void AIRINV::FlightDateStruct::addFareFamily (const SegmentStruct & *iSegment,* const SegmentCabinStruct & *iCabin,* const FareFamilyStruct & *iFareFamily*)

Add, to the SegmentCabin structure whose key corresponds to the given cabin code, the specific segment fare family details (mainly, the list of the class codes).

Note that the SegmentCabin structure is retrieved from the internal list, already filled by a previous step (the buildSegmentCabins() method).

Definition at line 167 of file FlightDateStruct.cpp.

References AIRINV::SegmentStruct::_boardingPoint, AIRINV::SegmentCabinStruct::_cabinCode, AIRINV::SegmentStruct::_cabinList, AIRINV::SegmentCabinStruct::_fareFamilies, AIRINV::SegmentStruct::_offPoint, and

_segmentList.

22.38.3.9 void AIRINV::FlightDateStruct::addFareFamily (const SegmentCabinStruct & *iCabin,* const FareFamilyStruct & *iFareFamily*)

Add, to all the Segment structures, the general fare family sets (list of fare families).

Note that the SegmentCabin structures are stored within the internal list, already filled by a previous step (the buildSegmentCabins() method).

Definition at line 231 of file FlightDateStruct.cpp.

References AIRINV::SegmentCabinStruct::_cabinCode, AIRINV::SegmentStruct::_cabinList, AIRINV::SegmentCabinStruct::_fareFamilies, and _segmentList.

22.38.4 Member Data Documentation

22.38.4.1 stdair::AirlineCode_T AIRINV::FlightDateStruct::_airlineCode

Definition at line 81 of file FlightDateStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeAirlineCode::operator()().

22.38.4.2 stdair::FlightNumber_T AIRINV::FlightDateStruct::_flightNumber

Definition at line 82 of file FlightDateStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeFlightNumber::operator()().

22.38.4.3 stdair::Date_T AIRINV::FlightDateStruct::_flightDate

Definition at line 83 of file FlightDateStruct.hpp.

Referenced by describe(), AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), and AIRINV::InventoryParserHelper::storeFlightDate::operator()().

22.38.4.4 FlightTypeCode AIRINV::FlightDateStruct::_flightTypeCode

Definition at line 84 of file FlightDateStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()().

22.38.4.5 FlightVisibilityCode AIRINV::FlightDateStruct::_flightVisibilityCode

Definition at line 85 of file FlightDateStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()().

22.38.4.6 LegStructList_T AIRINV::FlightDateStruct::_legList

Definition at line 86 of file FlightDateStruct.hpp.

Referenced by describe(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), and AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()().

22.38.4.7 SegmentStructList_T AIRINV::FlightDateStruct::_segmentList

Definition at line 87 of file FlightDateStruct.hpp.

Referenced by addFareFamily(), addSegmentCabin(), buildSegments(), describe(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

22.38.4.8 unsigned int AIRINV::FlightDateStruct::_itYear

Staging Date.

Definition at line 90 of file FlightDateStruct.hpp.

Referenced by getDate().

22.38.4.9 unsigned int AIRINV::FlightDateStruct::_itMonth

Definition at line 91 of file FlightDateStruct.hpp.

Referenced by getDate().

22.38.4.10 unsigned int AIRINV::FlightDateStruct::_itDay

Definition at line 92 of file FlightDateStruct.hpp.

Referenced by getDate().

22.38.4.11 int AIRINV::FlightDateStruct::_dateOffSet

Definition at line 93 of file FlightDateStruct.hpp.

Referenced by AIRINV::InventoryParserHelper::storeBoardingTime::operator()().

22.38.4.12 long AIRINV::FlightDateStruct::_itHours

Staging Time.

Definition at line 96 of file FlightDateStruct.hpp.

Referenced by getTime().

22.38.4.13 long AIRINV::FlightDateStruct::_itMinutes

Definition at line 97 of file FlightDateStruct.hpp.

Referenced by getTime().

22.38.4.14 long AIRINV::FlightDateStruct::_itSeconds

Definition at line 98 of file FlightDateStruct.hpp.

Referenced by getTime(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), and AIRINV::InventoryParserHelper::storeOffTime::operator()().

22.38.4.15 AirportList_T AIRINV::FlightDateStruct::_airportList

Staging Airport List (helper to derive the list of Segment structures).

Definition at line 102 of file FlightDateStruct.hpp.

Referenced by addAirport(), and buildSegments().

22.38.4.16 AirportOrderedList_T AIRINV::FlightDateStruct::_airportOrderedList

Definition at line 103 of file FlightDateStruct.hpp.

Referenced by addAirport(), and buildSegments().

22.38.4.17 bool AIRINV::FlightDateStruct::_legAlreadyDefined

Staging Leg (resp. Cabin) structure, gathering the result of the iteration on one leg (resp. cabin).

Definition at line 107 of file FlightDateStruct.hpp.

22.38.4.18 LegStruct AIRINV::FlightDateStruct::_itLeg

Definition at line 108 of file FlightDateStruct.hpp.

Referenced by AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), and AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()().

22.38.4.19 LegCabinStruct AIRINV::FlightDateStruct::_itLegCabin

Definition at line 109 of file FlightDateStruct.hpp.

Referenced by AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), and AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()().

22.38.4.20 BucketStruct AIRINV::FlightDateStruct::_itBucket

Definition at line 110 of file FlightDateStruct.hpp.

Referenced by AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), and AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()().

22.38.4.21 bool AIRINV::FlightDateStruct::_areSegmentDefinitionsSpecific

Staging Segment-related attributes.

Definition at line 113 of file FlightDateStruct.hpp.

22.38.4.22 SegmentStruct AIRINV::FlightDateStruct::_itSegment

Definition at line 114 of file FlightDateStruct.hpp.

Referenced by AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

22.38.4.23 SegmentCabinStruct AIRINV::FlightDateStruct::_itSegmentCabin

Definition at line 115 of file FlightDateStruct.hpp.

Referenced by AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), and AIRINV::InventoryParserHelper::storeFClasses::operator()().

22.38.4.24 BookingClassStruct AIRINV::FlightDateStruct::_itBookingClass

Definition at line 116 of file FlightDateStruct.hpp.

Referenced by AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper-

::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), and AIRINV::InventoryParserHelper::storeFClasses::operator()().

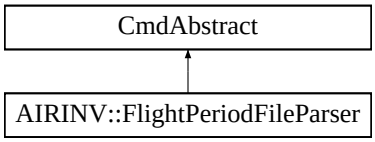
The documentation for this struct was generated from the following files:

- airinv/bom/FlightDateStruct.hpp
- airinv/bom/FlightDateStruct.cpp

22.39 AIRINV::FlightPeriodFileParser Class Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::FlightPeriodFileParser:



Public Member Functions

- FlightPeriodFileParser (stdair::BomRoot &ioBomRoot, const stdair::Filename_T &iFilename)
- bool generateInventories ()

22.39.1 Detailed Description

Short Description

Detailed Description. Class wrapping the initialisation and entry point of the parser.

The seemingly redundancy is used to force the instantiation of the actual parser, which is a templatised Boost Spirit grammar. Hence, the actual parser is instantiated within that class object code.

Definition at line 292 of file ScheduleParserHelper.hpp.

22.39.2 Constructor & Destructor Documentation

22.39.2.1 AIRINV::FlightPeriodFileParser::FlightPeriodFileParser (stdair::BomRoot & *ioBomRoot,* const stdair::Filename_T & *iFilename*)

Constructor.

Definition at line 631 of file ScheduleParserHelper.cpp.

22.39.3 Member Function Documentation

22.39.3.1 bool AIRINV::FlightPeriodFileParser::generateInventories ( )

Parse the input file and generate the Inventories.

Definition at line 655 of file ScheduleParserHelper.cpp.

Referenced by AIRINV::ScheduleParser::generateInventories().

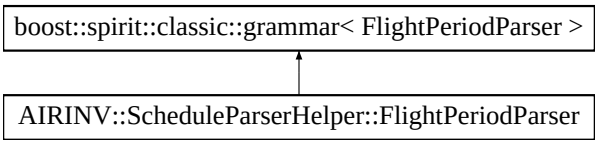
The documentation for this class was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.40 AIRINV::ScheduleParserHelper::FlightPeriodParser Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::FlightPeriodParser:



Classes

- struct definition

Public Member Functions

- FlightPeriodParser (stdair::BomRoot &, FlightPeriodStruct &)

Public Attributes

- stdair::BomRoot & _bomRoot
- FlightPeriodStruct & _flightPeriod

22.40.1 Detailed Description

AirlineCode; FlightNumber; DateRangeStart; DateRangeEnd; DOW; (list) BoardingPoint; OffPoint; BoardingTime; DateOffset; OffTime; ElapsedTime; (list) CabinCode; Capacity; SegmentSpecificty (0 or 1); (list) (optional BoardingPoint; OffPoint); CabinCode; Classes BA; 9; 2007-04-20; 2007-04-30; 0000011; LHR; BKK; 22:00; +1; 15:15; 11:15; C; 12; M; 300; BKK; SYD; 18:10; +1; 06:05; 08:55; C; 20; M; 250; 0; C; CDIU; 1; CD; 2; IU; M; YHBKLMNOPQRSTVWX; 3; YHBKLMNOPQRSTVWX BA; 9; 2007-04-20; 2007-04-30; 1111100; LHR; SIN; 22:00; +1; 15:15; 11:15; C; 15; M; 310; SIN; SYD; 18:10; +1; 06:05; 08:55; C; 25; M; 260; 1; LHR; SIN; C; CDIU; 1; CDIU; M; YHBKLMNOPQRSTVWX; 2;YHBKLMNOPQRSTVWX SIN; SYD; C; CDIU; 1; CDIU; M; YHBKLMNOPQRSTVWX; 2;YHBKLMNOPQRSTVWX LHR; SYD; C; CDIU; 1; CDIU; M; YHBKLMNOPQRSTVWX; 2;YHBKLMNOPQRSTVWX

Grammar: DOW ::= int FlightKey ::= AirlineCode ';' FlightNumber ';' DateRangeStart ';' DateRangeEnd ';' DOW LegKey ::= BoardingPoint ';' OffPoint LegDetails ::= BoardingTime ['/' BoardingDateOffset] ';' OffTime ['/' BoardingDateOffset] ';' Elapsed LegCabinDetails ::= CabinCode ';' Capacity Leg ::= LegKey ';' LegDetails (';' CabinDetails)+ SegmentKey ::= BoardingPoint ';' OffPoint SegmentCabinDetails ::= CabinCode ';' Classes (';' FamilyCabinDetails)+

FamilyCabinDetails ::= FamilyCode ';' Classes FullSegmentCabinDetails::= (';' SegmentCabinDetails)+ GenericSegment ::= '0' (';' SegmentCabinDetails)+ SpecificSegments ::= '1' (';' SegmentKey ';' FullSegmentCabinDetails)+ SegmentSection ::= GenericSegment | SpecificSegments FlightPeriod ::= FlightKey (';' Leg)+ ';' SegmentSection ';' EndOfFlight EndOfFlight ::= ';'Grammar for the Flight-Period parser.

Definition at line 249 of file ScheduleParserHelper.hpp.

22.40.2 Constructor & Destructor Documentation

22.40.2.1 AIRINV::ScheduleParserHelper::FlightPeriodParser::FlightPeriodParser (stdair::BomRoot & *ioBomRoot,* FlightPeriodStruct & *ioFlightPeriod*)

Definition at line 466 of file ScheduleParserHelper.cpp.

22.40.3 Member Data Documentation

22.40.3.1 stdair::BomRoot& AIRINV::ScheduleParserHelper::FlightPeriodParser::_bomRoot

Definition at line 273 of file ScheduleParserHelper.hpp.

22.40.3.2 FlightPeriodStruct& AIRINV::ScheduleParserHelper::FlightPeriodParser::_flightPeriod

Definition at line 274 of file ScheduleParserHelper.hpp.

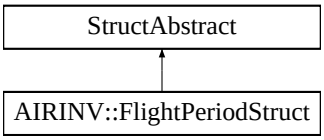
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.41 AIRINV::FlightPeriodStruct Struct Reference

`#include <airinv/bom/FlightPeriodStruct.hpp>`

Inheritance diagram for AIRINV::FlightPeriodStruct:



Public Member Functions

- stdair::Date_T getDate () const
- stdair::Duration_T getTime () const
- const std::string describe () const
- void addAirport (const stdair::AirportCode_T &)
- void buildSegments ()
- void addSegmentCabin (const SegmentStruct &, const SegmentCabinStruct &)
- void addSegmentCabin (const SegmentCabinStruct &)
- void addFareFamily (const SegmentStruct &, const SegmentCabinStruct &, const FareFamilyStruct &)
- void addFareFamily (const SegmentCabinStruct &, const FareFamilyStruct &)
- FlightPeriodStruct ()

Public Attributes

- stdair::AirlineCode_T _airlineCode
- stdair::FlightNumber_T _flightNumber
- stdair::DatePeriod_T _dateRange
- stdair::DoWStruct _dow
- LegStructList_T _legList
- SegmentStructList_T _segmentList
- bool _legAlreadyDefined
- LegStruct _itLeg
- LegCabinStruct _itLegCabin
- stdair::Date_T _dateRangeStart
- stdair::Date_T _dateRangeEnd
- unsigned int _itYear
- unsigned int _itMonth
- unsigned int _itDay
- int _dateOffset
- long _itHours
- long _itMinutes
- long _itSeconds
- AirportList_T _airportList
- AirportOrderedList_T _airportOrderedList
- bool _areSegmentDefinitionsSpecific
- SegmentStruct _itSegment
- SegmentCabinStruct _itSegmentCabin

22.41.1 Detailed Description

Utility Structure for the parsing of Flight-Period structures.

Definition at line 24 of file FlightPeriodStruct.hpp.

22.41.2 Constructor & Destructor Documentation

22.41.2.1 AIRINV::FlightPeriodStruct::FlightPeriodStruct ( )

Constructor.

Definition at line 17 of file FlightPeriodStruct.cpp.

22.41.3 Member Function Documentation

22.41.3.1 stdair::Date_T AIRINV::FlightPeriodStruct::getDate ( ) const

Set the date from the staging details.

Definition at line 24 of file FlightPeriodStruct.cpp.

References _itDay, _itMonth, and _itYear.

Referenced by AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), and AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()().

22.41.3.2 stdair::Duration_T AIRINV::FlightPeriodStruct::getTime ( ) const

Set the time from the staging details.

Definition at line 29 of file FlightPeriodStruct.cpp.

References _itHours, _itMinutes, and _itSeconds.

Referenced by AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), and AIRINV::ScheduleParserHelper::storeElapsedTime::operator()().

22.41.3.3 const std::string AIRINV::FlightPeriodStruct::describe ( ) const

Give a description of the structure (for display purposes).

Definition at line 36 of file FlightPeriodStruct.cpp.

References _airlineCode, _dateRange, _dow, _flightNumber, _legList, _segmentList, AIRINV::SegmentStruct::describe(), and AIRINV::LegStruct::describe().

Referenced by AIRINV::ScheduleParserHelper::doEndFlight::operator()().

22.41.3.4 void AIRINV::FlightPeriodStruct::addAirport (const stdair::AirportCode_T & *iAirport*)

Add the given airport to the internal lists (if not already existing).

Definition at line 62 of file FlightPeriodStruct.cpp.

References _airportList, and _airportOrderedList.

Referenced by AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), and AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()().

22.41.3.5 void AIRINV::FlightPeriodStruct::buildSegments ( )

Build the list of SegmentStruct objects.

Definition at line 78 of file FlightPeriodStruct.cpp.

References _airportList, _airportOrderedList, AIRINV::SegmentStruct::_boardingPoint, AIRINV::SegmentStruct::_offPoint, and _segmentList.

Referenced by AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()().

22.41.3.6 void AIRINV::FlightPeriodStruct::addSegmentCabin (const SegmentStruct & *iSegment,* const SegmentCabinStruct & *iCabin*)

Add, to the Segment structure whose key corresponds to the given (board point, off point) pair, the specific segment cabin details (mainly, the list of the class codes).

Note that the Segment structure is retrieved from the internal list, already filled by a previous step (the buildSegments() method).

Definition at line 111 of file FlightPeriodStruct.cpp.

References AIRINV::SegmentStruct::_boardingPoint, AIRINV::SegmentStruct::_cabinList, AIRINV::SegmentStruct::_offPoint, and _segmentList.

Referenced by AIRINV::ScheduleParserHelper::storeClasses::operator()().

22.41.3.7 void AIRINV::FlightPeriodStruct::addSegmentCabin (const SegmentCabinStruct & *iCabin*)

Add, to all the Segment structures, the general segment cabin details (mainly, the list of the class codes).

Note that the Segment structures are stored within the internal list, already filled by a previous step (the buildSegments() method).

Definition at line 148 of file FlightPeriodStruct.cpp.

References AIRINV::SegmentStruct::_cabinList, and _segmentList.

22.41.3.8 void AIRINV::FlightPeriodStruct::addFareFamily (const SegmentStruct & *iSegment,* const SegmentCabinStruct & *iCabin,* const FareFamilyStruct & *iFareFamily*)

Add, to the SegmentCabin structure whose key corresponds to the given cabin code, the specific segment fare family details (mainly, the list of the class codes).

Note that the SegmentCabin structure is retrieved from the internal list, already filled by a previous step (the buildSegmentCabins() method).

Definition at line 161 of file FlightPeriodStruct.cpp.

References AIRINV::SegmentStruct::_boardingPoint, AIRINV::SegmentCabinStruct::_cabinCode, AIRINV::SegmentStruct::_cabinList, AIRINV::SegmentCabinStruct::_fareFamilies, AIRINV::SegmentStruct::_offPoint, and _segmentList.

Referenced by AIRINV::ScheduleParserHelper::storeFClasses::operator()().

22.41.3.9 void AIRINV::FlightPeriodStruct::addFareFamily (const SegmentCabinStruct & *iCabin,* const FareFamilyStruct & *iFareFamily*)

Add, to all the Segment structures, the general fare family sets (list of fare families).

Note that the SegmentCabin structures are stored within the internal list, already filled by a previous step (the buildSegmentCabins() method).

Definition at line 225 of file FlightPeriodStruct.cpp.

References AIRINV::SegmentCabinStruct::_cabinCode, AIRINV::SegmentStruct::_cabinList, AIRINV::SegmentCabinStruct::_fareFamilies, and _segmentList.

22.41.4 Member Data Documentation

22.41.4.1 stdair::AirlineCode_T AIRINV::FlightPeriodStruct::_airlineCode

Definition at line 80 of file FlightPeriodStruct.hpp.

Referenced by describe(), and AIRINV::ScheduleParserHelper::storeAirlineCode::operator()().

22.41.4.2 stdair::FlightNumber_T AIRINV::FlightPeriodStruct::_flightNumber

Definition at line 81 of file FlightPeriodStruct.hpp.

Referenced by describe(), and AIRINV::ScheduleParserHelper::storeFlightNumber::operator()().

22.41.4.3 stdair::DatePeriod_T AIRINV::FlightPeriodStruct::_dateRange

Definition at line 82 of file FlightPeriodStruct.hpp.

Referenced by describe(), and AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()().

22.41.4.4 stdair::DoWStruct AIRINV::FlightPeriodStruct::_dow

Definition at line 83 of file FlightPeriodStruct.hpp.

Referenced by describe(), and AIRINV::ScheduleParserHelper::storeDow::operator()().

22.41.4.5 LegStructList_T AIRINV::FlightPeriodStruct::_legList

Definition at line 84 of file FlightPeriodStruct.hpp.

Referenced by describe(), AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

22.41.4.6 SegmentStructList_T AIRINV::FlightPeriodStruct::_segmentList

Definition at line 85 of file FlightPeriodStruct.hpp.

Referenced by addFareFamily(), addSegmentCabin(), buildSegments(), and describe().

22.41.4.7 bool AIRINV::FlightPeriodStruct::_legAlreadyDefined

Staging Leg (resp. Cabin) structure, gathering the result of the iteration on one leg (resp. cabin).

Definition at line 89 of file FlightPeriodStruct.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

22.41.4.8 LegStruct AIRINV::FlightPeriodStruct::_itLeg

Definition at line 90 of file FlightPeriodStruct.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

22.41.4.9 LegCabinStruct AIRINV::FlightPeriodStruct::_itLegCabin

Definition at line 91 of file FlightPeriodStruct.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), and AIRINV::ScheduleParserHelper::storeCapacity::operator()().

22.41.4.10 stdair::Date_T AIRINV::FlightPeriodStruct::_dateRangeStart

Staging Date.

Definition at line 94 of file FlightPeriodStruct.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), and AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()().

22.41.4.11 stdair::Date_T AIRINV::FlightPeriodStruct::_dateRangeEnd

Definition at line 95 of file FlightPeriodStruct.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()().

22.41.4.12 unsigned int AIRINV::FlightPeriodStruct::_itYear

Definition at line 96 of file FlightPeriodStruct.hpp.

Referenced by getDate().

22.41.4.13 unsigned int AIRINV::FlightPeriodStruct::_itMonth

Definition at line 97 of file FlightPeriodStruct.hpp.

Referenced by getDate().

22.41.4.14 unsigned int AIRINV::FlightPeriodStruct::_itDay

Definition at line 98 of file FlightPeriodStruct.hpp.

Referenced by getDate().

22.41.4.15 int AIRINV::FlightPeriodStruct::_dateOffset

Definition at line 99 of file FlightPeriodStruct.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper-

::storeOffTime::operator()(), and AIRINV::ScheduleParserHelper::storeElapsedTime::operator()().

22.41.4.16 long AIRINV::FlightPeriodStruct::_itHours

Staging Time.

Definition at line 102 of file FlightPeriodStruct.hpp.

Referenced by getTime().

22.41.4.17 long AIRINV::FlightPeriodStruct::_itMinutes

Definition at line 103 of file FlightPeriodStruct.hpp.

Referenced by getTime().

22.41.4.18 long AIRINV::FlightPeriodStruct::_itSeconds

Definition at line 104 of file FlightPeriodStruct.hpp.

Referenced by getTime(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), and AIRINV::ScheduleParserHelper::storeElapsedTime::operator()().

22.41.4.19 AirportList_T AIRINV::FlightPeriodStruct::_airportList

Staging Airport List (helper to derive the list of Segment structures).

Definition at line 108 of file FlightPeriodStruct.hpp.

Referenced by addAirport(), buildSegments(), and AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()().

22.41.4.20 AirportOrderedList_T AIRINV::FlightPeriodStruct::_airportOrderedList

Definition at line 109 of file FlightPeriodStruct.hpp.

Referenced by addAirport(), buildSegments(), and AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()().

22.41.4.21 bool AIRINV::FlightPeriodStruct::_areSegmentDefinitionsSpecific

Staging Segment-related attributes.

Definition at line 112 of file FlightPeriodStruct.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), and AIRINV::ScheduleParserHelper::storeFClasses::operator()().

22.41.4.22 SegmentStruct AIRINV::FlightPeriodStruct::_itSegment

Definition at line 113 of file FlightPeriodStruct.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), and AIRINV::ScheduleParserHelper::storeFClasses::operator()().

22.41.4.23 SegmentCabinStruct AIRINV::FlightPeriodStruct::_itSegmentCabin

Definition at line 114 of file FlightPeriodStruct.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), and AIRINV::ScheduleParserHelper::storeFClasses::operator()().

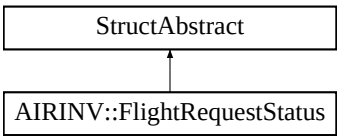
The documentation for this struct was generated from the following files:

- airinv/bom/FlightPeriodStruct.hpp
- airinv/bom/FlightPeriodStruct.cpp

22.42 AIRINV::FlightRequestStatus Struct Reference

`#include <airinv/FlightRequestStatus.hpp>`

Inheritance diagram for AIRINV::FlightRequestStatus:



Public Types

- enum EN_FlightRequestStatus { OK = 0, NOT_FOUND, INTERNAL_ERROR, LAST_VALUE }

Public Member Functions

- EN_FlightRequestStatus getCode () const
- const std::string describe () const
- FlightRequestStatus (const EN_FlightRequestStatus &)
- FlightRequestStatus (const std::string &iCode)

Static Public Member Functions

- static const std::string & getLabel (const EN_FlightRequestStatus &)
- static const std::string & getCodeLabel (const EN_FlightRequestStatus &)
- static std::string describeLabels ()

22.42.1 Detailed Description

Enumeration of flight type codes.

Definition at line 15 of file FlightRequestStatus.hpp.

22.42.2 Member Enumeration Documentation

22.42.2.1 enum AIRINV::FlightRequestStatus::EN_FlightRequestStatus

Enumerator:

OK

NOT_FOUND

INTERNAL_ERROR

LAST_VALUE

Definition at line 17 of file FlightRequestStatus.hpp.

22.42.3 Constructor & Destructor Documentation

22.42.3.1 AIRINV::FlightRequestStatus::FlightRequestStatus (const EN_FlightRequestStatus & *iFlightRequestStatus*)

Constructor.

Definition at line 25 of file FlightRequestStatus.cpp.

22.42.3.2 AIRINV::FlightRequestStatus::FlightRequestStatus (const std::string & *iCode*)

Constructor.

Definition at line 30 of file FlightRequestStatus.cpp.

References describeLabels(), INTERNAL_ERROR, LAST_VALUE, NOT_FOUND, and OK.

22.42.4 Member Function Documentation

22.42.4.1 const std::string & AIRINV::FlightRequestStatus::getLabel (const EN_FlightRequestStatus & *iCode*) [static]

Get the label as a string.

Definition at line 58 of file FlightRequestStatus.cpp.

22.42.4.2 const std::string & AIRINV::FlightRequestStatus::getCodeLabel (const EN_FlightRequestStatus & *iCode*) [static]

Get the label as a single char.

Definition at line 64 of file FlightRequestStatus.cpp.

22.42.4.3 std::string AIRINV::FlightRequestStatus::describeLabels ( ) [static]

List the labels.

Definition at line 69 of file FlightRequestStatus.cpp.

References LAST_VALUE.

Referenced by FlightRequestStatus().

22.42.4.4 FlightRequestStatus::EN_FlightRequestStatus AIRINV::FlightRequestStatus::getCode ( ) const

Get the enumerated value.

Definition at line 82 of file FlightRequestStatus.cpp.

22.42.4.5 const std::string AIRINV::FlightRequestStatus::describe ( ) const

Give a description of the structure (for display purposes).

Definition at line 87 of file FlightRequestStatus.cpp.

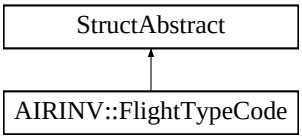
The documentation for this struct was generated from the following files:

- airinv/FlightRequestStatus.hpp
- airinv/basic/FlightRequestStatus.cpp

22.43 AIRINV::FlightTypeCode Struct Reference

`#include <airinv/basic/FlightTypeCode.hpp>`

Inheritance diagram for AIRINV::FlightTypeCode:



Public Types

- enum EN_FlightTypeCode { DOMESTIC = 0, INTERNATIONAL, GROUND_HANDLING, LAST_VALUE }

Public Member Functions

- EN_FlightTypeCode getCode () const
- const std::string describe () const
- FlightTypeCode (const EN_FlightTypeCode &)
- FlightTypeCode (const std::string &iCode)

Static Public Member Functions

- static const std::string & getLabel (const EN_FlightTypeCode &)
- static const std::string & getCodeLabel (const EN_FlightTypeCode &)
- static std::string describeLabels ()

22.43.1 Detailed Description

Enumeration of flight type codes.

Definition at line 15 of file FlightTypeCode.hpp.

22.43.2 Member Enumeration Documentation

22.43.2.1 enum AIRINV::FlightTypeCode::EN_FlightTypeCode

Enumerator:

DOMESTIC
INTERNATIONAL
GROUND_HANDLING
LAST_VALUE

Definition at line 17 of file FlightTypeCode.hpp.

22.43.3 Constructor & Destructor Documentation

22.43.3.1 AIRINV::FlightTypeCode::FlightTypeCode (const EN_FlightTypeCode & *iFlightTypeCode*)

Constructor.

Definition at line 24 of file FlightTypeCode.cpp.

22.43.3.2 AIRINV::FlightTypeCode::FlightTypeCode (const std::string & *iCode*)

Constructor.

Definition at line 29 of file FlightTypeCode.cpp.

References describeLabels(), DOMESTIC, GROUND_HANDLING, INTERNATIONAL, and LAST_VALUE.

22.43.4 Member Function Documentation

22.43.4.1 const std::string & AIRINV::FlightTypeCode::getLabel (const EN_FlightTypeCode & *iCode*) [static]

Get the label as a string.

Definition at line 54 of file FlightTypeCode.cpp.

22.43.4.2 const std::string & AIRINV::FlightTypeCode::getCodeLabel (const EN_FlightTypeCode & *iCode*) [static]

Get the label as a single char.

Definition at line 60 of file FlightTypeCode.cpp.

22.43.4.3 std::string AIRINV::FlightTypeCode::describeLabels ( ) [static]

List the labels.

Definition at line 65 of file FlightTypeCode.cpp.

References LAST_VALUE.

Referenced by FlightTypeCode().

22.43.4.4 FlightTypeCode::EN_FlightTypeCode AIRINV::FlightTypeCode::getCode ( ) const

Get the enumerated value.

Definition at line 77 of file FlightTypeCode.cpp.

Referenced by AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()().

22.43.4.5 const std::string AIRINV::FlightTypeCode::describe ( ) const

Give a description of the structure (for display purposes).

Definition at line 82 of file FlightTypeCode.cpp.

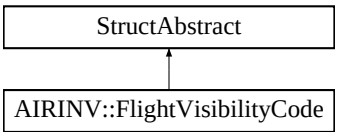
The documentation for this struct was generated from the following files:

- airinv/basic/FlightTypeCode.hpp
- airinv/basic/FlightTypeCode.cpp

22.44 AIRINV::FlightVisibilityCode Struct Reference

`#include <airinv/basic/FlightVisibilityCode.hpp>`

Inheritance diagram for AIRINV::FlightVisibilityCode:



Public Types

- enum EN_FlightVisibilityCode { NORMAL = 0, HIDDEN, PSEUDO, LAST_VALUE }

Public Member Functions

- EN_FlightVisibilityCode getCode () const

- const std::string describe () const
- FlightVisibilityCode (const EN_FlightVisibilityCode &)
- FlightVisibilityCode (const std::string &iCode)

Static Public Member Functions

- static const std::string & getLabel (const EN_FlightVisibilityCode &)
- static const std::string & getCodeLabel (const EN_FlightVisibilityCode &)
- static std::string describeLabels ()

22.44.1 Detailed Description

Enumeration of flight visibility codes.

Definition at line 15 of file FlightVisibilityCode.hpp.

22.44.2 Member Enumeration Documentation

22.44.2.1 enum AIRINV::FlightVisibilityCode::EN_FlightVisibilityCode

Enumerator:

NORMAL

HIDDEN

PSEUDO

LAST_VALUE

Definition at line 17 of file FlightVisibilityCode.hpp.

22.44.3 Constructor & Destructor Documentation

22.44.3.1 AIRINV::FlightVisibilityCode::FlightVisibilityCode (const EN_FlightVisibilityCode & *iFlightVisibilityCode*)

Constructor.

Definition at line 25 of file FlightVisibilityCode.cpp.

22.44.3.2 AIRINV::FlightVisibilityCode::FlightVisibilityCode (const std::string & *iCode*)

Constructor.

Definition at line 30 of file FlightVisibilityCode.cpp.

References describeLabels(), HIDDEN, LAST_VALUE, NORMAL, and PSEUDO.

22.44.4 Member Function Documentation

22.44.4.1 const std::string & AIRINV::FlightVisibilityCode::getLabel (const EN_FlightVisibilityCode & *iCode*) [static]

Get the label as a string.

Definition at line 57 of file FlightVisibilityCode.cpp.

22.44.4.2 const std::string & AIRINV::FlightVisibilityCode::getCodeLabel (const EN_FlightVisibilityCode & *iCode*) [static]

Get the label as a single char.

Definition at line 63 of file FlightVisibilityCode.cpp.

22.44.4.3 std::string AIRINV::FlightVisibilityCode::describeLabels ( ) [static]

List the labels.

Definition at line 68 of file FlightVisibilityCode.cpp.

References LAST_VALUE.

Referenced by FlightVisibilityCode().

22.44.4.4 FlightVisibilityCode::EN_FlightVisibilityCode AIRINV::FlightVisibilityCode::getCode ( ) const

Get the enumerated value.

Definition at line 81 of file FlightVisibilityCode.cpp.

Referenced by AIRINV::FlightDateStruct::describe(), and AIRINV::InventoryParserHelper::storeFlightVisibilityCode-::operator()().

22.44.4.5 const std::string AIRINV::FlightVisibilityCode::describe ( ) const

Give a description of the structure (for display purposes).

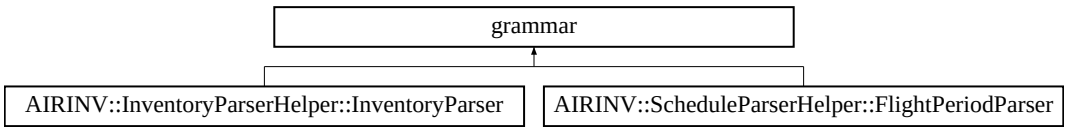
Definition at line 86 of file FlightVisibilityCode.cpp.

The documentation for this struct was generated from the following files:

- airinv/basic/FlightVisibilityCode.hpp
- airinv/basic/FlightVisibilityCode.cpp

22.45 grammar Class Reference

Inheritance diagram for grammar:

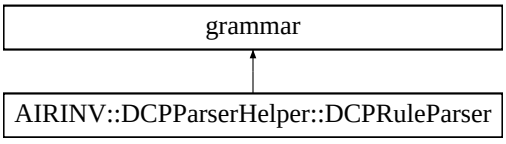


The documentation for this class was generated from the following file:

- airinv/command/ScheduleParserHelper.hpp

22.46 grammar Class Reference

Inheritance diagram for grammar:



The documentation for this class was generated from the following file:

- airinv/command/vault/DCPParserHelper.hpp

22.47 AIRINV::GuillotineBlockHelper Class Reference

`#include <airinv/bom/GuillotineBlockHelper.hpp>`

Static Public Member Functions

- static void takeSnapshots (stdair::GuillotineBlock &, const stdair::DateTime_T &)

22.47.1 Detailed Description

Class representing the actual business functions for an airline inventory.

Definition at line 22 of file GuillotineBlockHelper.hpp.

22.47.2 Member Function Documentation

22.47.2.1 void AIRINV::GuillotineBlockHelper::takeSnapshots (stdair::GuillotineBlock & *ioGuillotineBlock*, const stdair::DateTime_T & *iSnapshotTime*) [static]

Take inventory snapshots.

Definition at line 27 of file GuillotineBlockHelper.cpp.

References AIRINV::SegmentCabinHelper::updateAvailabilities().

The documentation for this class was generated from the following files:

- airinv/bom/GuillotineBlockHelper.hpp
- airinv/bom/GuillotineBlockHelper.cpp

22.48 AIRINV::header Struct Reference

`#include <airinv/server/header.hpp>`

Public Attributes

- std::string name
- std::string value

22.48.1 Detailed Description

Header structure.

Definition at line 13 of file header.hpp.

22.48.2 Member Data Documentation

22.48.2.1 std::string AIRINV::header::name

Definition at line 14 of file header.hpp.

22.48.2.2 std::string AIRINV::header::value

Definition at line 15 of file header.hpp.

The documentation for this struct was generated from the following file:

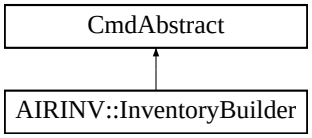
- airinv/server/header.hpp

22.49 AIRINV::InventoryBuilder Class Reference

Class handling the generation / instantiation of the Inventory BOM.

`#include <airinv/command/InventoryBuilder.hpp>`

Inheritance diagram for AIRINV::InventoryBuilder:



Friends

- struct InventoryParserHelper::doEndFlightDate

22.49.1 Detailed Description

Class handling the generation / instantiation of the Inventory BOM.

Definition at line 43 of file InventoryBuilder.hpp.

22.49.2 Friends And Related Function Documentation

22.49.2.1 friend struct InventoryParserHelper::doEndFlightDate [friend]

Only the following class may use methods of InventoryBuilder. Indeed, as those methods build the BOM, it is not good to expose them publicly.

Definition at line 49 of file InventoryBuilder.hpp.

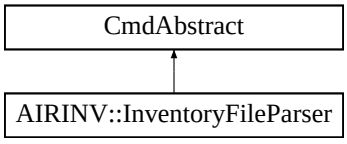
The documentation for this class was generated from the following files:

- airinv/command/InventoryBuilder.hpp
- airinv/command/InventoryBuilder.cpp

22.50 AIRINV::InventoryFileParser Class Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryFileParser:



Public Member Functions

- InventoryFileParser (stdair::BomRoot &, const stdair::Filename_T &iInventoryInputFilename)
- bool buildInventory ()

22.50.1 Detailed Description

Class wrapping the initialisation and entry point of the parser.

The seemingly redundancy is used to force the instantiation of the actual parser, which is a templatised Boost Spirit grammar. Hence, the actual parser is instantiated within that class object code.

Definition at line 500 of file InventoryParserHelper.hpp.

22.50.2 Constructor & Destructor Documentation

22.50.2.1 AIRINV::InventoryFileParser::InventoryFileParser (stdair::BomRoot & , const stdair::Filename_T & *iInventoryInputFilename*)

Constructor.

Definition at line 1092 of file InventoryParserHelper.cpp.

22.50.3 Member Function Documentation

22.50.3.1 bool AIRINV::InventoryFileParser::buildInventory ( )

Parse the inventory input file.

Definition at line 1116 of file InventoryParserHelper.cpp.

Referenced by AIRINV::InventoryParser::buildInventory().

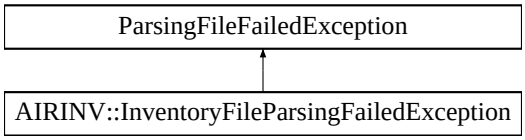
The documentation for this class was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.51 AIRINV::InventoryFileParsingFailedException Class Reference

```
#include <airinv/AIRINV_Types.hpp>
```

Inheritance diagram for AIRINV::InventoryFileParsingFailedException:



Public Member Functions

- InventoryFileParsingFailedException (const std::string &iWhat)

22.51.1 Detailed Description

The inventory input file can not be parsed.

Definition at line 27 of file AIRINV_Types.hpp.

22.51.2 Constructor & Destructor Documentation

22.51.2.1 AIRINV::InventoryFileParsingFailedException::InventoryFileParsingFailedException (const std::string & *iWhat*) [inline]

Constructor.

Definition at line 33 of file AIRINV_Types.hpp.

The documentation for this class was generated from the following file:

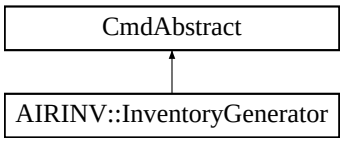
- airinv/AIRINV_Types.hpp

22.52 AIRINV::InventoryGenerator Class Reference

Class handling the generation / instantiation of the Inventory BOM.

`#include <airinv/command/InventoryGenerator.hpp>`

Inheritance diagram for AIRINV::InventoryGenerator:



Friends

- class FlightPeriodFileParser
- class FFFlightPeriodFileParser
- struct ScheduleParserHelper::doEndFlight
- class ScheduleParser

22.52.1 Detailed Description

Class handling the generation / instantiation of the Inventory BOM.

Definition at line 42 of file InventoryGenerator.hpp.

22.52.2 Friends And Related Function Documentation

22.52.2.1 friend class FlightPeriodFileParser [friend]

Only the following class may use methods of InventoryGenerator. Indeed, as those methods build the BOM, it is not good to expose them publicly.

Definition at line 48 of file InventoryGenerator.hpp.

22.52.2.2 friend class FFFlightPeriodFileParser [friend]

Definition at line 49 of file InventoryGenerator.hpp.

22.52.2.3 friend struct ScheduleParserHelper::doEndFlight [friend]

Definition at line 50 of file InventoryGenerator.hpp.

22.52.2.4 friend class ScheduleParser [friend]

Definition at line 51 of file InventoryGenerator.hpp.

The documentation for this class was generated from the following files:

- airinv/command/InventoryGenerator.hpp
- airinv/command/InventoryGenerator.cpp

22.53 AIRINV::InventoryHelper Class Reference

`#include <airinv/bom/InventoryHelper.hpp>`

Static Public Member Functions

- static void fillFromRouting (const stdair::Inventory &)
- static void calculateAvailability (const stdair::Inventory &, const std::string &, stdair::TravelSolutionStruct &)
- static void getYieldAndBidPrice (const stdair::Inventory &, const std::string &, stdair::TravelSolutionStruct &)
- static bool sell (stdair::Inventory &, const std::string &iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- static bool cancel (stdair::Inventory &, const std::string &iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- static void takeSnapshots (const stdair::Inventory &, const stdair::DateTime_T &)

22.53.1 Detailed Description

Class representing the actual business functions for an airline inventory.

Definition at line 22 of file InventoryHelper.hpp.

22.53.2 Member Function Documentation

22.53.2.1 void AIRINV::InventoryHelper::fillFromRouting (const stdair::Inventory & *ilInventory*) [static]

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 28 of file InventoryHelper.cpp.

22.53.2.2 void AIRINV::InventoryHelper::calculateAvailability (const stdair::Inventory & *ilInventory*, const std::string & *iFullSegmentDateKey*, stdair::TravelSolutionStruct & *ioTravelSolution*) [static]

Compute the availability for the given travel solution.

Definition at line 44 of file InventoryHelper.cpp.

References AIRINV::SegmentCabinHelper::updateAvailabilities().

22.53.2.3 void AIRINV::InventoryHelper::getYieldAndBidPrice (const stdair::Inventory & *ilInventory*, const std::string & *iFullSegmentDateKey*, stdair::TravelSolutionStruct & *ioTravelSolution*) [static]

Get yield and bid price information for the given travel solution.

Definition at line 97 of file InventoryHelper.cpp.

22.53.2.4 bool AIRINV::InventoryHelper::sell (stdair::Inventory & *ioInventory,* const std::string & *iSegmentDateKey,* const stdair::ClassCode_T & *iClassCode,* const stdair::PartySize_T & *iPartySize*) [static]

Make a sale with the given travel solution.

Definition at line 239 of file InventoryHelper.cpp.

References AIRINV::SegmentCabinHelper::updateFromReservation().

22.53.2.5 bool AIRINV::InventoryHelper::cancel (stdair::Inventory & *ioInventory,* const std::string & *iSegmentDateKey,* const stdair::ClassCode_T & *iClassCode,* const stdair::PartySize_T & *iPartySize*) [static]

Make a cancellation.

Definition at line 295 of file InventoryHelper.cpp.

References AIRINV::SegmentCabinHelper::updateFromReservation().

22.53.2.6 void AIRINV::InventoryHelper::takeSnapshots (const stdair::Inventory & *ilnventory,* const stdair::DateTime_T & *iSnapshotTime*) [static]

Take inventory snapshots.

Definition at line 351 of file InventoryHelper.cpp.

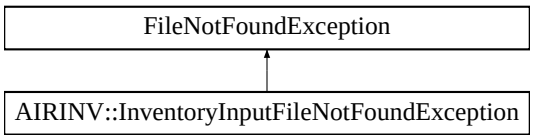
The documentation for this class was generated from the following files:

- airinv/bom/InventoryHelper.hpp
- airinv/bom/InventoryHelper.cpp

22.54 AIRINV::InventoryInputFileNotFoundException Class Reference

`#include <airinv/AIRINV_Types.hpp>`

Inheritance diagram for AIRINV::InventoryInputFileNotFoundException:



Public Member Functions

- InventoryInputFileNotFoundException (const std::string &iWhat)

22.54.1 Detailed Description

The inventory input file can not be found or opened.

Definition at line 66 of file AIRINV_Types.hpp.

22.54.2 Constructor & Destructor Documentation

22.54.2.1 AIRINV::InventoryInputFileNotFoundException::InventoryInputFileNotFoundException (const std::string & *iWhat*) [inline]

Constructor.

Definition at line 71 of file AIRINV_Types.hpp.

The documentation for this class was generated from the following file:

- airinv/AIRINV_Types.hpp

22.55 AIRINV::InventoryManager Class Reference

`#include <airinv/command/InventoryManager.hpp>`

Static Public Member Functions

- static void createDirectAccesses (const stdair::BomRoot &)
- static void createDirectAccesses (stdair::Inventory &)
- static void createDirectAccesses (stdair::FlightDate &)
- static void createDirectAccesses (stdair::SegmentDate &)
- static void buildSimilarSegmentCabinSets (const stdair::BomRoot &)
- static void buildSimilarSegmentCabinSets (stdair::Inventory &)
- static void buildGuillotineBlock (stdair::Inventory &, const stdair::GuillotineNumber_T &, const DepartureDate-SegmentCabinMap_T &)
- static void setDefaultBidPriceVector (stdair::BomRoot &)
- static void setDefaultBidPriceVector (stdair::Inventory &)

Friends

- class AIRINV_Master_Service
- class AIRINV_Service

22.55.1 Detailed Description

Command wrapping the travel request process.

Definition at line 34 of file InventoryManager.hpp.

22.55.2 Member Function Documentation

22.55.2.1 void AIRINV::InventoryManager::createDirectAccesses (const stdair::BomRoot & *iBomRoot*) [static]

Create the direct accesses within the invetories suck as links between leg-date and segment-date, ect.

Definition at line 717 of file InventoryManager.cpp.

References AIRINV::BomRootHelper::fillFromRouting().

Referenced by AIRINV::InventoryParser::buildInventory(), createDirectAccesses(), and AIRINV::ScheduleParser-::generateInventories().

22.55.2.2 void AIRINV::InventoryManager::createDirectAccesses (stdair::Inventory & *ioInventory*) [static]

Definition at line 737 of file InventoryManager.cpp.

References createDirectAccesses().

22.55.2.3 void AIRINV::InventoryManager::createDirectAccesses (stdair::FlightDate & *ioFlightDate*) [static]

Definition at line 755 of file InventoryManager.cpp.

References createDirectAccesses().

22.55.2.4 void AIRINV::InventoryManager::createDirectAccesses (stdair::SegmentDate & *ioSegmentDate*) [static]

Definition at line 824 of file InventoryManager.cpp.

22.55.2.5 void AIRINV::InventoryManager::buildSimilarSegmentCabinSets (const stdair::BomRoot & *iBomRoot*) [static]

Build the similar segment-cabin sets and the corresponding guillotine blocks for snapshots and other data.

Definition at line 890 of file InventoryManager.cpp.

Referenced by AIRINV::AIRINV_Service::buildSampleBom(), and AIRINV::ScheduleParser::generateInventories().

22.55.2.6 void AIRINV::InventoryManager::buildSimilarSegmentCabinSets (stdair::Inventory & *ioInventory*) [static]

Definition at line 906 of file InventoryManager.cpp.

References buildGuillotineBlock().

22.55.2.7 void AIRINV::InventoryManager::buildGuillotineBlock (stdair::Inventory & *ioInventory,* const stdair::GuillotineNumber_T & *iGuillotineNumber,* const DepartureDateSegmentCabinMap_T & *iDDSCMap*) [static]

Definition at line 981 of file InventoryManager.cpp.

Referenced by buildSimilarSegmentCabinSets().

22.55.2.8 void AIRINV::InventoryManager::setDefaultBidPriceVector (stdair::BomRoot & *ioBomRoot*) [static]

Bid price vectors initialisation

Definition at line 596 of file InventoryManager.cpp.

Referenced by AIRINV::ScheduleParser::generateInventories().

22.55.2.9 void AIRINV::InventoryManager::setDefaultBidPriceVector (stdair::Inventory & *ioInventory*) [static]

Definition at line 628 of file InventoryManager.cpp.

22.55.3 Friends And Related Function Documentation

22.55.3.1 friend class AIRINV_Master_Service [friend]

Definition at line 35 of file InventoryManager.hpp.

22.55.3.2 friend class AIRINV_Service [friend]

Definition at line 36 of file InventoryManager.hpp.

The documentation for this class was generated from the following files:

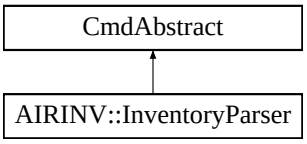
- airinv/command/InventoryManager.hpp
- airinv/command/InventoryManager.cpp

22.56 AIRINV::InventoryParser Class Reference

Class wrapping the parser entry point.

`#include <airinv/command/InventoryParser.hpp>`

Inheritance diagram for AIRINV::InventoryParser:



Static Public Member Functions

- static void buildInventory (const stdair::Filename_T &iInventoryFilename, stdair::BomRoot &)

22.56.1 Detailed Description

Class wrapping the parser entry point.

Definition at line 21 of file InventoryParser.hpp.

22.56.2 Member Function Documentation

22.56.2.1 void AIRINV::InventoryParser::buildInventory (const stdair::Filename_T & *iInventoryFilename,* stdair::BomRoot & *ioBomRoot*) [static]

Parses the CSV file describing an airline inventory, and generates the corresponding data model in memory. It can then be used, for instance, in a simulator.

Parameters

const	stdair::Filename_T& The file-name of the CSV-formatted inventory input file.
stdair::BomRoot&	Root of the BOM tree.

Definition at line 20 of file InventoryParser.cpp.

References AIRINV::InventoryFileParser::buildInventory(), and AIRINV::InventoryManager::createDirectAccesses().

Referenced by AIRINV::AIRINV_Service::parseAndLoad().

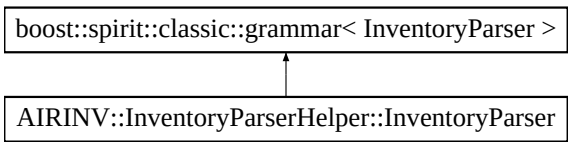
The documentation for this class was generated from the following files:

- airinv/command/InventoryParser.hpp
- airinv/command/InventoryParser.cpp

22.57 AIRINV::InventoryParserHelper::InventoryParser Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::InventoryParser:



Classes

- struct definition

Public Member Functions

- InventoryParser (stdair::BomRoot &, FlightDateStruct &, unsigned int &)

Public Attributes

- stdair::BomRoot & _bomRoot
- FlightDateStruct & _flightDate
- unsigned int & _nbOfFlights

22.57.1 Detailed Description

FlightDepDate; 2010-02-08; SIN; BKK; L; 10.0; 1.0;

Grammar: FlightDate ::= FlightDepDate ';' Origin ';' Destination EndOfFlightDate FlightDepDate ::= date EndOfFlightDate ::= ';'Grammar for the inventory parser.

Definition at line 454 of file InventoryParserHelper.hpp.

22.57.2 Constructor & Destructor Documentation

22.57.2.1 AIRINV::InventoryParserHelper::InventoryParser::InventoryParser (stdair::BomRoot & *ioBomRoot,* FlightDateStruct & *ioFlightDate,* unsigned int & *ioNbOfFlights*)

Definition at line 862 of file InventoryParserHelper.cpp.

22.57.3 Member Data Documentation

22.57.3.1 stdair::BomRoot& AIRINV::InventoryParserHelper::InventoryParser::_bomRoot

Definition at line 482 of file InventoryParserHelper.hpp.

22.57.3.2 FlightDateStruct& AIRINV::InventoryParserHelper::InventoryParser::_flightDate

Definition at line 483 of file InventoryParserHelper.hpp.

22.57.3.3 unsigned int& AIRINV::InventoryParserHelper::InventoryParser::_nbOfFlights

Definition at line 484 of file InventoryParserHelper.hpp.

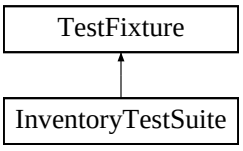
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.58 InventoryTestSuite Class Reference

`#include <test/airinv/InventoryTestSuite.hpp>`

Inheritance diagram for InventoryTestSuite:



Public Member Functions

- void simpleInventory ()
- InventoryTestSuite ()

Protected Attributes

- std::stringstream _describeKey

22.58.1 Detailed Description

Utility class for CPPUnit-based testing.

Definition at line 7 of file InventoryTestSuite.hpp.

22.58.2 Constructor & Destructor Documentation

22.58.2.1 InventoryTestSuite::InventoryTestSuite ( )

Test some error detection functionalities. Constructor.

22.58.3 Member Function Documentation

22.58.3.1 void InventoryTestSuite::simpleInventory ( )

Test a simple inventory functionality.

22.58.4 Member Data Documentation

22.58.4.1 std::stringstream InventoryTestSuite::_describeKey [protected]

Definition at line 28 of file InventoryTestSuite.hpp.

The documentation for this class was generated from the following file:

- test/airinv/InventoryTestSuite.hpp

22.59 AIRINV::LegCabinHelper Class Reference

`#include <airinv/bom/LegCabinHelper.hpp>`

22.59.1 Detailed Description

Class representing the actual business functions for an airline leg-cabin.

Definition at line 16 of file LegCabinHelper.hpp.

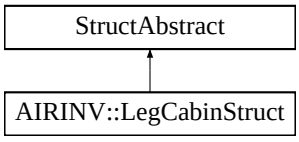
The documentation for this class was generated from the following file:

- airinv/bom/LegCabinHelper.hpp

22.60 AIRINV::LegCabinStruct Struct Reference

`#include <airinv/bom/LegCabinStruct.hpp>`

Inheritance diagram for AIRINV::LegCabinStruct:



Public Member Functions

- void fill (stdair::LegCabin &) const
- const std::string describe () const

Public Attributes

- stdair::CabinCode_T _cabinCode
- stdair::CabinCapacity_T _saleableCapacity
- stdair::CapacityAdjustment_T _adjustment
- stdair::CapacityAdjustment_T _dcsRegrade
- stdair::AuthorizationLevel_T _au
- stdair::Availability_T _avPool
- stdair::UPR_T _upr
- stdair::NbOfBookings_T _nbOfBookings
- stdair::Availability_T _nav
- stdair::Availability_T _gav
- stdair::OverbookingRate_T _acp
- stdair::NbOfBookings_T _etb
- stdair::NbOfBookings_T _staffNbOfBookings
- stdair::NbOfBookings_T _wlNbOfBookings
- stdair::NbOfBookings_T _groupNbOfBookings
- BucketStructList_T _bucketList

22.60.1 Detailed Description

Utility Structure for the parsing of LegCabin details.

Definition at line 24 of file LegCabinStruct.hpp.

22.60.2 Member Function Documentation

22.60.2.1 void AIRINV::LegCabinStruct::fill (stdair::LegCabin & *ioLegCabin*) const

Fill the LegCabin objects with the attributes of the LegCabinStruct.

Definition at line 38 of file LegCabinStruct.cpp.

References _saleableCapacity.

22.60.2.2 const std::string AIRINV::LegCabinStruct::describe ( ) const

Give a description of the structure (for display purposes).

Definition at line 15 of file LegCabinStruct.cpp.

References _acp, _adjustment, _au, _avPool, _bucketList, _cabinCode, _dcsRegrade, _etb, _gav, _groupNbOfBookings, _nav, _nbOfBookings, _saleableCapacity, _staffNbOfBookings, _upr, _wlNbOfBookings, and AIRINV::BucketStruct::describe().

Referenced by AIRINV::LegStruct::describe().

22.60.3 Member Data Documentation

22.60.3.1 stdair::CabinCode_T AIRINV::LegCabinStruct::_cabinCode

Definition at line 26 of file LegCabinStruct.hpp.

Referenced by describe(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), and AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()().

22.60.3.2 stdair::CabinCapacity_T AIRINV::LegCabinStruct::_saleableCapacity

Definition at line 27 of file LegCabinStruct.hpp.

Referenced by describe(), fill(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), and AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()().

22.60.3.3 stdair::CapacityAdjustment_T AIRINV::LegCabinStruct::_adjustment

Definition at line 28 of file LegCabinStruct.hpp.

Referenced by describe().

22.60.3.4 stdair::CapacityAdjustment_T AIRINV::LegCabinStruct::_dcsRegrade

Definition at line 29 of file LegCabinStruct.hpp.

Referenced by describe().

22.60.3.5 stdair::AuthorizationLevel_T AIRINV::LegCabinStruct::_au

Definition at line 30 of file LegCabinStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeAU::operator()().

22.60.3.6 stdair::Availability_T AIRINV::LegCabinStruct::_avPool

Definition at line 31 of file LegCabinStruct.hpp.

Referenced by describe().

22.60.3.7 stdair::UPR_T AIRINV::LegCabinStruct::_upr

Definition at line 32 of file LegCabinStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeUPR::operator()().

22.60.3.8 stdair::NbOfBookings_T AIRINV::LegCabinStruct::_nbOfBookings

Definition at line 33 of file LegCabinStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeBookingCounter::operator()().

22.60.3.9 stdair::Availability_T AIRINV::LegCabinStruct::_nav

Definition at line 34 of file LegCabinStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeNAV::operator()().

22.60.3.10 stdair::Availability_T AIRINV::LegCabinStruct::_gav

Definition at line 35 of file LegCabinStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeGAV::operator()().

22.60.3.11 stdair::OverbookingRate_T AIRINV::LegCabinStruct::_acp

Definition at line 36 of file LegCabinStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeACP::operator()().

22.60.3.12 stdair::NbOfBookings_T AIRINV::LegCabinStruct::_etb

Definition at line 37 of file LegCabinStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeETB::operator()().

22.60.3.13 stdair::NbOfBookings_T AIRINV::LegCabinStruct::_staffNbOfBookings

Definition at line 38 of file LegCabinStruct.hpp.

Referenced by describe().

22.60.3.14 stdair::NbOfBookings_T AIRINV::LegCabinStruct::_wlNbOfBookings

Definition at line 39 of file LegCabinStruct.hpp.

Referenced by describe().

22.60.3.15 stdair::NbOfBookings_T AIRINV::LegCabinStruct::_groupNbOfBookings

Definition at line 40 of file LegCabinStruct.hpp.

Referenced by describe().

22.60.3.16 BucketStructList_T AIRINV::LegCabinStruct::_bucketList

Definition at line 41 of file LegCabinStruct.hpp.

Referenced by describe(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), and AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()().

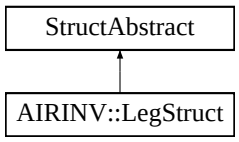
The documentation for this struct was generated from the following files:

- airinv/bom/LegCabinStruct.hpp
- airinv/bom/LegCabinStruct.cpp

22.61 AIRINV::LegStruct Struct Reference

`#include <airinv/bom/LegStruct.hpp>`

Inheritance diagram for AIRINV::LegStruct:



Public Member Functions

- void fill (const stdair::Date_T &iRefDate, stdair::LegDate &) const
- void fill (stdair::LegDate &) const
- const std::string describe () const
- LegStruct ()

Public Attributes

- stdair::AirportCode_T _boardingPoint
- stdair::DateOffset_T _boardingDateOffset
- stdair::Date_T _boardingDate
- stdair::Duration_T _boardingTime
- stdair::AirportCode_T _offPoint
- stdair::DateOffset_T _offDateOffset
- stdair::Date_T _offDate
- stdair::Duration_T _offTime
- stdair::Duration_T _elapsed
- LegCabinStructList_T _cabinList

22.61.1 Detailed Description

Utility Structure for the parsing of Leg structures.

Definition at line 24 of file LegStruct.hpp.

22.61.2 Constructor & Destructor Documentation

22.61.2.1 AIRINV::LegStruct::LegStruct ( )

Default Constructor.

Definition at line 16 of file LegStruct.cpp.

22.61.3 Member Function Documentation

22.61.3.1 void AIRINV::LegStruct::fill (const stdair::Date_T & *iRefDate,* stdair::LegDate & *ioLegDate*) const

Fill the LegDate objects with the attributes of the LegStruct.

The given reference date corresponds to the date of the FlightDate. Indeed, each Leg gets date off-sets, when compared to that (reference) flight-date, both for the boarding date and for the off date.

Definition at line 41 of file LegStruct.cpp.

References _boardingDateOffset, _boardingTime, _elapsed, _offDateOffset, _offPoint, and _offTime.

22.61.3.2 void AIRINV::LegStruct::fill (stdair::LegDate & *ioLegDate*) const

Fill the LegDate objects with the attributes of the LegStruct.

Definition at line 58 of file LegStruct.cpp.

References _boardingTime, _elapsed, _offDate, _offPoint, and _offTime.

22.61.3.3 const std::string AIRINV::LegStruct::describe ( ) const

Give a description of the structure (for display purposes).

Definition at line 21 of file LegStruct.cpp.

References _boardingDate, _boardingPoint, _boardingTime, _cabinList, _elapsed, _offDate, _offPoint, _offTime, and AIRINV::LegCabinStruct::describe().

Referenced by AIRINV::FlightPeriodStruct::describe(), and AIRINV::FlightDateStruct::describe().

22.61.4 Member Data Documentation

22.61.4.1 stdair::AirportCode_T AIRINV::LegStruct::_boardingPoint

Definition at line 26 of file LegStruct.hpp.

Referenced by describe(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), and AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()().

22.61.4.2 stdair::DateOffset_T AIRINV::LegStruct::_boardingDateOffset

Definition at line 27 of file LegStruct.hpp.

Referenced by fill(), and AIRINV::ScheduleParserHelper::storeOffTime::operator()().

22.61.4.3 stdair::Date_T AIRINV::LegStruct::_boardingDate

Definition at line 28 of file LegStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeBoardingDate::operator()().

22.61.4.4 stdair::Duration_T AIRINV::LegStruct::_boardingTime

Definition at line 29 of file LegStruct.hpp.

Referenced by describe(), fill(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), and AIRINV::InventoryParserHelper::storeBoardingTime::operator()().

22.61.4.5 stdair::AirportCode_T AIRINV::LegStruct::_offPoint

Definition at line 30 of file LegStruct.hpp.

Referenced by describe(), fill(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), and AIRINV::InventoryParserHelper::storeLegOffPoint::operator()().

22.61.4.6 stdair::DateOffset_T AIRINV::LegStruct::_offDateOffset

Definition at line 31 of file LegStruct.hpp.

Referenced by fill(), and AIRINV::ScheduleParserHelper::storeElapsedTime::operator()().

22.61.4.7 stdair::Date_T AIRINV::LegStruct::_offDate

Definition at line 32 of file LegStruct.hpp.

Referenced by describe(), fill(), and AIRINV::InventoryParserHelper::storeOffDate::operator()().

22.61.4.8 stdair::Duration_T AIRINV::LegStruct::_offTime

Definition at line 33 of file LegStruct.hpp.

Referenced by describe(), fill(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), and AIRINV::InventoryParserHelper::storeOffTime::operator()().

22.61.4.9 stdair::Duration_T AIRINV::LegStruct::_elapsed

Definition at line 34 of file LegStruct.hpp.

Referenced by describe(), fill(), and AIRINV::ScheduleParserHelper::storeElapsedTime::operator()().

22.61.4.10 LegCabinStructList_T AIRINV::LegStruct::_cabinList

Definition at line 35 of file LegStruct.hpp.

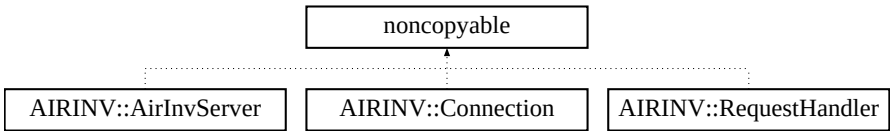
Referenced by describe(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::doEndFlight::operator()(), and AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()().

The documentation for this struct was generated from the following files:

- airinv/bom/LegStruct.hpp
- airinv/bom/LegStruct.cpp

22.62 noncopyable Class Reference

Inheritance diagram for noncopyable:

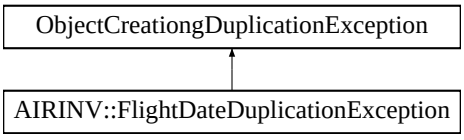


The documentation for this class was generated from the following file:

- airinv/server/Connection.hpp

22.63 ObjectCreationgDuplicationException Class Reference

Inheritance diagram for ObjectCreationgDuplicationException:

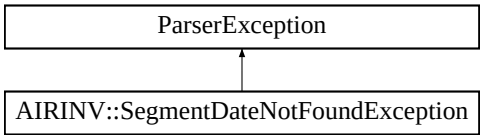


The documentation for this class was generated from the following file:

- airinv/AIRINV_Types.hpp

22.64 ParserException Class Reference

Inheritance diagram for ParserException:



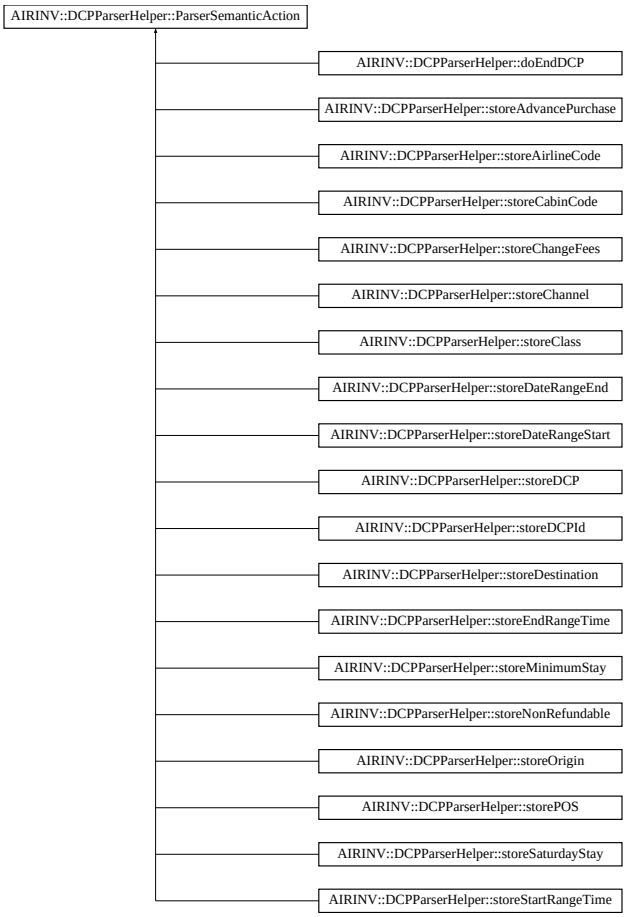
The documentation for this class was generated from the following file:

- airinv/AIRINV_Types.hpp

22.65 AIRINV::DCPParserHelper::ParserSemanticAction Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::ParserSemanticAction:



Public Member Functions

- ParserSemanticAction (DCPRuleStruct &)

Public Attributes

- DCPRuleStruct & _DCPRule

22.65.1 Detailed Description

Generic Semantic Action (Actor / Functor) for the DCP Parser.

Definition at line 30 of file DCPParserHelper.hpp.

22.65.2 Constructor & Destructor Documentation

22.65.2.1 AIRINV::DCPParserHelper::ParserSemanticAction::ParserSemanticAction (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 25 of file DCPParserHelper.cpp.

22.65.3 Member Data Documentation

22.65.3.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

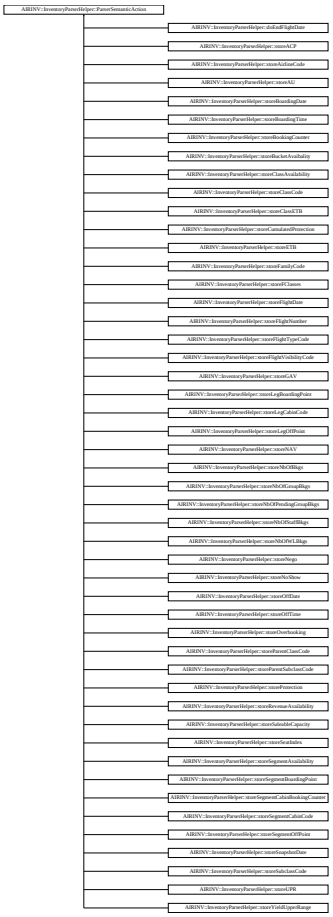
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.66 AIRINV::InventoryParserHelper::ParserSemanticAction Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::ParserSemanticAction:



Public Member Functions

- ParserSemanticAction (FlightDateStruct &)

Public Attributes

- FlightDateStruct & _flightDate

22.66.1 Detailed Description

Generic Semantic Action (Actor / Functor) for the Inventory Parser.

Definition at line 29 of file InventoryParserHelper.hpp.

22.66.2 Constructor & Destructor Documentation

22.66.2.1 AIRINV::InventoryParserHelper::ParserSemanticAction::ParserSemanticAction (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 26 of file InventoryParserHelper.cpp.

22.66.3 Member Data Documentation

22.66.3.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

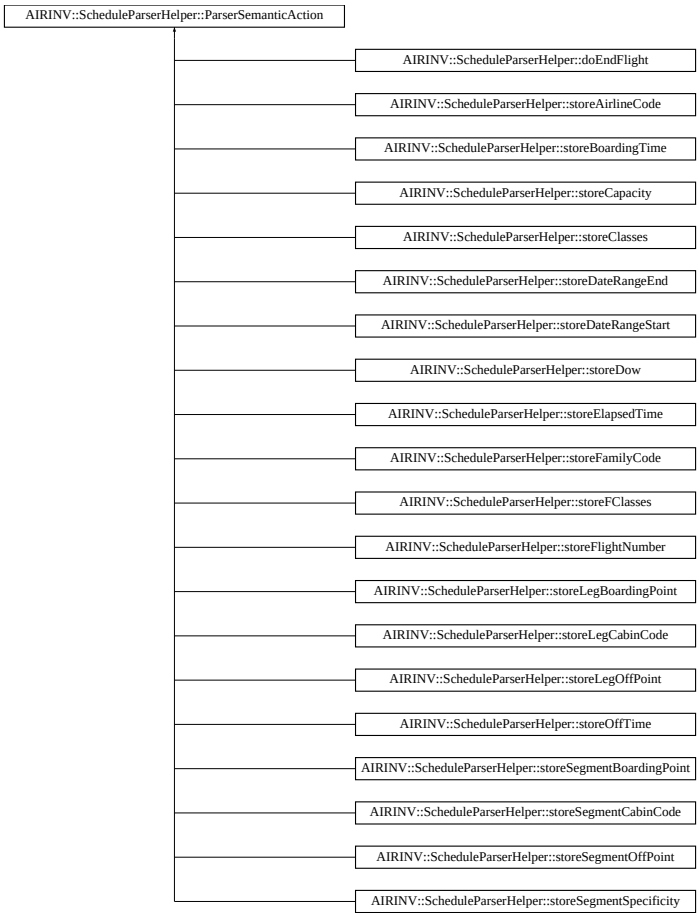
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.67 AIRINV::ScheduleParserHelper::ParserSemanticAction Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::ParserSemanticAction:



Public Member Functions

- ParserSemanticAction (FlightPeriodStruct &)

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.67.1 Detailed Description

Generic Semantic Action (Actor / Functor) for the Schedule Parser.

Definition at line 29 of file ScheduleParserHelper.hpp.

22.67.2 Constructor & Destructor Documentation

22.67.2.1 AIRINV::ScheduleParserHelper::ParserSemanticAction::ParserSemanticAction (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 27 of file ScheduleParserHelper.cpp.

22.67.3 Member Data Documentation

22.67.3.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

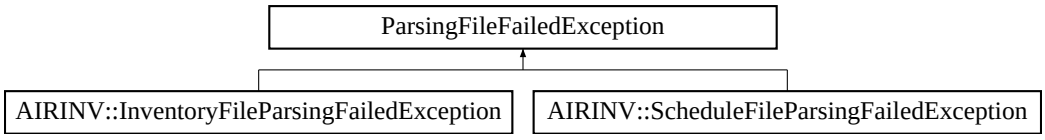
Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.68 ParsingFileFailedException Class Reference

Inheritance diagram for ParsingFileFailedException:



The documentation for this class was generated from the following file:

- airinv/AIRINV_Types.hpp

22.69 AIRINV::Reply Struct Reference

`#include <airinv/server/Reply.hpp>`

Public Member Functions

- std::vector
  < boost::asio::const_buffer > to_buffers ()

Public Attributes

- FlightRequestStatus::EN_FlightRequestStatus _status
- std::string content

22.69.1 Detailed Description

A reply to be sent to a client.

Definition at line 18 of file Reply.hpp.

22.69.2 Member Function Documentation

22.69.2.1 std::vector< boost::asio::const_buffer > AIRINV::Reply::to_buffers ( )

Convert the reply into a vector of buffers. The buffers do not own the underlying memory blocks, therefore the reply object must remain valid and not be changed until the write operation has completed.

Definition at line 15 of file Reply.cpp.

References content.

22.69.3 Member Data Documentation

22.69.3.1 FlightRequestStatus::EN_FlightRequestStatus AIRINV::Reply::_status

Status.

Definition at line 20 of file Reply.hpp.

Referenced by AIRINV::RequestHandler::handleRequest().

22.69.3.2 std::string AIRINV::Reply::content

The content to be sent in the reply.

Definition at line 23 of file Reply.hpp.

Referenced by AIRINV::RequestHandler::handleRequest(), and to_buffers().

The documentation for this struct was generated from the following files:

- airinv/server/Reply.hpp
- airinv/server/Reply.cpp

22.70 AIRINV::Request Struct Reference

`#include <airinv/server/Request.hpp>`

Public Member Functions

- bool parseFlightDate ()

Public Attributes

- std::string _flightDetails
- stdair::AirlineCode_T _airlineCode
- stdair::FlightNumber_T _flightNumber
- stdair::Date_T _departureDate

22.70.1 Detailed Description

A request received from a client.

Definition at line 18 of file Request.hpp.

22.70.2 Member Function Documentation

22.70.2.1 bool AIRINV::Request::parseFlightDate ( )

Parse the incoming request.

Expected requested is of the form: <airline_code>,<flight_number>,<flight_date>, where date format is YYYY--MM-DD. For instance: BA,341,2010-09-20.

Definition at line 12 of file Request.cpp.

References _airlineCode, _departureDate, and _flightNumber.

Referenced by AIRINV::RequestHandler::handleRequest().

22.70.3 Member Data Documentation

22.70.3.1 std::string AIRINV::Request::_flightDetails

String as it comes from the connected client.

Definition at line 29 of file Request.hpp.

Referenced by AIRINV::RequestHandler::handleRequest().

22.70.3.2 stdair::AirlineCode_T AIRINV::Request::_airlineCode

Parsed airline code.

Definition at line 31 of file Request.hpp.

Referenced by parseFlightDate().

22.70.3.3 stdair::FlightNumber_T AIRINV::Request::_flightNumber

Parsed flight number.

Definition at line 33 of file Request.hpp.

Referenced by parseFlightDate().

22.70.3.4 stdair::Date_T AIRINV::Request::_departureDate

Parsed departure date.

Definition at line 35 of file Request.hpp.

Referenced by parseFlightDate().

The documentation for this struct was generated from the following files:

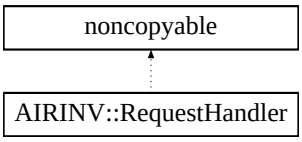
- airinv/server/Request.hpp
- airinv/server/Request.cpp

22.71 AIRINV::RequestHandler Class Reference

The common handler for all incoming requests.

`#include <airinv/server/RequestHandler.hpp>`

Inheritance diagram for AIRINV::RequestHandler:



Public Member Functions

- RequestHandler (const stdair::AirlineCode_T &)
- bool handleRequest (Request &, Reply &) const

22.71.1 Detailed Description

The common handler for all incoming requests.

Definition at line 28 of file RequestHandler.hpp.

22.71.2 Constructor & Destructor Documentation

22.71.2.1 AIRINV::RequestHandler::RequestHandler (const stdair::AirlineCode_T & *iAirlineCode*)

Constructor.

Parameters

const	stdair::AirlineCode_T& Airline code of the inventory owner.

Definition at line 20 of file RequestHandler.cpp.

22.71.3 Member Function Documentation

22.71.3.1 bool AIRINV::RequestHandler::handleRequest (Request & *ioRequest*, Reply & *ioReply*) const

Handle a request and produce a reply.

Definition at line 26 of file RequestHandler.cpp.

References AIRINV::Request::_flightDetails, AIRINV::Reply::_status, AIRINV::Reply::content, AIRINV::FlightRequestStatus::INTERNAL_ERROR, AIRINV::FlightRequestStatus::OK, and AIRINV::Request::parseFlightDate().

The documentation for this class was generated from the following files:

- airinv/server/RequestHandler.hpp
- airinv/server/RequestHandler.cpp

22.72 AIRINV::RequestParser Class Reference

Parser for incoming requests.

`#include <airinv/server/RequestParser.hpp>`

Public Member Functions

- RequestParser ()

  Construct ready to parse the request method.
- void reset ()

Reset to initial parser state.

- template<typename InputIterator >
  boost::tuple< boost::tribool,
  InputIterator > parse (Request &req, InputIterator begin, InputIterator end)

22.72.1 Detailed Description

Parser for incoming requests.

Definition at line 17 of file RequestParser.hpp.

22.72.2 Constructor & Destructor Documentation

22.72.2.1 AIRINV::RequestParser::RequestParser ( )

Construct ready to parse the request method.

Definition at line 13 of file RequestParser.cpp.

22.72.3 Member Function Documentation

22.72.3.1 void AIRINV::RequestParser::reset ( )

Reset to initial parser state.

Definition at line 18 of file RequestParser.cpp.

22.72.3.2 template<typename InputIterator > boost::tuple<boost::tribool, InputIterator> AIRINV::RequestParser::parse (Request & *req,* InputIterator *begin,* InputIterator *end*) [inline]

Parse some data. The tribool return value is true when a complete request has been parsed, false if the data is invalid, indeterminate when more data is required. The InputIterator return value indicates how much of the input has been consumed.

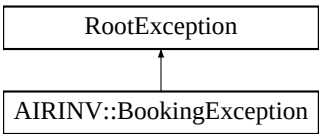
Definition at line 30 of file RequestParser.hpp.

The documentation for this class was generated from the following files:

- airinv/server/RequestParser.hpp
- airinv/server/RequestParser.cpp

22.73 RootException Class Reference

Inheritance diagram for RootException:



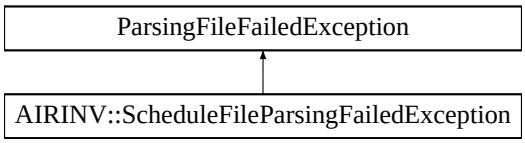
The documentation for this class was generated from the following file:

- airinv/AIRINV_Types.hpp

22.74 AIRINV::ScheduleFileParsingFailedException Class Reference

`#include <airinv/AIRINV_Types.hpp>`

Inheritance diagram for AIRINV::ScheduleFileParsingFailedException:



Public Member Functions

- ScheduleFileParsingFailedException (const std::string &iWhat)

22.74.1 Detailed Description

The schedule input file can not be parsed.

Definition at line 40 of file AIRINV_Types.hpp.

22.74.2 Constructor & Destructor Documentation

22.74.2.1 AIRINV::ScheduleFileParsingFailedException::ScheduleFileParsingFailedException (const std::string & *iWhat*) [inline]

Constructor.

Definition at line 46 of file AIRINV_Types.hpp.

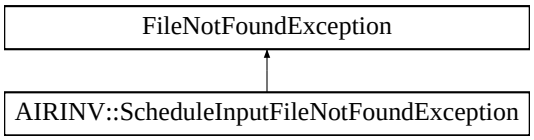
The documentation for this class was generated from the following file:

- airinv/AIRINV_Types.hpp

22.75 AIRINV::ScheduleInputFileNotFoundException Class Reference

`#include <airinv/AIRINV_Types.hpp>`

Inheritance diagram for AIRINV::ScheduleInputFileNotFoundException:



Public Member Functions

- ScheduleInputFileNotFoundException (const std::string &iWhat)

22.75.1 Detailed Description

The schedule input file can not be found or opened.

Definition at line 78 of file AIRINV_Types.hpp.

22.75.2 Constructor & Destructor Documentation

22.75.2.1 AIRINV::ScheduleInputFileNotFoundException::ScheduleInputFileNotFoundException (const std::string & *iWhat*) [inline]

Constructor.

Definition at line 83 of file AIRINV_Types.hpp.

The documentation for this class was generated from the following file:

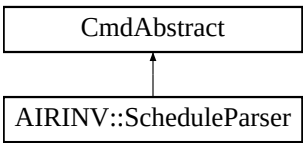
- airinv/AIRINV_Types.hpp

22.76 AIRINV::ScheduleParser Class Reference

Class wrapping the parser entry point.

`#include <airinv/command/ScheduleParser.hpp>`

Inheritance diagram for AIRINV::ScheduleParser:



Static Public Member Functions

- static void generateInventories (const stdair::Filename_T &iScheduleFilename, stdair::BomRoot &)

22.76.1 Detailed Description

Class wrapping the parser entry point.

Definition at line 21 of file ScheduleParser.hpp.

22.76.2 Member Function Documentation

22.76.2.1 void AIRINV::ScheduleParser::generateInventories (const stdair::Filename_T & *iScheduleFilename,* stdair::BomRoot & *ioBomRoot*) [static]

Parse the CSV file describing the airline schedules for the simulator, and generates the inventories accordingly.

Parameters

const	stdair::Filename_T& The file-name of the CSV-formatted schedule input file.
stdair::BomRoot&	Root of the BOM tree.

Definition at line 20 of file ScheduleParser.cpp.

References AIRINV::InventoryManager::buildSimilarSegmentCabinSets(), AIRINV::InventoryManager::createDirectAccesses(), AIRINV::FlightPeriodFileParser::generateInventories(), and AIRINV::InventoryManager::setDefaultBidPriceVector().

Referenced by AIRINV::AIRINV_Service::parseAndLoad().

The documentation for this class was generated from the following files:

- airinv/command/ScheduleParser.hpp
- airinv/command/ScheduleParser.cpp

22.77 AIRINV::SegmentCabinHelper Class Reference

Class representing the actual business functions for an airline segment-cabin.

`#include <airinv/bom/SegmentCabinHelper.hpp>`

Static Public Member Functions

- static void updateFromReservation (const stdair::FlightDate &, stdair::SegmentCabin &, const stdair::PartySize_T &)
- static void buildPseudoBidPriceVector (stdair::SegmentCabin &)
- static void updateBookingControlsUsingPseudoBidPriceVector (const stdair::SegmentCabin &)
- static void updateAUs (const stdair::SegmentCabin &)
- static void updateAvailabilities (const stdair::SegmentCabin &)
- static void initialiseAU (stdair::SegmentCabin &)

22.77.1 Detailed Description

Class representing the actual business functions for an airline segment-cabin.

Definition at line 23 of file SegmentCabinHelper.hpp.

22.77.2 Member Function Documentation

22.77.2.1 void AIRINV::SegmentCabinHelper::updateFromReservation (const stdair::FlightDate & *iFlightDate,* stdair::SegmentCabin & *ioSegmentCabin,* const stdair::PartySize_T & *iNbOfBookings*) [static]

Update the segment-cabin with the reservation.

Definition at line 57 of file SegmentCabinHelper.cpp.

References AIRINV::FlightDateHelper::updateAvailablityPool().

Referenced by AIRINV::InventoryHelper::cancel(), and AIRINV::InventoryHelper::sell().

22.77.2.2 void AIRINV::SegmentCabinHelper::buildPseudoBidPriceVector (stdair::SegmentCabin & *ioSegmentCabin*) [static]

Build the pseudo bid price vector from the vectors of the leg-cabins.

Definition at line 82 of file SegmentCabinHelper.cpp.

Referenced by AIRINV::FlightDateHelper::updateBookingControls().

22.77.2.3 void AIRINV::SegmentCabinHelper::updateBookingControlsUsingPseudoBidPriceVector (const stdair::SegmentCabin & *iSegmentCabin*) [static]

Update the booking controls using the pseudo bid price vector.

Definition at line 126 of file SegmentCabinHelper.cpp.

References updateAUs().

Referenced by AIRINV::FlightDateHelper::updateBookingControls().

22.77.2.4 void AIRINV::SegmentCabinHelper::updateAUs (const stdair::SegmentCabin & *iSegmentCabin*) [static]

Update the authorisation levels using the booking limits.

Definition at line 158 of file SegmentCabinHelper.cpp.

Referenced by updateBookingControlsUsingPseudoBidPriceVector().

22.77.2.5 void AIRINV::SegmentCabinHelper::updateAvailabilities (const stdair::SegmentCabin & *iSegmentCabin*) [static]

Update the availability of the booking classes.

Definition at line 190 of file SegmentCabinHelper.cpp.

Referenced by AIRINV::InventoryHelper::calculateAvailability(), and AIRINV::GuillotineBlockHelper::takeSnapshots().

22.77.2.6 void AIRINV::SegmentCabinHelper::initialiseAU (stdair::SegmentCabin & *iSegmentCabin*) [static]

Initialise the AU for the booking classes.

Definition at line 21 of file SegmentCabinHelper.cpp.

Referenced by AIRINV::SegmentDateHelper::fillFromRouting().

The documentation for this class was generated from the following files:

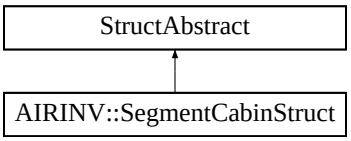
- airinv/bom/SegmentCabinHelper.hpp
- airinv/bom/SegmentCabinHelper.cpp

22.78 AIRINV::SegmentCabinStruct Struct Reference

Utility Structure for the parsing of SegmentCabin details.

`#include <airinv/bom/SegmentCabinStruct.hpp>`

Inheritance diagram for AIRINV::SegmentCabinStruct:



Public Member Functions

- void fill (stdair::SegmentCabin &) const
- const std::string describe () const

Public Attributes

- stdair::CabinCode_T _cabinCode
- stdair::NbOfBookings_T _nbOfBookings
- FareFamilyStruct _itFareFamily
- FareFamilyStructList_T _fareFamilies

22.78.1 Detailed Description

Utility Structure for the parsing of SegmentCabin details.

Definition at line 26 of file SegmentCabinStruct.hpp.

22.78.2 Member Function Documentation

22.78.2.1 void AIRINV::SegmentCabinStruct::fill (stdair::SegmentCabin & *ioSegmentCabin*) const

Fill the SegmentCabin objects with the attributes of the SegmentCabinStruct.

Definition at line 33 of file SegmentCabinStruct.cpp.

22.78.2.2 const std::string AIRINV::SegmentCabinStruct::describe ( ) const

Give a description of the structure (for display purposes).

Definition at line 15 of file SegmentCabinStruct.cpp.

References _cabinCode, _fareFamilies, _nbOfBookings, and AIRINV::FareFamilyStruct::describe().

Referenced by AIRINV::SegmentStruct::describe().

22.78.3 Member Data Documentation

22.78.3.1 stdair::CabinCode_T AIRINV::SegmentCabinStruct::_cabinCode

Definition at line 28 of file SegmentCabinStruct.hpp.

Referenced by AIRINV::FlightPeriodStruct::addFareFamily(), AIRINV::FlightDateStruct::addFareFamily(), describe(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), and AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()().

22.78.3.2 stdair::NbOfBookings_T AIRINV::SegmentCabinStruct::_nbOfBookings

Definition at line 29 of file SegmentCabinStruct.hpp.

Referenced by describe(), and AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()().

22.78.3.3 FareFamilyStruct AIRINV::SegmentCabinStruct::_itFareFamily

Definition at line 30 of file SegmentCabinStruct.hpp.

Referenced by AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), and AIRINV::InventoryParserHelper::storeFClasses::operator()().

22.78.3.4 FareFamilyStructList_T AIRINV::SegmentCabinStruct::_fareFamilies

Definition at line 31 of file SegmentCabinStruct.hpp.

Referenced by AIRINV::FlightPeriodStruct::addFareFamily(), AIRINV::FlightDateStruct::addFareFamily(), describe(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), and AIRINV::InventoryParserHelper::storeFClasses::operator()().

The documentation for this struct was generated from the following files:

- airinv/bom/SegmentCabinStruct.hpp
- airinv/bom/SegmentCabinStruct.cpp

22.79 AIRINV::SegmentDateHelper Class Reference

`#include <airinv/bom/SegmentDateHelper.hpp>`

Static Public Member Functions

- static void fillFromRouting (stdair::SegmentDate &)
- static void updateElapsedTimeFromRouting (stdair::SegmentDate &)
- static void updateDistanceFromElapsedTime (stdair::SegmentDate &)

22.79.1 Detailed Description

Class representing the actual business functions for an airline segment-date.

Definition at line 16 of file SegmentDateHelper.hpp.

22.79.2 Member Function Documentation

22.79.2.1 void AIRINV::SegmentDateHelper::fillFromRouting (stdair::SegmentDate & *ioSegmentDate*) [static]

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 18 of file SegmentDateHelper.cpp.

References AIRINV::SegmentCabinHelper::initialiseAU(), and updateElapsedTimeFromRouting().

22.79.2.2 void AIRINV::SegmentDateHelper::updateElapsedTimeFromRouting (stdair::SegmentDate & *ioSegmentDate*) [static]

Calculate and set the elapsed time according to the leg routing.

Actually, the elapsed time of the segment is the sum of the elapsed times of the routing legs, plus the stop-over times. The stop-over time is the difference between the board time of a routing leg, and the off time of the previous leg. That is, it is the time spent at the corresponding airport.

Of course, in case of mono-leg segments, there is no stop-over, and the elapsed time of the segment is equal to the elapsed time of the single routing leg.

Definition at line 73 of file SegmentDateHelper.cpp.

References updateDistanceFromElapsedTime().

Referenced by fillFromRouting().

22.79.2.3 void AIRINV::SegmentDateHelper::updateDistanceFromElapsedTime (stdair::SegmentDate & *ioSegmentDate*) [static]

Method computing the distance of the segment (in kilometers).

Definition at line 116 of file SegmentDateHelper.cpp.

Referenced by updateElapsedTimeFromRouting().

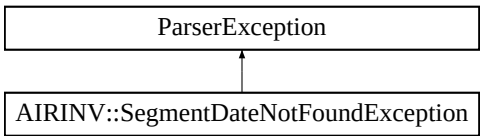
The documentation for this class was generated from the following files:

- airinv/bom/SegmentDateHelper.hpp
- airinv/bom/SegmentDateHelper.cpp

22.80 AIRINV::SegmentDateNotFoundException Class Reference

`#include <airinv/AIRINV_Types.hpp>`

Inheritance diagram for AIRINV::SegmentDateNotFoundException:



Public Member Functions

- SegmentDateNotFoundException (const std::string &iWhat)

22.80.1 Detailed Description

Specific exception when some BOM objects can not be found within the inventory.

Definition at line 54 of file AIRINV_Types.hpp.

22.80.2 Constructor & Destructor Documentation

22.80.2.1 AIRINV::SegmentDateNotFoundException::SegmentDateNotFoundException (const std::string & *iWhat*) [inline]

Constructor.

Definition at line 59 of file AIRINV_Types.hpp.

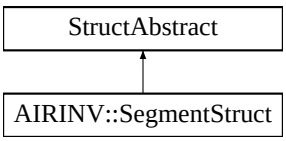
The documentation for this class was generated from the following file:

- airinv/AIRINV_Types.hpp

22.81 AIRINV::SegmentStruct Struct Reference

`#include <airinv/bom/SegmentStruct.hpp>`

Inheritance diagram for AIRINV::SegmentStruct:



Public Member Functions

- void fill (stdair::SegmentDate &) const
- const std::string describe () const

Public Attributes

- stdair::AirportCode_T _boardingPoint
- stdair::AirportCode_T _offPoint
- stdair::Date_T _boardingDate
- stdair::Duration_T _boardingTime

- stdair::Date_T _offDate
- stdair::Duration_T _offTime
- stdair::Duration_T _elapsed
- SegmentCabinStructList_T _cabinList

22.81.1 Detailed Description

Utility Structure for the parsing of Segment structures.

Definition at line 23 of file SegmentStruct.hpp.

22.81.2 Member Function Documentation

22.81.2.1 void AIRINV::SegmentStruct::fill (stdair::SegmentDate & *ioSegmentDate*) const

Fill the SegmentDate objects with the attributes of the SegmentStruct.

Definition at line 36 of file SegmentStruct.cpp.

References _boardingTime, _elapsed, _offDate, and _offTime.

22.81.2.2 const std::string AIRINV::SegmentStruct::describe ( ) const

Give a description of the structure (for display purposes).

Definition at line 14 of file SegmentStruct.cpp.

References _boardingPoint, _boardingTime, _cabinList, _elapsed, _offPoint, _offTime, and AIRINV::SegmentCabinStruct::describe().

Referenced by AIRINV::FlightPeriodStruct::describe(), and AIRINV::FlightDateStruct::describe().

22.81.3 Member Data Documentation

22.81.3.1 stdair::AirportCode_T AIRINV::SegmentStruct::_boardingPoint

Definition at line 25 of file SegmentStruct.hpp.

Referenced by AIRINV::FlightPeriodStruct::addFareFamily(), AIRINV::FlightDateStruct::addFareFamily(), AIRINV::FlightPeriodStruct::addSegmentCabin(), AIRINV::FlightDateStruct::addSegmentCabin(), AIRINV::FlightPeriodStruct::buildSegments(), AIRINV::FlightDateStruct::buildSegments(), describe(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), and AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()().

22.81.3.2 stdair::AirportCode_T AIRINV::SegmentStruct::_offPoint

Definition at line 26 of file SegmentStruct.hpp.

Referenced by AIRINV::FlightPeriodStruct::addFareFamily(), AIRINV::FlightDateStruct::addFareFamily(), AIRINV::FlightPeriodStruct::addSegmentCabin(), AIRINV::FlightDateStruct::addSegmentCabin(), AIRINV::FlightPeriodStruct::buildSegments(), AIRINV::FlightDateStruct::buildSegments(), describe(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), and AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()().

22.81.3.3 stdair::Date_T AIRINV::SegmentStruct::_boardingDate

Definition at line 27 of file SegmentStruct.hpp.

22.81.3.4 stdair::Duration_T AIRINV::SegmentStruct::_boardingTime

Definition at line 28 of file SegmentStruct.hpp.

Referenced by describe(), and fill().

22.81.3.5 stdair::Date_T AIRINV::SegmentStruct::_offDate

Definition at line 29 of file SegmentStruct.hpp.

Referenced by fill().

22.81.3.6 stdair::Duration_T AIRINV::SegmentStruct::_offTime

Definition at line 30 of file SegmentStruct.hpp.

Referenced by describe(), and fill().

22.81.3.7 stdair::Duration_T AIRINV::SegmentStruct::_elapsed

Definition at line 31 of file SegmentStruct.hpp.

Referenced by describe(), and fill().

22.81.3.8 SegmentCabinStructList_T AIRINV::SegmentStruct::_cabinList

Definition at line 32 of file SegmentStruct.hpp.

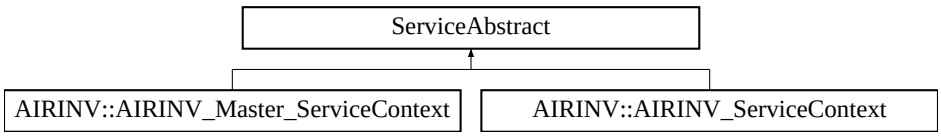
Referenced by AIRINV::FlightPeriodStruct::addFareFamily(), AIRINV::FlightDateStruct::addFareFamily(), AIRINV::FlightPeriodStruct::addSegmentCabin(), AIRINV::FlightDateStruct::addSegmentCabin(), describe(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

The documentation for this struct was generated from the following files:

- airinv/bom/SegmentStruct.hpp
- airinv/bom/SegmentStruct.cpp

22.82 ServiceAbstract Class Reference

Inheritance diagram for ServiceAbstract:



The documentation for this class was generated from the following file:

- airinv/service/AIRINV_Master_ServiceContext.hpp

22.83 AIRINV::ServiceAbstract Class Reference

```
#include <airinv/service/ServiceAbstract.hpp>
```

Public Member Functions

- virtual ~ServiceAbstract ()
- virtual void toStream (std::ostream &ioOut) const
- virtual void fromStream (std::istream &ioIn)

Protected Member Functions

- ServiceAbstract ()

22.83.1 Detailed Description

Base class for the Service layer.

Definition at line 14 of file ServiceAbstract.hpp.

22.83.2 Constructor & Destructor Documentation

22.83.2.1 virtual AIRINV::ServiceAbstract::~ServiceAbstract ( ) [inline], [virtual]

Destructor.

Definition at line 18 of file ServiceAbstract.hpp.

22.83.2.2 AIRINV::ServiceAbstract::ServiceAbstract ( ) [inline], [protected]

Protected Default Constructor to ensure this class is abtract.

Definition at line 30 of file ServiceAbstract.hpp.

22.83.3 Member Function Documentation

22.83.3.1 virtual void AIRINV::ServiceAbstract::toStream (std::ostream & *ioOut*) const [inline], [virtual]

Dump a Business Object into an output stream.

Parameters

ostream&	the output stream.

Definition at line 22 of file ServiceAbstract.hpp.

22.83.3.2 virtual void AIRINV::ServiceAbstract::fromStream (std::istream & *ioIn*) [inline], [virtual]

Read a Business Object from an input stream.

Parameters

istream&	the input stream.

Definition at line 26 of file ServiceAbstract.hpp.

Referenced by operator>>().

The documentation for this class was generated from the following file:

- airinv/service/ServiceAbstract.hpp

22.84 swift::SKeymap Class Reference

The readline keymap wrapper.

`#include <airinv/ui/cmdline/SReadline.hpp>`

Public Member Functions

- SKeymap (bool PrintableBound=false)

  Creates a new keymap.
- SKeymap (Keymap Pattern)

  Creates a new keymap which is a copy of Pattern.
- ~SKeymap ()

  Frees the allocated keymap.
- void Bind (int Key, KeyCallback Callback)

  Binds the given key to a function.
- void Unbind (int Key)

  Unbinds the given key.
- SKeymap (const SKeymap &rhs)

  Copy constructor.
- SKeymap & operator= (const SKeymap &rhs)

  operator=

Friends

- class SReadline

22.84.1 Detailed Description

The readline keymap wrapper.

Attention: It is not thread safe! Supports: key binding, key unbinding

Definition at line 307 of file SReadline.hpp.

22.84.2 Constructor & Destructor Documentation

22.84.2.1 swift::SKeymap::SKeymap (bool *PrintableBound* = `false`) [inline], [explicit]

Creates a new keymap.

Parameters

PrintableBound	if true - the printable characters are bound if false - the keymap is empty

Definition at line 319 of file SReadline.hpp.

22.84.2.2 swift::SKeymap::SKeymap (Keymap *Pattern*) [inline], [explicit]

Creates a new keymap which is a copy of Pattern.

Parameters

Pattern	A keymap to be copied.

Definition at line 342 of file SReadline.hpp.

22.84.2.3 swift::SKeymap::~SKeymap ( ) [inline]

Frees the allocated keymap.

Definition at line 354 of file SReadline.hpp.

22.84.2.4 swift::SKeymap::SKeymap (const SKeymap & *rhs*) [inline]

Copy constructor.

Parameters

rhs	Right hand side object of SKeymap

Definition at line 395 of file SReadline.hpp.

22.84.3 Member Function Documentation

22.84.3.1 void swift::SKeymap::Bind (int *Key*, KeyCallback *Callback*) [inline]

Binds the given key to a function.

Parameters

Key	A key to be bound
Callback	A function to be called when the Key is pressed

Definition at line 366 of file SReadline.hpp.

22.84.3.2 void swift::SKeymap::Unbind (int *Key*) [inline]

Unbinds the given key.

Parameters

Key	A key to be unbound

Definition at line 381 of file SReadline.hpp.

22.84.3.3 SKeymap& swift::SKeymap::operator= (const SKeymap & *rhs*) [inline]

operator=

Parameters

rhs	Right hand side object of SKeymap

Definition at line 407 of file SReadline.hpp.

22.84.4 Friends And Related Function Documentation

22.84.4.1 friend class SReadline [friend]

Definition at line 415 of file SReadline.hpp.

The documentation for this class was generated from the following file:

- airinv/ui/cmdline/SReadline.hpp

22.85 swift::SReadline Class Reference

The readline library wrapper.

`#include <airinv/ui/cmdline/SReadline.hpp>`

Public Member Functions

- SReadline (const size_t Limit=DefaultHistoryLimit)

  Constructs the object, sets the completion function.
- SReadline (const std::string &historyFileName, const size_t Limit=DefaultHistoryLimit)

  Constructs the object, sets the completion function, loads history.
- ~SReadline ()

  Saves the session history (if the file name was provided) and destroys the object.
- std::string GetLine (const std::string &Prompt)

  Gets a single line from a user.
- template<typename Container >
  std::string GetLine (const std::string &Prompt, Container &ReadTokens)

  Gets a single line from a user.
- template<typename Container >
  std::string GetLine (const std::string &Prompt, Container &ReadTokens, bool &BreakOut)

  Gets a single line from a user.
- std::string GetLine (const std::string &Prompt, bool &BreakOut)

  Gets a single line from a user.
- template<typename ContainerType >
  void GetHistory (ContainerType &Container)

  Fills the given container with the current history list.
- bool SaveHistory (std::ostream &OS)

  Saves the history to the given file stream.
- bool SaveHistory (const std::string &FileName)

  Saves the history to the given file.
- void ClearHistory ()

  Clears the history. Does not affect the file where the previous session history is saved.
- bool LoadHistory (std::istream &IS)

  Loads a history from a file stream.
- bool LoadHistory (const std::string &FileName)

  Loads a history from the given file.
- template<typename ContainerType >
  void RegisterCompletions (const ContainerType &Container)

  Allows to register custom completers.
- void SetKeymap (SKeymap &NewKeymap)

  Sets the given keymap.

22.85.1 Detailed Description

The readline library wrapper.

Attention: It is not thread safe! Supports: editing, history, custom completers

Definition at line 424 of file SReadline.hpp.

22.85.2 Constructor & Destructor Documentation

22.85.2.1 swift::SReadline::SReadline (const size_t *Limit* = `DefaultHistoryLimit`) [inline]

Constructs the object, sets the completion function.

Parameters

Limit	History size

Definition at line 431 of file SReadline.hpp.

22.85.2.2 swift::SReadline::SReadline (const std::string & *historyFileName,* const size_t *Limit* = DefaultHistoryLimit) [inline]

Constructs the object, sets the completion function, loads history.

Parameters

historyFileName	File name to load history from
Limit	History size

Definition at line 446 of file SReadline.hpp.

References LoadHistory().

22.85.2.3 swift::SReadline::~SReadline ( ) [inline]

Saves the session history (if the file name was provided) and destroys the object.

Definition at line 460 of file SReadline.hpp.

References SaveHistory().

22.85.3 Member Function Documentation

22.85.3.1 std::string swift::SReadline::GetLine (const std::string & *Prompt*) [inline]

Gets a single line from a user.

Parameters

Prompt	A printed prompt

Returns

A string which was actually inputed

Definition at line 471 of file SReadline.hpp.

Referenced by GetLine().

22.85.3.2 template<typename Container > std::string swift::SReadline::GetLine (const std::string & *Prompt,* Container & *ReadTokens*) [inline]

Gets a single line from a user.

Parameters

Prompt	A printed prompt
ReadTokens	A user inputed string splitted into tokens. The container is cleared first

Returns

A string which was actually inputed

Definition at line 485 of file SReadline.hpp.

References GetLine().

22.85.3.3 template<typename Container > std::string swift::SReadline::GetLine (const std::string & *Prompt,* Container & *ReadTokens,* bool & *BreakOut*) [inline]

Gets a single line from a user.

Parameters

Prompt	A printed prompt
BreakOut	it is set to true if the EOF found
ReadTokens	A user inputed string splitted into tokens. The container is cleared first

Returns

A string which was actually inputed

Definition at line 500 of file SReadline.hpp.

References GetLine().

22.85.3.4 std::string swift::SReadline::GetLine (const std::string & *Prompt,* bool & *BreakOut*) [inline]

Gets a single line from a user.

Parameters

Prompt	A printed prompt
BreakOut	it is set to true if the EOF found

Returns

A string which was actually inputed

Definition at line 515 of file SReadline.hpp.

22.85.3.5 template<typename ContainerType > void swift::SReadline::GetHistory (ContainerType & *Container*) [inline]

Fills the given container with the current history list.

Does not clear the given container

Definition at line 550 of file SReadline.hpp.

22.85.3.6 bool swift::SReadline::SaveHistory (std::ostream & *OS*) [inline]

Saves the history to the given file stream.

Parameters

OS	output file stream

Returns

true if success

Definition at line 562 of file SReadline.hpp.

Referenced by SaveHistory(), and ~SReadline().

22.85.3.7 bool swift::SReadline::SaveHistory (const std::string & *FileName*) [inline]

Saves the history to the given file.

Parameters

FileName	File name to save the history to

Returns

true if success

Definition at line 579 of file SReadline.hpp.

References SaveHistory().

22.85.3.8 void swift::SReadline::ClearHistory ( ) [inline]

Clears the history. Does not affect the file where the previous session history is saved.

Definition at line 592 of file SReadline.hpp.

Referenced by LoadHistory().

22.85.3.9 bool swift::SReadline::LoadHistory (std::istream & *IS*) [inline]

Loads a history from a file stream.

Parameters

IS	Input file stream

Returns

true if success

Definition at line 602 of file SReadline.hpp.

References ClearHistory().

Referenced by LoadHistory(), and SReadline().

22.85.3.10 bool swift::SReadline::LoadHistory (const std::string & *FileName*) [inline]

Loads a history from the given file.

Parameters

FileName	File name to be load from

Returns

true if success

Definition at line 627 of file SReadline.hpp.

References LoadHistory().

22.85.3.11 template<typename ContainerType > void swift::SReadline::RegisterCompletions (const ContainerType & *Container*) [inline]

Allows to register custom completers.

Supports a special keyword: file. It means to use the standard file name completer.

For example the given container elements could be as follows:

- command1 opt1
- command1 opt2 file
- command2
- command2 opt1

Each container element must describe a single possible command line. The container element must have a conversion to std::string operator.

Parameters

Container	A container which has all the user possible commands.

Definition at line 656 of file SReadline.hpp.

22.85.3.12 void swift::SReadline::SetKeymap (SKeymap & *NewKeymap*) [inline]

Sets the given keymap.

Parameters

NewKeymap	The keymap that should be used from now.

Definition at line 673 of file SReadline.hpp.

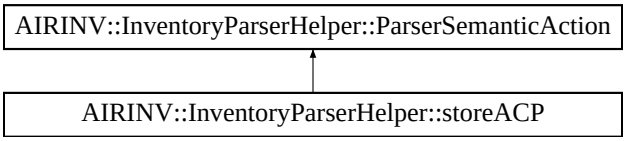
The documentation for this class was generated from the following file:

- airinv/ui/cmdline/SReadline.hpp

22.86 AIRINV::InventoryParserHelper::storeACP Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeACP:



Public Member Functions

- storeACP (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.86.1 Detailed Description

Store the parsed Average Cancellation Percentage (ACP).

Definition at line 189 of file InventoryParserHelper.hpp.

22.86.2 Constructor & Destructor Documentation

22.86.2.1 AIRINV::InventoryParserHelper::storeACP::storeACP (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 318 of file InventoryParserHelper.cpp.

22.86.3 Member Function Documentation

22.86.3.1 void AIRINV::InventoryParserHelper::storeACP::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 323 of file InventoryParserHelper.cpp.

References AIRINV::LegCabinStruct::_acp, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, and AIRINV::FlightDateStruct::_itLegCabin.

22.86.4 Member Data Documentation

22.86.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs-

::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

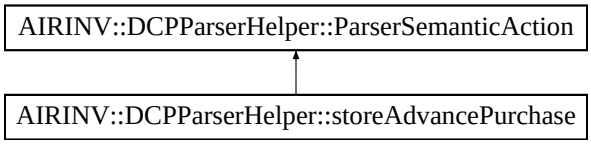
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.87 AIRINV::DCPParserHelper::storeAdvancePurchase Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeAdvancePurchase:



Public Member Functions

- storeAdvancePurchase (DCPRuleStruct &)
- void operator() (unsigned int, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.87.1 Detailed Description

Store the parsed advance purchase days.

Definition at line 138 of file DCPParserHelper.hpp.

22.87.2 Constructor & Destructor Documentation

22.87.2.1 AIRINV::DCPParserHelper::storeAdvancePurchase::storeAdvancePurchase (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 208 of file DCPParserHelper.cpp.

22.87.3 Member Function Documentation

22.87.3.1 void AIRINV::DCPParserHelper::storeAdvancePurchase::operator() (unsigned int *iAdancePurchase,* boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 213 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.87.4 Member Data Documentation

22.87.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

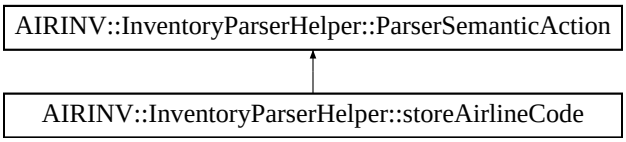
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.88 AIRINV::InventoryParserHelper::storeAirlineCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeAirlineCode:



Public Member Functions

- storeAirlineCode (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.88.1 Detailed Description

Store the parsed airline code.

Definition at line 45 of file InventoryParserHelper.hpp.

22.88.2 Constructor & Destructor Documentation

22.88.2.1 AIRINV::InventoryParserHelper::storeAirlineCode::storeAirlineCode (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 44 of file InventoryParserHelper.cpp.

22.88.3 Member Function Documentation

22.88.3.1 void AIRINV::InventoryParserHelper::storeAirlineCode::operator() (iterator_t *iStr*, iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 49 of file InventoryParserHelper.cpp.

References AIRINV::FlightDateStruct::_airlineCode, AIRINV::LegCabinStruct::_bucketList, AIRINV::SegmentStruct::_cabinList, AIRINV::LegStruct::_cabinList, AIRINV::BookingClassStruct::_classCode, AIRINV::FareFamilyStruct::_classList, AIRINV::SegmentCabinStruct::_fareFamilies, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, AIRINV::FlightDateStruct::_itBucket, AIRINV::SegmentCabinStruct::_itFareFamily, AIRINV::FlightDateStruct::_itLeg, AIRINV::FlightDateStruct::_itLegCabin, AIRINV::FlightDateStruct::_itSegment, AIRINV::FlightDateStruct::_itSegmentCabin, AIRINV::FlightDateStruct::_legList, AIRINV::FlightDateStruct::_segmentList, and AIRINV::BucketStruct::_yieldRangeUpperValue.

22.88.4 Member Data Documentation

22.88.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(),

AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses-::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

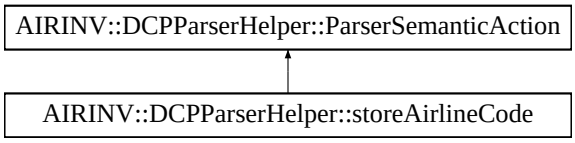
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.89 AIRINV::DCPParserHelper::storeAirlineCode Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeAirlineCode:



Public Member Functions

- storeAirlineCode (DCPRuleStruct &)
- void operator() (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.89.1 Detailed Description

Store the parsed airline code.

Definition at line 198 of file DCPParserHelper.hpp.

22.89.2 Constructor & Destructor Documentation

22.89.2.1 AIRINV::DCPParserHelper::storeAirlineCode::storeAirlineCode (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 329 of file DCPParserHelper.cpp.

22.89.3 Member Function Documentation

22.89.3.1 void AIRINV::DCPParserHelper::storeAirlineCode::operator() (std::vector< char > *iChar*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 334 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.89.4 Member Data Documentation

22.89.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

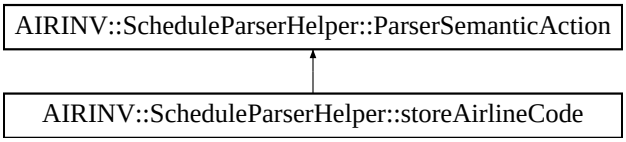
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.90 AIRINV::ScheduleParserHelper::storeAirlineCode Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeAirlineCode:



Public Member Functions

- storeAirlineCode (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.90.1 Detailed Description

Store the parsed airline code.

Definition at line 37 of file ScheduleParserHelper.hpp.

22.90.2 Constructor & Destructor Documentation

22.90.2.1 AIRINV::ScheduleParserHelper::storeAirlineCode::storeAirlineCode (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 33 of file ScheduleParserHelper.cpp.

22.90.3 Member Function Documentation

22.90.3.1 void AIRINV::ScheduleParserHelper::storeAirlineCode::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 38 of file ScheduleParserHelper.cpp.

References AIRINV::FlightPeriodStruct::_airlineCode, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, and AIRINV::FlightPeriodStruct::_legList.

22.90.4 Member Data Documentation

22.90.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

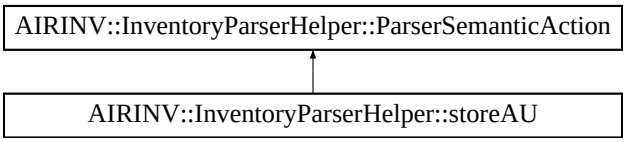
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.91 AIRINV::InventoryParserHelper::storeAU Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeAU:



Public Member Functions

- storeAU (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.91.1 Detailed Description

Store the parsed Authorisation Level (AU).

Definition at line 149 of file InventoryParserHelper.hpp.

22.91.2 Constructor & Destructor Documentation

22.91.2.1 AIRINV::InventoryParserHelper::storeAU::storeAU (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 263 of file InventoryParserHelper.cpp.

22.91.3 Member Function Documentation

22.91.3.1 void AIRINV::InventoryParserHelper::storeAU::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 268 of file InventoryParserHelper.cpp.

References AIRINV::LegCabinStruct::_au, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, and AIRINV::FlightDateStruct::_itLegCabin.

22.91.4 Member Data Documentation

22.91.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(),

AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses-::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

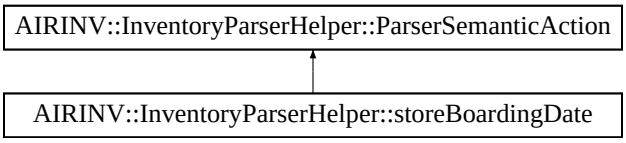
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.92 AIRINV::InventoryParserHelper::storeBoardingDate Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeBoardingDate:



Public Member Functions

- storeBoardingDate (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.92.1 Detailed Description

Store the boarding date.

Definition at line 101 of file InventoryParserHelper.hpp.

22.92.2 Constructor & Destructor Documentation

22.92.2.1 AIRINV::InventoryParserHelper::storeBoardingDate::storeBoardingDate (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 172 of file InventoryParserHelper.cpp.

22.92.3 Member Function Documentation

22.92.3.1 void AIRINV::InventoryParserHelper::storeBoardingDate::operator() (iterator_t *iStr*, iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 177 of file InventoryParserHelper.cpp.

References AIRINV::LegStruct::_boardingDate, AIRINV::InventoryParserHelper::ParserSemanticAction::_flight-Date, AIRINV::FlightDateStruct::_itLeg, and AIRINV::FlightDateStruct::getDate().

22.92.4 Member Data Documentation

22.92.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

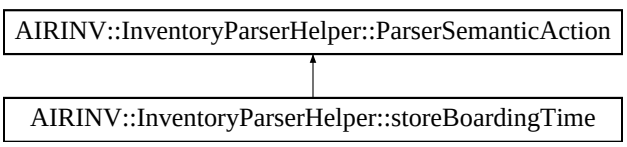
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.93 AIRINV::InventoryParserHelper::storeBoardingTime Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeBoardingTime:



Public Member Functions

- storeBoardingTime (FlightDateStruct &)

- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.93.1 Detailed Description

Store the boarding time.

Definition at line 109 of file InventoryParserHelper.hpp.

22.93.2 Constructor & Destructor Documentation

22.93.2.1 AIRINV::InventoryParserHelper::storeBoardingTime::storeBoardingTime (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 183 of file InventoryParserHelper.cpp.

22.93.3 Member Function Documentation

22.93.3.1 void AIRINV::InventoryParserHelper::storeBoardingTime::operator() (iterator_t *iStr*, iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 188 of file InventoryParserHelper.cpp.

References AIRINV::LegStruct::_boardingTime, AIRINV::FlightDateStruct::_dateOffSet, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itLeg, AIRINV::FlightDateStruct::_itSeconds, and AIRINV::FlightDateStruct::getTime().

22.93.4 Member Data Documentation

22.93.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::Inventory-

ParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection-::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper-::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParser-Helper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::-InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPending-GroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::Inventory-ParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AI-RINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegment-Availability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::Inventory-ParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

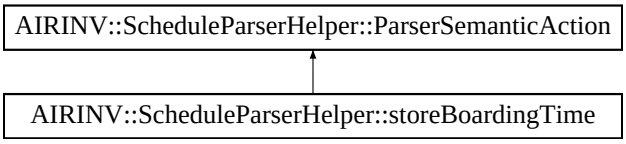
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.94 AIRINV::ScheduleParserHelper::storeBoardingTime Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeBoardingTime:



Public Member Functions

- storeBoardingTime (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.94.1 Detailed Description

Store the boarding time.

Definition at line 93 of file ScheduleParserHelper.hpp.

22.94.2 Constructor & Destructor Documentation

22.94.2.1 AIRINV::ScheduleParserHelper::storeBoardingTime::storeBoardingTime (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 156 of file ScheduleParserHelper.cpp.

22.94.3 Member Function Documentation

22.94.3.1 void AIRINV::ScheduleParserHelper::storeBoardingTime::operator() (iterator_t *iStr*, iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 161 of file ScheduleParserHelper.cpp.

References AIRINV::LegStruct::_boardingTime, AIRINV::FlightPeriodStruct::_dateOffset, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::FlightPeriodStruct::_itLeg, AIRINV::FlightPeriodStruct::_itSeconds, and AIRINV::FlightPeriodStruct::getTime().

22.94.4 Member Data Documentation

22.94.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

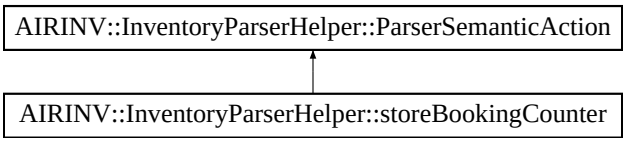
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.95 AIRINV::InventoryParserHelper::storeBookingCounter Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeBookingCounter:



Public Member Functions

- storeBookingCounter (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.95.1 Detailed Description

Store the parsed booking counter.

Definition at line 165 of file InventoryParserHelper.hpp.

22.95.2 Constructor & Destructor Documentation

22.95.2.1 AIRINV::InventoryParserHelper::storeBookingCounter::storeBookingCounter (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 285 of file InventoryParserHelper.cpp.

22.95.3 Member Function Documentation

22.95.3.1 void AIRINV::InventoryParserHelper::storeBookingCounter::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 290 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itLegCabin, and AIRINV::LegCabinStruct::_nbOfBookings.

22.95.4 Member Data Documentation

22.95.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(),

AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses-::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

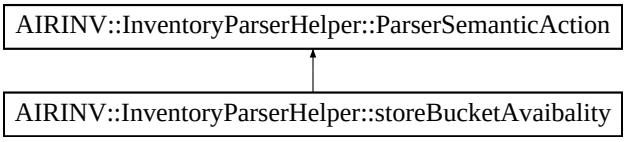
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.96 AIRINV::InventoryParserHelper::storeBucketAvaibality Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeBucketAvaibality:



Public Member Functions

- storeBucketAvaibality (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.96.1 Detailed Description

Store the parsed bucket availability.

Definition at line 213 of file InventoryParserHelper.hpp.

22.96.2 Constructor & Destructor Documentation

22.96.2.1 AIRINV::InventoryParserHelper::storeBucketAvaibality::storeBucketAvaibality (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 360 of file InventoryParserHelper.cpp.

22.96.3 Member Function Documentation

22.96.3.1 void AIRINV::InventoryParserHelper::storeBucketAvaibality::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 365 of file InventoryParserHelper.cpp.

References AIRINV::BucketStruct::_availability, AIRINV::InventoryParserHelper::ParserSemanticAction::_flight-Date, and AIRINV::FlightDateStruct::_itBucket.

22.96.4 Member Data Documentation

22.96.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

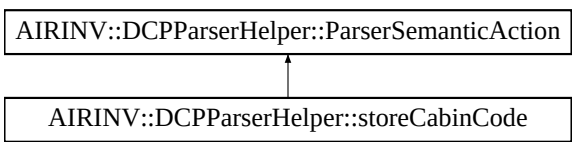
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.97 AIRINV::DCPParserHelper::storeCabinCode Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeCabinCode:



Public Member Functions

- storeCabinCode (DCPRuleStruct &)

- void operator() (char, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.97.1 Detailed Description

Store the cabin code.

Definition at line 118 of file DCPParserHelper.hpp.

22.97.2 Constructor & Destructor Documentation

22.97.2.1 AIRINV::DCPParserHelper::storeCabinCode::storeCabinCode (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 166 of file DCPParserHelper.cpp.

22.97.3 Member Function Documentation

22.97.3.1 void AIRINV::DCPParserHelper::storeCabinCode::operator() (char *iChar,* boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 171 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.97.4 Member Data Documentation

22.97.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

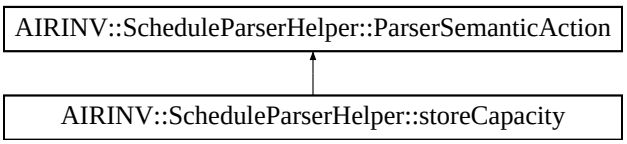
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.98 AIRINV::ScheduleParserHelper::storeCapacity Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeCapacity:



Public Member Functions

- storeCapacity (FlightPeriodStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.98.1 Detailed Description

Store the parsed capacity.

Definition at line 125 of file ScheduleParserHelper.hpp.

22.98.2 Constructor & Destructor Documentation

22.98.2.1 AIRINV::ScheduleParserHelper::storeCapacity::storeCapacity (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 228 of file ScheduleParserHelper.cpp.

22.98.3 Member Function Documentation

22.98.3.1 void AIRINV::ScheduleParserHelper::storeCapacity::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 233 of file ScheduleParserHelper.cpp.

References AIRINV::LegStruct::_cabinList, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::FlightPeriodStruct::_itLeg, AIRINV::FlightPeriodStruct::_itLegCabin, and AIRINV::LegCabinStruct::_saleableCapacity.

22.98.4 Member Data Documentation

22.98.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(),

AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

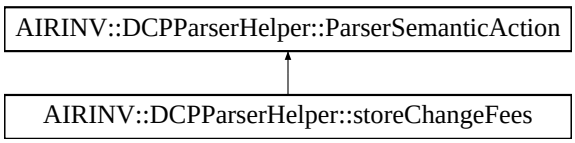
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.99 AIRINV::DCPParserHelper::storeChangeFees Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeChangeFees:



Public Member Functions

- storeChangeFees (DCPRuleStruct &)
- void operator() (char, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.99.1 Detailed Description

Store the parsed change fees.

Definition at line 158 of file DCPParserHelper.hpp.

22.99.2 Constructor & Destructor Documentation

22.99.2.1 AIRINV::DCPParserHelper::storeChangeFees::storeChangeFees (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 248 of file DCPParserHelper.cpp.

22.99.3 Member Function Documentation

22.99.3.1 void AIRINV::DCPParserHelper::storeChangeFees::operator() (char *iChangefees,* boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 253 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.99.4 Member Data Documentation

22.99.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

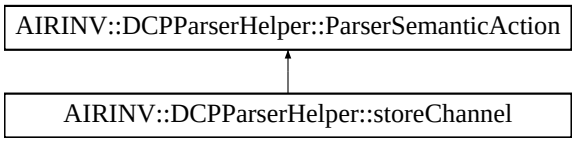
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.100 AIRINV::DCPParserHelper::storeChannel Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeChannel:



Public Member Functions

- storeChannel (DCPRuleStruct &)
- void operator() (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.100.1 Detailed Description

Store the channel distribution.

Definition at line 128 of file DCPParserHelper.hpp.

22.100.2 Constructor & Destructor Documentation

22.100.2.1 AIRINV::DCPParserHelper::storeChannel::storeChannel (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 187 of file DCPParserHelper.cpp.

22.100.3 Member Function Documentation

22.100.3.1 void AIRINV::DCPParserHelper::storeChannel::operator() (std::vector< char > *iChar,* boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 192 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.100.4 Member Data Documentation

22.100.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

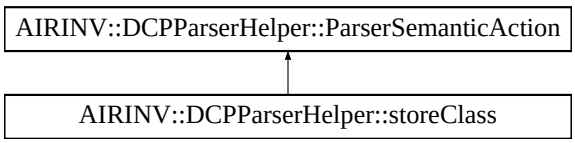
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.101 AIRINV::DCPParserHelper::storeClass Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeClass:



Public Member Functions

- storeClass (DCPRuleStruct &)
- void operator() (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.101.1 Detailed Description

Store the parsed class.

Definition at line 208 of file DCPParserHelper.hpp.

22.101.2 Constructor & Destructor Documentation

22.101.2.1 AIRINV::DCPParserHelper::storeClass::storeClass (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 376 of file DCPParserHelper.cpp.

22.101.3 Member Function Documentation

22.101.3.1 void AIRINV::DCPParserHelper::storeClass::operator() (std::vector< char > *iChar,* boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 381 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.101.4 Member Data Documentation

22.101.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

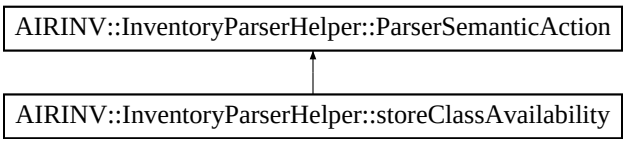
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.102 AIRINV::InventoryParserHelper::storeClassAvailability Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeClassAvailability:



Public Member Functions

- storeClassAvailability (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.102.1 Detailed Description

Store the parsed number of net class availability (at booking class level).

Definition at line 383 of file InventoryParserHelper.hpp.

22.102.2 Constructor & Destructor Documentation

22.102.2.1 AIRINV::InventoryParserHelper::storeClassAvailability::storeClassAvailability (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 670 of file InventoryParserHelper.cpp.

22.102.3 Member Function Documentation

22.102.3.1 void AIRINV::InventoryParserHelper::storeClassAvailability::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 675 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_netClassAvailability.

22.102.4 Member Data Documentation

22.102.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AI-

RINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter-::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGA-V::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeE-TB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParser-Helper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::-InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegment-OffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::Inventory-ParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode-::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper-::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::store-Protection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper-::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::Inventory-ParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), A-IRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::store-NbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::Inventory-ParserHelper::storeClassETB::operator()(), operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability-::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParser-Helper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::-InventoryParserHelper::doEndFlightDate::operator()().

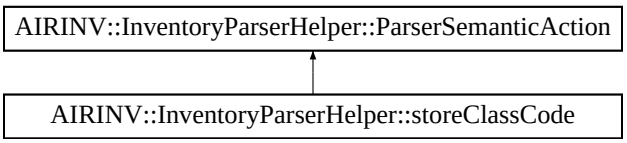
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.103 AIRINV::InventoryParserHelper::storeClassCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeClassCode:



Public Member Functions

- storeClassCode (FlightDateStruct &)
- void operator() (char iChar) const

Public Attributes

- FlightDateStruct & _flightDate

22.103.1 Detailed Description

Store the parsed booking class code.

Definition at line 261 of file InventoryParserHelper.hpp.

22.103.2 Constructor & Destructor Documentation

22.103.2.1 AIRINV::InventoryParserHelper::storeClassCode::storeClassCode (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 492 of file InventoryParserHelper.cpp.

22.103.3 Member Function Documentation

22.103.3.1 void AIRINV::InventoryParserHelper::storeClassCode::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 497 of file InventoryParserHelper.cpp.

References AIRINV::BookingClassStruct::_classCode, AIRINV::FareFamilyStruct::_classList, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, AIRINV::SegmentCabinStruct::_itFareFamily, and AIRINV::FlightDateStruct::_itSegmentCabin.

22.103.4 Member Data Documentation

22.103.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

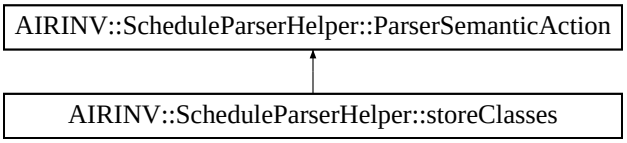
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.104 AIRINV::ScheduleParserHelper::storeClasses Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeClasses:



Public Member Functions

- storeClasses (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.104.1 Detailed Description

Store the parsed list of class codes.

Definition at line 168 of file ScheduleParserHelper.hpp.

22.104.2 Constructor & Destructor Documentation

22.104.2.1 AIRINV::ScheduleParserHelper::storeClasses::storeClasses (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 310 of file ScheduleParserHelper.cpp.

22.104.3 Member Function Documentation

22.104.3.1 void AIRINV::ScheduleParserHelper::storeClasses::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 315 of file ScheduleParserHelper.cpp.

References AIRINV::FlightPeriodStruct::_areSegmentDefinitionsSpecific, AIRINV::FareFamilyStruct::_classes, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::SegmentCabinStruct::_itFareFamily, AIRINV::FlightPeriodStruct::_itSegment, AIRINV::FlightPeriodStruct::_itSegmentCabin, and AIRINV::FlightPeriodStruct::addSegmentCabin().

22.104.4 Member Data Documentation

22.104.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

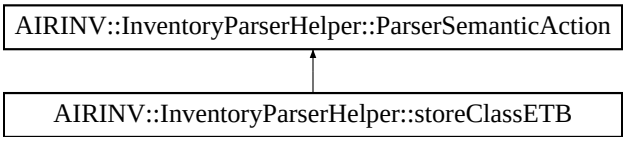
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.105 AIRINV::InventoryParserHelper::storeClassETB Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeClassETB:



Public Member Functions

- storeClassETB (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.105.1 Detailed Description

Store the parsed expected to board number (at booking class level).

Definition at line 374 of file InventoryParserHelper.hpp.

22.105.2 Constructor & Destructor Documentation

22.105.2.1 AIRINV::InventoryParserHelper::storeClassETB::storeClassETB (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 658 of file InventoryParserHelper.cpp.

22.105.3 Member Function Documentation

22.105.3.1 void AIRINV::InventoryParserHelper::storeClassETB::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 663 of file InventoryParserHelper.cpp.

References AIRINV::BookingClassStruct::_etb, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, and AIRINV::FlightDateStruct::_itBookingClass.

22.105.4 Member Data Documentation

22.105.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

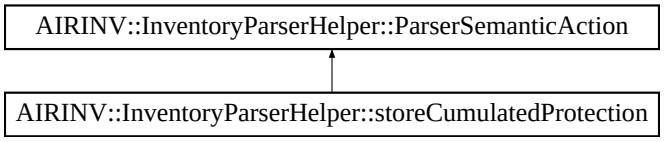
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.106 AIRINV::InventoryParserHelper::storeCumulatedProtection Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeCumulatedProtection:



Public Member Functions

- storeCumulatedProtection (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.106.1 Detailed Description

Store the parsed cumulated protection (at booking class level).

Definition at line 293 of file InventoryParserHelper.hpp.

22.106.2 Constructor & Destructor Documentation

22.106.2.1 AIRINV::InventoryParserHelper::storeCumulatedProtection::storeCumulatedProtection (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 547 of file InventoryParserHelper.cpp.

22.106.3 Member Function Documentation

22.106.3.1 void AIRINV::InventoryParserHelper::storeCumulatedProtection::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 552 of file InventoryParserHelper.cpp.

References AIRINV::BookingClassStruct::_cumulatedProtection, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, and AIRINV::FlightDateStruct::_itBookingClass.

22.106.4 Member Data Documentation

22.106.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::Inventory-

ParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

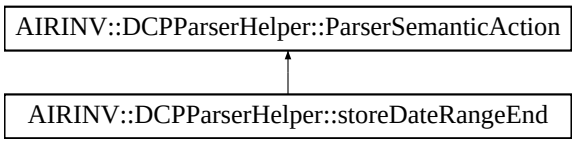
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.107 AIRINV::DCPParserHelper::storeDateRangeEnd Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeDateRangeEnd:



Public Member Functions

- storeDateRangeEnd (DCPRuleStruct &)
- void operator() (boost::spirit::qi::unused_type, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.107.1 Detailed Description

Store the parsed end of the date range.

Definition at line 78 of file DCPParserHelper.hpp.

22.107.2 Constructor & Destructor Documentation

22.107.2.1 AIRINV::DCPParserHelper::storeDateRangeEnd::storeDateRangeEnd (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 101 of file DCPParserHelper.cpp.

22.107.3 Member Function Documentation

22.107.3.1 void AIRINV::DCPParserHelper::storeDateRangeEnd::operator() (boost::spirit::qi::unused_type , boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 106 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.107.4 Member Data Documentation

22.107.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

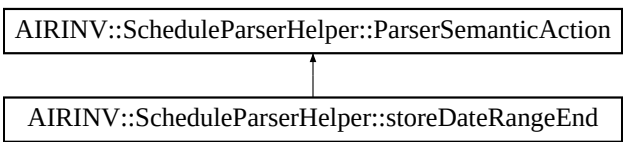
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.108 AIRINV::ScheduleParserHelper::storeDateRangeEnd Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeDateRangeEnd:



Public Member Functions

- storeDateRangeEnd (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.108.1 Detailed Description

Store the end of the date range.

Definition at line 61 of file ScheduleParserHelper.hpp.

22.108.2 Constructor & Destructor Documentation

22.108.2.1 AIRINV::ScheduleParserHelper::storeDateRangeEnd::storeDateRangeEnd (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 76 of file ScheduleParserHelper.cpp.

22.108.3 Member Function Documentation

22.108.3.1 void AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 81 of file ScheduleParserHelper.cpp.

References AIRINV::FlightPeriodStruct::_dateRange, AIRINV::FlightPeriodStruct::_dateRangeEnd, AIRINV::FlightPeriodStruct::_dateRangeStart, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::FlightPeriodStruct::_itSeconds, and AIRINV::FlightPeriodStruct::getDate().

22.108.4 Member Data Documentation

22.108.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

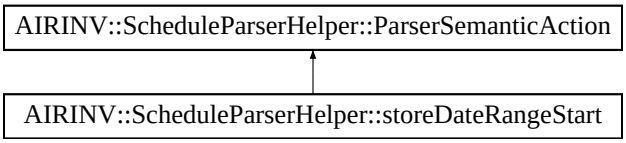
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.109 AIRINV::ScheduleParserHelper::storeDateRangeStart Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeDateRangeStart:



Public Member Functions

- storeDateRangeStart (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.109.1 Detailed Description

Store the start of the date range.

Definition at line 53 of file ScheduleParserHelper.hpp.

22.109.2 Constructor & Destructor Documentation

22.109.2.1 AIRINV::ScheduleParserHelper::storeDateRangeStart::storeDateRangeStart (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 61 of file ScheduleParserHelper.cpp.

22.109.3 Member Function Documentation

22.109.3.1 void AIRINV::ScheduleParserHelper::storeDateRangeStart::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 66 of file ScheduleParserHelper.cpp.

References AIRINV::FlightPeriodStruct::_dateRangeStart, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::FlightPeriodStruct::_itSeconds, and AIRINV::FlightPeriodStruct::getDate().

22.109.4 Member Data Documentation

22.109.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(),

AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

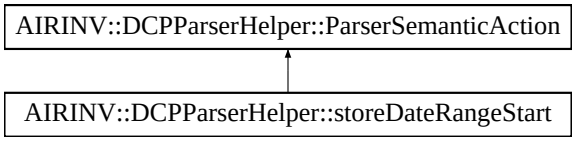
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.110 AIRINV::DCPParserHelper::storeDateRangeStart Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeDateRangeStart:



Public Member Functions

- storeDateRangeStart (DCPRuleStruct &)
- void operator() (boost::spirit::qi::unused_type, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.110.1 Detailed Description

Store the parsed start of the date range.

Definition at line 68 of file DCPParserHelper.hpp.

22.110.2 Constructor & Destructor Documentation

22.110.2.1 AIRINV::DCPParserHelper::storeDateRangeStart::storeDateRangeStart (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 86 of file DCPParserHelper.cpp.

22.110.3 Member Function Documentation

22.110.3.1 void AIRINV::DCPParserHelper::storeDateRangeStart::operator() (boost::spirit::qi::unused_type , boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 91 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.110.4 Member Data Documentation

22.110.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

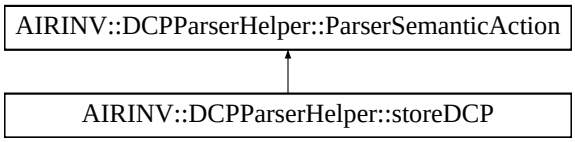
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.111 AIRINV::DCPParserHelper::storeDCP Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeDCP:



Public Member Functions

- storeDCP (DCPRuleStruct &)
- void operator() (double, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.111.1 Detailed Description

Store the parsed DCP value.

Definition at line 188 of file DCPParserHelper.hpp.

22.111.2 Constructor & Destructor Documentation

22.111.2.1 AIRINV::DCPParserHelper::storeDCP::storeDCP (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 314 of file DCPParserHelper.cpp.

22.111.3 Member Function Documentation

22.111.3.1 void AIRINV::DCPParserHelper::storeDCP::operator() (double *iDCP*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 319 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.111.4 Member Data Documentation

22.111.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

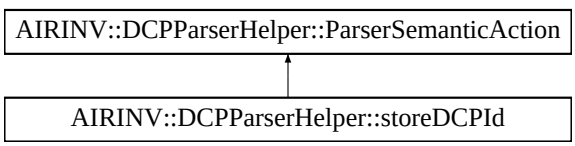
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.112 AIRINV::DCPParserHelper::storeDCPId Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeDCPId:



Public Member Functions

- storeDCPId (DCPRuleStruct &)
- void operator() (unsigned int, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.112.1 Detailed Description

Store the parsed DCP Id.

Definition at line 38 of file DCPParserHelper.hpp.

22.112.2 Constructor & Destructor Documentation

22.112.2.1 AIRINV::DCPParserHelper::storeDCPId::storeDCPId (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 30 of file DCPParserHelper.cpp.

22.112.3 Member Function Documentation

22.112.3.1 void AIRINV::DCPParserHelper::storeDCPId::operator() (unsigned int *iDCPId,* boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 35 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.112.4 Member Data Documentation

22.112.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

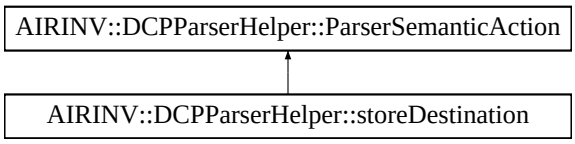
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.113 AIRINV::DCPParserHelper::storeDestination Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeDestination:



Public Member Functions

- storeDestination (DCPRuleStruct &)
- void operator() (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.113.1 Detailed Description

Store the parsed destination.

Definition at line 58 of file DCPParserHelper.hpp.

22.113.2 Constructor & Destructor Documentation

22.113.2.1 AIRINV::DCPParserHelper::storeDestination::storeDestination (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 70 of file DCPParserHelper.cpp.

22.113.3 Member Function Documentation

22.113.3.1 void AIRINV::DCPParserHelper::storeDestination::operator() (std::vector< char > *iChar*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 75 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.113.4 Member Data Documentation

22.113.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper-

::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

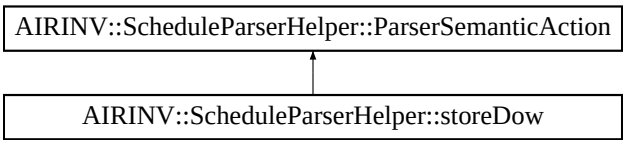
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.114 AIRINV::ScheduleParserHelper::storeDow Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeDow:



Public Member Functions

- storeDow (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.114.1 Detailed Description

Store the DOW (day of the Week).

Definition at line 69 of file ScheduleParserHelper.hpp.

22.114.2 Constructor & Destructor Documentation

22.114.2.1 AIRINV::ScheduleParserHelper::storeDow::storeDow (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 99 of file ScheduleParserHelper.cpp.

22.114.3 Member Function Documentation

22.114.3.1 void AIRINV::ScheduleParserHelper::storeDow::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 104 of file ScheduleParserHelper.cpp.

References AIRINV::FlightPeriodStruct::_dow, and AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod.

22.114.4 Member Data Documentation

22.114.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

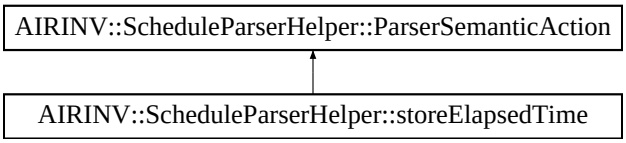
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.115 AIRINV::ScheduleParserHelper::storeElapsedTime Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeElapsedTime:



Public Member Functions

- storeElapsedTime (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.115.1 Detailed Description

Store the elapsed time.

Definition at line 109 of file ScheduleParserHelper.hpp.

22.115.2 Constructor & Destructor Documentation

22.115.2.1 AIRINV::ScheduleParserHelper::storeElapsedTime::storeElapsedTime (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 195 of file ScheduleParserHelper.cpp.

22.115.3 Member Function Documentation

22.115.3.1 void AIRINV::ScheduleParserHelper::storeElapsedTime::operator() (iterator_t *iStr*, iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 200 of file ScheduleParserHelper.cpp.

References AIRINV::FlightPeriodStruct::_dateOffset, AIRINV::LegStruct::_elapsed, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::FlightPeriodStruct::_itLeg, AIRINV::FlightPeriodStruct::_itSeconds, AIRINV::LegStruct::_offDateOffset, and AIRINV::FlightPeriodStruct::getTime().

22.115.4 Member Data Documentation

22.115.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

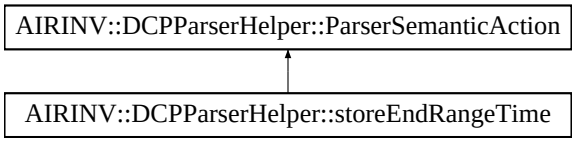
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.116 AIRINV::DCPParserHelper::storeEndRangeTime Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeEndRangeTime:



Public Member Functions

- storeEndRangeTime (DCPRuleStruct &)

- void operator() (boost::spirit::qi::unused_type, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.116.1 Detailed Description

Store the parsed end start range time.

Definition at line 98 of file DCPParserHelper.hpp.

22.116.2 Constructor & Destructor Documentation

22.116.2.1 AIRINV::DCPParserHelper::storeEndRangeTime::storeEndRangeTime (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 133 of file DCPParserHelper.cpp.

22.116.3 Member Function Documentation

22.116.3.1 void AIRINV::DCPParserHelper::storeEndRangeTime::operator() (boost::spirit::qi::unused_type , boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 138 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.116.4 Member Data Documentation

22.116.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

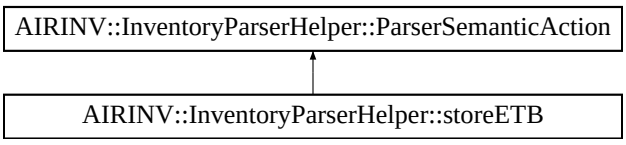
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.117 AIRINV::InventoryParserHelper::storeETB Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeETB:



Public Member Functions

- storeETB (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.117.1 Detailed Description

Store the parsed Expected To Board (ETB) number.

Definition at line 197 of file InventoryParserHelper.hpp.

22.117.2 Constructor & Destructor Documentation

22.117.2.1 AIRINV::InventoryParserHelper::storeETB::storeETB (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 329 of file InventoryParserHelper.cpp.

22.117.3 Member Function Documentation

22.117.3.1 void AIRINV::InventoryParserHelper::storeETB::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 334 of file InventoryParserHelper.cpp.

References AIRINV::LegCabinStruct::_etb, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, and AIRINV::FlightDateStruct::_itLegCabin.

22.117.4 Member Data Documentation

22.117.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode-

::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

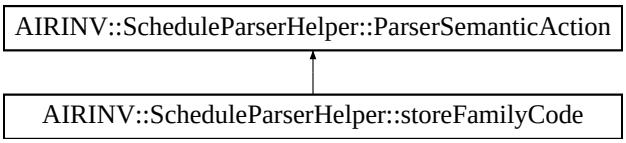
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.118 AIRINV::ScheduleParserHelper::storeFamilyCode Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeFamilyCode:



Public Member Functions

- storeFamilyCode (FlightPeriodStruct &)
- void operator() (int iCode) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.118.1 Detailed Description

Store the parsed family code.

Definition at line 176 of file ScheduleParserHelper.hpp.

22.118.2 Constructor & Destructor Documentation

22.118.2.1 AIRINV::ScheduleParserHelper::storeFamilyCode::storeFamilyCode (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 335 of file ScheduleParserHelper.cpp.

22.118.3 Member Function Documentation

22.118.3.1 void AIRINV::ScheduleParserHelper::storeFamilyCode::operator() (int *iCode*) const

Actor Function (functor).

Definition at line 340 of file ScheduleParserHelper.cpp.

References AIRINV::FareFamilyStruct::_familyCode, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::SegmentCabinStruct::_itFareFamily, and AIRINV::FlightPeriodStruct::_itSegmentCabin.

22.118.4 Member Data Documentation

22.118.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

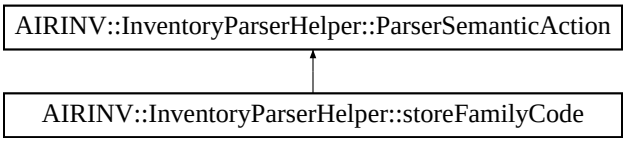
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.119 AIRINV::InventoryParserHelper::storeFamilyCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeFamilyCode:



Public Member Functions

- storeFamilyCode (FlightDateStruct &)
- void operator() (int iCode) const

Public Attributes

- FlightDateStruct & _flightDate

22.119.1 Detailed Description

Store the parsed family code.

Definition at line 409 of file InventoryParserHelper.hpp.

22.119.2 Constructor & Destructor Documentation

22.119.2.1 AIRINV::InventoryParserHelper::storeFamilyCode::storeFamilyCode (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 705 of file InventoryParserHelper.cpp.

22.119.3 Member Function Documentation

22.119.3.1 void AIRINV::InventoryParserHelper::storeFamilyCode::operator() (int *iCode*) const

Actor Function (functor).

Definition at line 710 of file InventoryParserHelper.cpp.

References AIRINV::FareFamilyStruct::_familyCode, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::SegmentCabinStruct::_itFareFamily, and AIRINV::FlightDateStruct::_itSegmentCabin.

22.119.4 Member Data Documentation

22.119.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::Inventory-

ParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

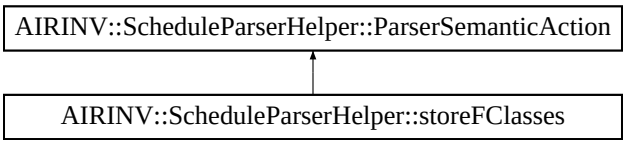
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.120 AIRINV::ScheduleParserHelper::storeFClasses Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeFClasses:



Public Member Functions

- storeFClasses (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.120.1 Detailed Description

Store the parsed list of class codes (for families).

Definition at line 184 of file ScheduleParserHelper.hpp.

22.120.2 Constructor & Destructor Documentation

22.120.2.1 AIRINV::ScheduleParserHelper::storeFClasses::storeFClasses (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 348 of file ScheduleParserHelper.cpp.

22.120.3 Member Function Documentation

22.120.3.1 void AIRINV::ScheduleParserHelper::storeFClasses::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 353 of file ScheduleParserHelper.cpp.

References AIRINV::FlightPeriodStruct::_areSegmentDefinitionsSpecific, AIRINV::FareFamilyStruct::_familyCode, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::SegmentCabinStruct::_itFareFamily, AIRINV::FlightPeriodStruct::_itSegment, AIRINV::FlightPeriodStruct::_itSegmentCabin, and AIRINV::FlightPeriodStruct::addFareFamily().

22.120.4 Member Data Documentation

22.120.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

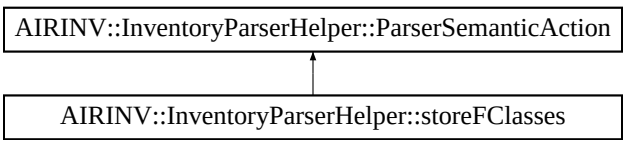
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.121 AIRINV::InventoryParserHelper::storeFClasses Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeFClasses:



Public Member Functions

- storeFClasses (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.121.1 Detailed Description

Store the parsed list of class codes (for families).

Definition at line 417 of file InventoryParserHelper.hpp.

22.121.2 Constructor & Destructor Documentation

22.121.2.1 AIRINV::InventoryParserHelper::storeFClasses::storeFClasses (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 717 of file InventoryParserHelper.cpp.

22.121.3 Member Function Documentation

22.121.3.1 void AIRINV::InventoryParserHelper::storeFClasses::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 722 of file InventoryParserHelper.cpp.

References AIRINV::SegmentStruct::_cabinList, AIRINV::BookingClassStruct::_classCode, AIRINV::FareFamilyStruct::_classes, AIRINV::FareFamilyStruct::_classList, AIRINV::SegmentCabinStruct::_fareFamilies, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, AIRINV::SegmentCabinStruct::_itFareFamily, AIRINV::FlightDateStruct::_itSegment, and AIRINV::FlightDateStruct::_itSegmentCabin.

22.121.4 Member Data Documentation

22.121.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(),

AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

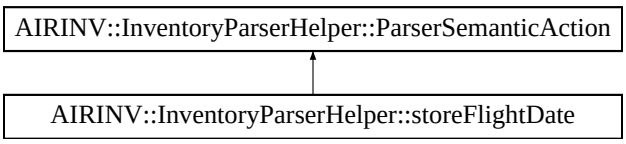
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.122 AIRINV::InventoryParserHelper::storeFlightDate Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeFlightDate:



Public Member Functions

- storeFlightDate (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.122.1 Detailed Description

Store the flight date.

Definition at line 61 of file InventoryParserHelper.hpp.

22.122.2 Constructor & Destructor Documentation

22.122.2.1 AIRINV::InventoryParserHelper::storeFlightDate::storeFlightDate (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 80 of file InventoryParserHelper.cpp.

22.122.3 Member Function Documentation

22.122.3.1 void AIRINV::InventoryParserHelper::storeFlightDate::operator() (iterator_t *iStr*, iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 85 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_flightDate, and AIRINV::FlightDateStruct::getDate().

22.122.4 Member Data Documentation

22.122.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

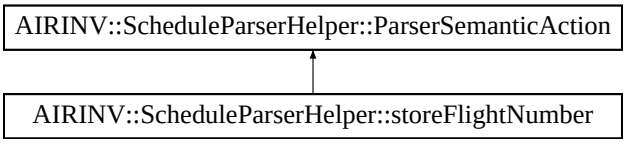
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.123 AIRINV::ScheduleParserHelper::storeFlightNumber Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeFlightNumber:



Public Member Functions

- storeFlightNumber (FlightPeriodStruct &)
- void operator() (unsigned int iNumber) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.123.1 Detailed Description

Store the parsed flight number.

Definition at line 45 of file ScheduleParserHelper.hpp.

22.123.2 Constructor & Destructor Documentation

22.123.2.1 AIRINV::ScheduleParserHelper::storeFlightNumber::storeFlightNumber (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 50 of file ScheduleParserHelper.cpp.

22.123.3 Member Function Documentation

22.123.3.1 void AIRINV::ScheduleParserHelper::storeFlightNumber::operator() (unsigned int *iNumber*) const

Actor Function (functor).

Definition at line 55 of file ScheduleParserHelper.cpp.

References AIRINV::FlightPeriodStruct::_flightNumber, and AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod.

22.123.4 Member Data Documentation

22.123.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

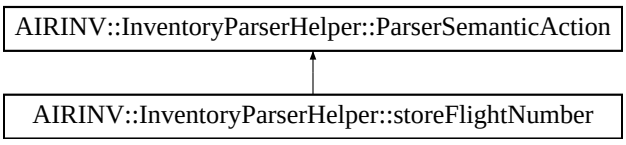
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.124 AIRINV::InventoryParserHelper::storeFlightNumber Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeFlightNumber:



Public Member Functions

- storeFlightNumber (FlightDateStruct &)
- void operator() (unsigned int iNumber) const

Public Attributes

- FlightDateStruct & _flightDate

22.124.1 Detailed Description

Store the parsed flight number.

Definition at line 53 of file InventoryParserHelper.hpp.

22.124.2 Constructor & Destructor Documentation

22.124.2.1 AIRINV::InventoryParserHelper::storeFlightNumber::storeFlightNumber (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 70 of file InventoryParserHelper.cpp.

22.124.3 Member Function Documentation

22.124.3.1 void AIRINV::InventoryParserHelper::storeFlightNumber::operator() (unsigned int *iNumber*) const

Actor Function (functor).

Definition at line 75 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, and AIRINV::FlightDateStruct::_flightNumber.

22.124.4 Member Data Documentation

22.124.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibility-

Code::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

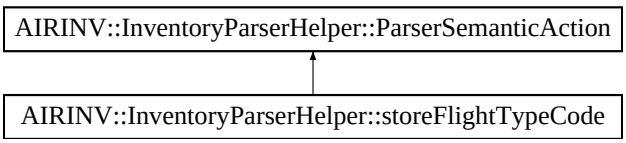
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.125 AIRINV::InventoryParserHelper::storeFlightTypeCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeFlightTypeCode:



Public Member Functions

- storeFlightTypeCode (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.125.1 Detailed Description

Store the flight type code.

Definition at line 69 of file InventoryParserHelper.hpp.

22.125.2 Constructor & Destructor Documentation

22.125.2.1 AIRINV::InventoryParserHelper::storeFlightTypeCode::storeFlightTypeCode (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 91 of file InventoryParserHelper.cpp.

22.125.3 Member Function Documentation

22.125.3.1 void AIRINV::InventoryParserHelper::storeFlightTypeCode::operator() (iterator_t *iStr*, iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 96 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_flightTypeCode, and AIRINV::FlightTypeCode::getCode().

22.125.4 Member Data Documentation

22.125.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

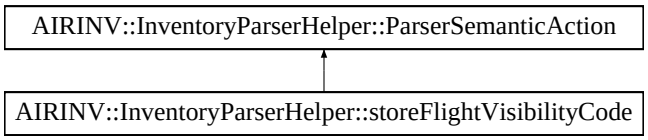
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.126 AIRINV::InventoryParserHelper::storeFlightVisibilityCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeFlightVisibilityCode:



Public Member Functions

- storeFlightVisibilityCode (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.126.1 Detailed Description

Store the flight visibility code.

Definition at line 77 of file InventoryParserHelper.hpp.

22.126.2 Constructor & Destructor Documentation

22.126.2.1 AIRINV::InventoryParserHelper::storeFlightVisibilityCode::storeFlightVisibilityCode (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 106 of file InventoryParserHelper.cpp.

22.126.3 Member Function Documentation

22.126.3.1 void AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 111 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_flightVisibilityCode, and AIRINV::FlightVisibilityCode::getCode().

22.126.4 Member Data Documentation

22.126.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

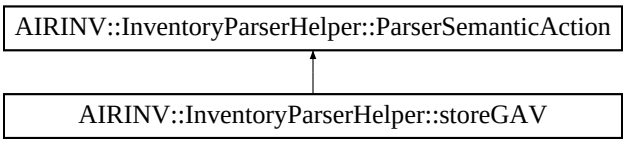
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.127 AIRINV::InventoryParserHelper::storeGAV Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeGAV:



Public Member Functions

- storeGAV (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.127.1 Detailed Description

Store the parsed Gross Availability (GAV).

Definition at line 181 of file InventoryParserHelper.hpp.

22.127.2 Constructor & Destructor Documentation

22.127.2.1 AIRINV::InventoryParserHelper::storeGAV::storeGAV (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 307 of file InventoryParserHelper.cpp.

22.127.3 Member Function Documentation

22.127.3.1 void AIRINV::InventoryParserHelper::storeGAV::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 312 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::LegCabinStruct::_gav, and AIRINV::FlightDateStruct::_itLegCabin.

22.127.4 Member Data Documentation

22.127.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(),

AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs-::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper-::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB-::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper-::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses-::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

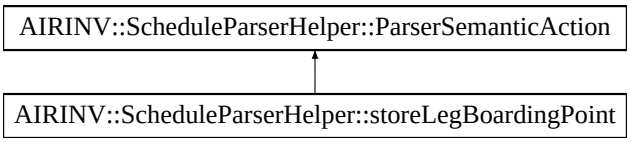
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.128 AIRINV::ScheduleParserHelper::storeLegBoardingPoint Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeLegBoardingPoint:



Public Member Functions

- storeLegBoardingPoint (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.128.1 Detailed Description

Store the parsed leg boarding point.

Definition at line 77 of file ScheduleParserHelper.hpp.

22.128.2 Constructor & Destructor Documentation

22.128.2.1 AIRINV::ScheduleParserHelper::storeLegBoardingPoint::storeLegBoardingPoint (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 111 of file ScheduleParserHelper.cpp.

22.128.3 Member Function Documentation

22.128.3.1 void AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 116 of file ScheduleParserHelper.cpp.

References AIRINV::LegStruct::_boardingPoint, AIRINV::LegStruct::_cabinList, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::FlightPeriodStruct::_itLeg, AIRINV::FlightPeriodStruct::_legAlreadyDefined, AIRINV::FlightPeriodStruct::_legList, and AIRINV::FlightPeriodStruct::addAirport().

22.128.4 Member Data Documentation

22.128.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

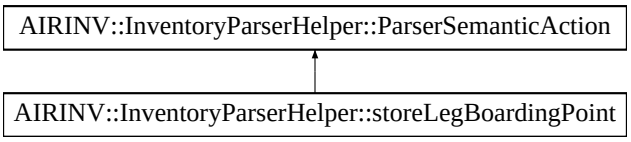
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.129 AIRINV::InventoryParserHelper::storeLegBoardingPoint Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeLegBoardingPoint:



Public Member Functions

- storeLegBoardingPoint (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.129.1 Detailed Description

Store the parsed leg boarding point.

Definition at line 85 of file InventoryParserHelper.hpp.

22.129.2 Constructor & Destructor Documentation

22.129.2.1 AIRINV::InventoryParserHelper::storeLegBoardingPoint::storeLegBoardingPoint (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 121 of file InventoryParserHelper.cpp.

22.129.3 Member Function Documentation

22.129.3.1 void AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 126 of file InventoryParserHelper.cpp.

References AIRINV::LegStruct::_boardingPoint, AIRINV::LegCabinStruct::_bucketList, AIRINV::LegCabinStruct::_cabinCode, AIRINV::LegStruct::_cabinList, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBucket, AIRINV::FlightDateStruct::_itLeg, AIRINV::FlightDateStruct::_itLegCabin, AIRINV::FlightDateStruct::_legList, AIRINV::BucketStruct::_yieldRangeUpperValue, and AIRINV::FlightDateStruct::addAirport().

22.129.4 Member Data Documentation

22.129.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(),

AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses-::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

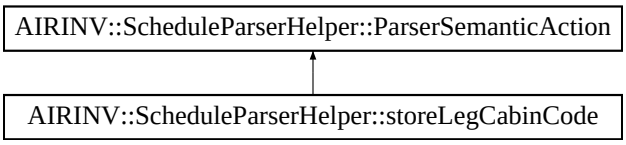
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.130 AIRINV::ScheduleParserHelper::storeLegCabinCode Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeLegCabinCode:



Public Member Functions

- storeLegCabinCode (FlightPeriodStruct &)
- void operator() (char iChar) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.130.1 Detailed Description

Store the parsed leg cabin code.

Definition at line 117 of file ScheduleParserHelper.hpp.

22.130.2 Constructor & Destructor Documentation

22.130.2.1 AIRINV::ScheduleParserHelper::storeLegCabinCode::storeLegCabinCode (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 216 of file ScheduleParserHelper.cpp.

22.130.3 Member Function Documentation

22.130.3.1 void AIRINV::ScheduleParserHelper::storeLegCabinCode::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 221 of file ScheduleParserHelper.cpp.

References AIRINV::LegCabinStruct::_cabinCode, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flight-Period, and AIRINV::FlightPeriodStruct::_itLegCabin.

22.130.4 Member Data Documentation

22.130.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

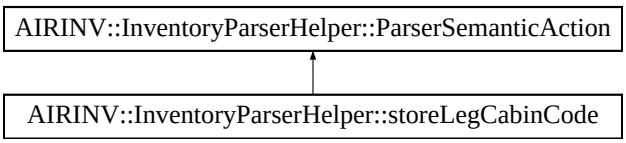
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.131 AIRINV::InventoryParserHelper::storeLegCabinCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeLegCabinCode:



Public Member Functions

- storeLegCabinCode (FlightDateStruct &)
- void operator() (char iChar) const

Public Attributes

- FlightDateStruct & _flightDate

22.131.1 Detailed Description

Store the parsed leg cabin code.

Definition at line 133 of file InventoryParserHelper.hpp.

22.131.2 Constructor & Destructor Documentation

22.131.2.1 AIRINV::InventoryParserHelper::storeLegCabinCode::storeLegCabinCode (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 223 of file InventoryParserHelper.cpp.

22.131.3 Member Function Documentation

22.131.3.1 void AIRINV::InventoryParserHelper::storeLegCabinCode::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 228 of file InventoryParserHelper.cpp.

References AIRINV::LegCabinStruct::_bucketList, AIRINV::LegCabinStruct::_cabinCode, AIRINV::LegStruct::_cabinList, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBucket, AIRINV::FlightDateStruct::_itLeg, AIRINV::FlightDateStruct::_itLegCabin, and AIRINV::BucketStruct::_yieldRangeUpperValue.

22.131.4 Member Data Documentation

22.131.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

The documentation for this struct was generated from the following files:

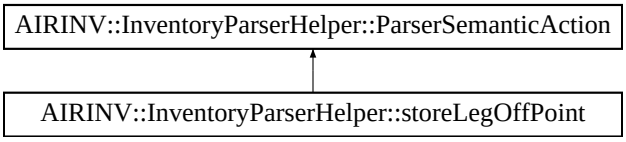
- airinv/command/InventoryParserHelper.hpp

- airinv/command/InventoryParserHelper.cpp

22.132 AIRINV::InventoryParserHelper::storeLegOffPoint Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeLegOffPoint:



Public Member Functions

- storeLegOffPoint (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.132.1 Detailed Description

Store the parsed leg off point.

Definition at line 93 of file InventoryParserHelper.hpp.

22.132.2 Constructor & Destructor Documentation

22.132.2.1 AIRINV::InventoryParserHelper::storeLegOffPoint::storeLegOffPoint (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 157 of file InventoryParserHelper.cpp.

22.132.3 Member Function Documentation

22.132.3.1 void AIRINV::InventoryParserHelper::storeLegOffPoint::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 162 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itLeg, AIRINV::LegStruct::_offPoint, and AIRINV::FlightDateStruct::addAirport().

22.132.4 Member Data Documentation

22.132.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

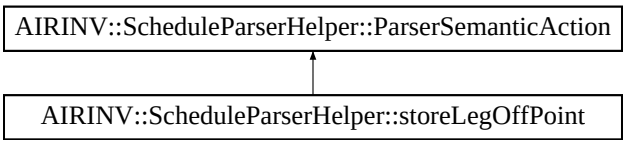
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.133 AIRINV::ScheduleParserHelper::storeLegOffPoint Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeLegOffPoint:



Public Member Functions

- storeLegOffPoint (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.133.1 Detailed Description

Store the parsed leg off point.

Definition at line 85 of file ScheduleParserHelper.hpp.

22.133.2 Constructor & Destructor Documentation

22.133.2.1 AIRINV::ScheduleParserHelper::storeLegOffPoint::storeLegOffPoint (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 140 of file ScheduleParserHelper.cpp.

22.133.3 Member Function Documentation

22.133.3.1 void AIRINV::ScheduleParserHelper::storeLegOffPoint::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 145 of file ScheduleParserHelper.cpp.

References AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::FlightPeriodStruct::_itLeg, AIRINV::LegStruct::_offPoint, and AIRINV::FlightPeriodStruct::addAirport().

22.133.4 Member Data Documentation

22.133.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

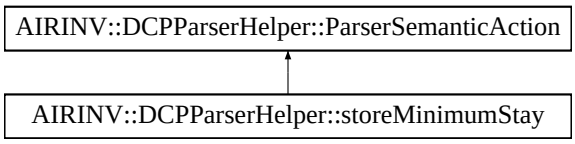
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.134 AIRINV::DCPParserHelper::storeMinimumStay Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeMinimumStay:



Public Member Functions

- storeMinimumStay (DCPRuleStruct &)
- void operator() (unsigned int, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.134.1 Detailed Description

Store the parsed minimum stay.

Definition at line 178 of file DCPParserHelper.hpp.

22.134.2 Constructor & Destructor Documentation

22.134.2.1 AIRINV::DCPParserHelper::storeMinimumStay::storeMinimumStay (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 299 of file DCPParserHelper.cpp.

22.134.3 Member Function Documentation

22.134.3.1 void AIRINV::DCPParserHelper::storeMinimumStay::operator() (unsigned int *iMinStay,* boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 304 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.134.4 Member Data Documentation

22.134.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(),

AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees-::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), operator()(), AIRINV::DCPParser-Helper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParser-Helper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

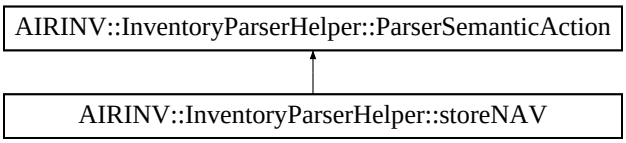
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.135 AIRINV::InventoryParserHelper::storeNAV Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeNAV:



Public Member Functions

- storeNAV (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.135.1 Detailed Description

Store the parsed Net Availability (NAV).

Definition at line 173 of file InventoryParserHelper.hpp.

22.135.2 Constructor & Destructor Documentation

22.135.2.1 AIRINV::InventoryParserHelper::storeNAV::storeNAV (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 296 of file InventoryParserHelper.cpp.

22.135.3 Member Function Documentation

22.135.3.1 void AIRINV::InventoryParserHelper::storeNAV::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 301 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itLeg-Cabin, and AIRINV::LegCabinStruct::_nav.

22.135.4 Member Data Documentation

22.135.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

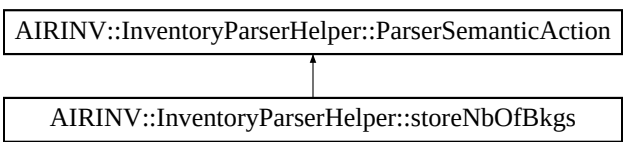
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.136 AIRINV::InventoryParserHelper::storeNbOfBkgs Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfBkgs:



Public Member Functions

- storeNbOfBkgs (FlightDateStruct &)

- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.136.1 Detailed Description

Store the parsed number of bookings (at booking class level).

Definition at line 333 of file InventoryParserHelper.hpp.

22.136.2 Constructor & Destructor Documentation

22.136.2.1 AIRINV::InventoryParserHelper::storeNbOfBkgs::storeNbOfBkgs (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 602 of file InventoryParserHelper.cpp.

22.136.3 Member Function Documentation

22.136.3.1 void AIRINV::InventoryParserHelper::storeNbOfBkgs::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 607 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_nbOfBookings.

22.136.4 Member Data Documentation

22.136.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(),

AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

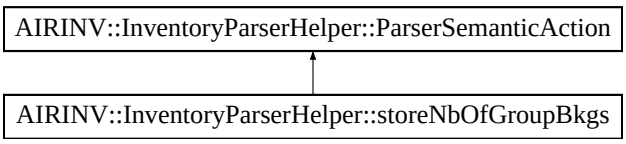
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.137 AIRINV::InventoryParserHelper::storeNbOfGroupBkgs Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfGroupBkgs:



Public Member Functions

- storeNbOfGroupBkgs (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.137.1 Detailed Description

Store the parsed number of group bookings (at booking class level).

Definition at line 341 of file InventoryParserHelper.hpp.

22.137.2 Constructor & Destructor Documentation

22.137.2.1 AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::storeNbOfGroupBkgs (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 613 of file InventoryParserHelper.cpp.

22.137.3 Member Function Documentation

22.137.3.1 void AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 618 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_nbOfGroupBookings.

22.137.4 Member Data Documentation

22.137.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

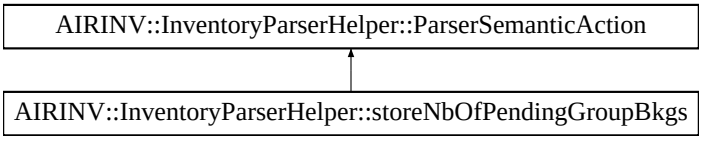
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.138 AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs:



Public Member Functions

- storeNbOfPendingGroupBkgs (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.138.1 Detailed Description

Store the parsed number of pending group bookings (at booking class level).

Definition at line 349 of file InventoryParserHelper.hpp.

22.138.2 Constructor & Destructor Documentation

22.138.2.1 AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::storeNbOfPendingGroupBkgs (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 625 of file InventoryParserHelper.cpp.

22.138.3 Member Function Documentation

22.138.3.1 void AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 630 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_nbOfPendingGroupBookings.

22.138.4 Member Data Documentation

22.138.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::store-

SegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

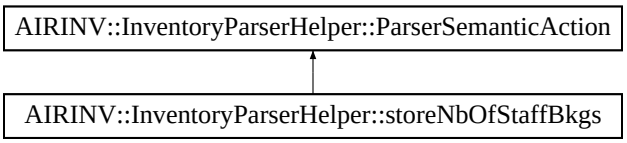
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.139 AIRINV::InventoryParserHelper::storeNbOfStaffBkgs Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfStaffBkgs:



Public Member Functions

- storeNbOfStaffBkgs (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.139.1 Detailed Description

Store the parsed number of staff bookings (at booking class level).

Definition at line 357 of file InventoryParserHelper.hpp.

22.139.2 Constructor & Destructor Documentation

22.139.2.1 AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::storeNbOfStaffBkgs (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 636 of file InventoryParserHelper.cpp.

22.139.3 Member Function Documentation

22.139.3.1 void AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 641 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_nbOfStaffBookings.

22.139.4 Member Data Documentation

22.139.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

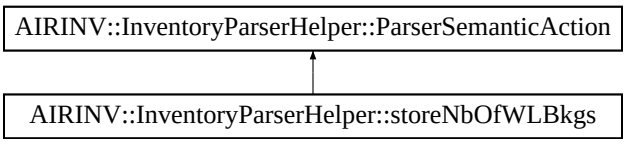
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.140 AIRINV::InventoryParserHelper::storeNbOfWLBkgs Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfWLBkgs:



Public Member Functions

- storeNbOfWLBkgs (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.140.1 Detailed Description

Store the parsed number of wait-list bookings (at booking class level).

Definition at line 366 of file InventoryParserHelper.hpp.

22.140.2 Constructor & Destructor Documentation

22.140.2.1 AIRINV::InventoryParserHelper::storeNbOfWLBkgs::storeNbOfWLBkgs (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 647 of file InventoryParserHelper.cpp.

22.140.3 Member Function Documentation

22.140.3.1 void AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 652 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_nbOfWLBookings.

22.140.4 Member Data Documentation

22.140.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AI-

RINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

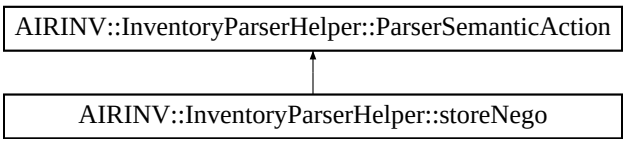
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.141 AIRINV::InventoryParserHelper::storeNego Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeNego:



Public Member Functions

- storeNego (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.141.1 Detailed Description

Store the negotiated allotment (at booking class level).

Definition at line 309 of file InventoryParserHelper.hpp.

22.141.2 Constructor & Destructor Documentation

22.141.2.1 AIRINV::InventoryParserHelper::storeNego::storeNego (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 569 of file InventoryParserHelper.cpp.

22.141.3 Member Function Documentation

22.141.3.1 void AIRINV::InventoryParserHelper::storeNego::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 574 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_nego.

22.141.4 Member Data Documentation

22.141.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

The documentation for this struct was generated from the following files:

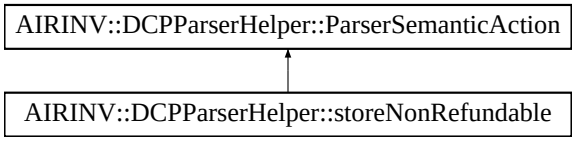
- airinv/command/InventoryParserHelper.hpp

- airinv/command/InventoryParserHelper.cpp

22.142 AIRINV::DCPParserHelper::storeNonRefundable Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeNonRefundable:



Public Member Functions

- storeNonRefundable (DCPRuleStruct &)
- void operator() (char, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.142.1 Detailed Description

Store the parsed refundable option

Definition at line 168 of file DCPParserHelper.hpp.

22.142.2 Constructor & Destructor Documentation

22.142.2.1 AIRINV::DCPParserHelper::storeNonRefundable::storeNonRefundable (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 274 of file DCPParserHelper.cpp.

22.142.3 Member Function Documentation

22.142.3.1 void AIRINV::DCPParserHelper::storeNonRefundable::operator() (char *iNonRefundable*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 279 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.142.4 Member Data Documentation

22.142.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

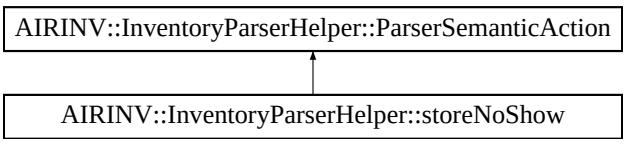
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.143 AIRINV::InventoryParserHelper::storeNoShow Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeNoShow:



Public Member Functions

- storeNoShow (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.143.1 Detailed Description

Store the parsed No-Show percentage (at booking class level).

Definition at line 317 of file InventoryParserHelper.hpp.

22.143.2 Constructor & Destructor Documentation

22.143.2.1 AIRINV::InventoryParserHelper::storeNoShow::storeNoShow (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 580 of file InventoryParserHelper.cpp.

22.143.3 Member Function Documentation

22.143.3.1 void AIRINV::InventoryParserHelper::storeNoShow::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 585 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_noShowPercentage.

22.143.4 Member Data Documentation

22.143.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

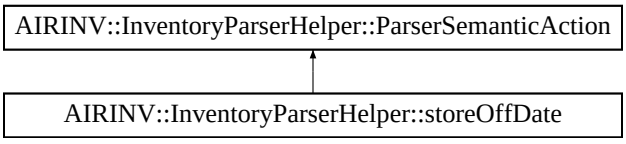
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.144 AIRINV::InventoryParserHelper::storeOffDate Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeOffDate:



Public Member Functions

- storeOffDate (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.144.1 Detailed Description

Store the off date.

Definition at line 117 of file InventoryParserHelper.hpp.

22.144.2 Constructor & Destructor Documentation

22.144.2.1 AIRINV::InventoryParserHelper::storeOffDate::storeOffDate (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 200 of file InventoryParserHelper.cpp.

22.144.3 Member Function Documentation

22.144.3.1 void AIRINV::InventoryParserHelper::storeOffDate::operator() (iterator_t *iStr*, iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 205 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itLeg, AIRINV::LegStruct::_offDate, and AIRINV::FlightDateStruct::getDate().

22.144.4 Member Data Documentation

22.144.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBooking-

Counter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

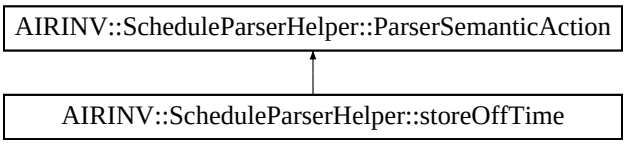
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.145 AIRINV::ScheduleParserHelper::storeOffTime Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeOffTime:



Public Member Functions

- storeOffTime (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.145.1 Detailed Description

Store the off time.

Definition at line 101 of file ScheduleParserHelper.hpp.

22.145.2 Constructor & Destructor Documentation

22.145.2.1 AIRINV::ScheduleParserHelper::storeOffTime::storeOffTime (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 174 of file ScheduleParserHelper.cpp.

22.145.3 Member Function Documentation

22.145.3.1 void AIRINV::ScheduleParserHelper::storeOffTime::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 179 of file ScheduleParserHelper.cpp.

References AIRINV::LegStruct::_boardingDateOffset, AIRINV::FlightPeriodStruct::_dateOffset, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::FlightPeriodStruct::_itLeg, AIRINV::FlightPeriodStruct::_itSeconds, AIRINV::LegStruct::_offTime, and AIRINV::FlightPeriodStruct::getTime().

22.145.4 Member Data Documentation

22.145.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

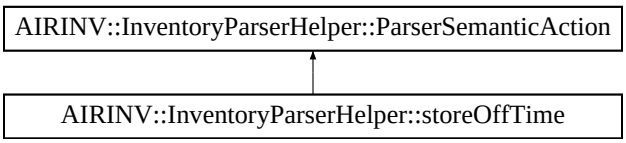
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.146 AIRINV::InventoryParserHelper::storeOffTime Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeOffTime:



Public Member Functions

- storeOffTime (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.146.1 Detailed Description

Store the off time.

Definition at line 125 of file InventoryParserHelper.hpp.

22.146.2 Constructor & Destructor Documentation

22.146.2.1 AIRINV::InventoryParserHelper::storeOffTime::storeOffTime (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 210 of file InventoryParserHelper.cpp.

22.146.3 Member Function Documentation

22.146.3.1 void AIRINV::InventoryParserHelper::storeOffTime::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 215 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itLeg, AIRINV::FlightDateStruct::_itSeconds, AIRINV::LegStruct::_offTime, and AIRINV::FlightDateStruct::getTime().

22.146.4 Member Data Documentation

22.146.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(),

AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses-::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

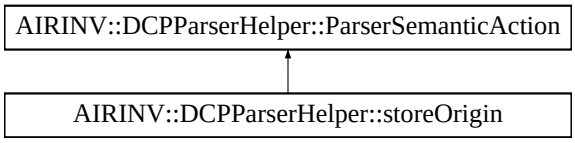
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.147 AIRINV::DCPParserHelper::storeOrigin Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeOrigin:



Public Member Functions

- storeOrigin (DCPRuleStruct &)
- void operator() (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.147.1 Detailed Description

Store the parsed origin.

Definition at line 48 of file DCPParserHelper.hpp.

22.147.2 Constructor & Destructor Documentation

22.147.2.1 AIRINV::DCPParserHelper::storeOrigin::storeOrigin (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 54 of file DCPParserHelper.cpp.

22.147.3 Member Function Documentation

22.147.3.1 void AIRINV::DCPParserHelper::storeOrigin::operator() (std::vector< char > *iChar*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 59 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.147.4 Member Data Documentation

22.147.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

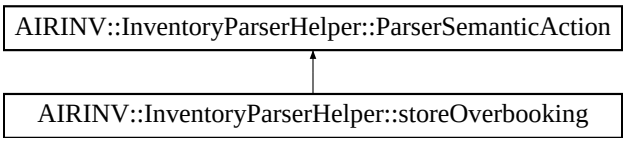
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.148 AIRINV::InventoryParserHelper::storeOverbooking Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeOverbooking:



Public Member Functions

- storeOverbooking (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.148.1 Detailed Description

Store the parsed Overbooking percentage (at booking class level).

Definition at line 325 of file InventoryParserHelper.hpp.

22.148.2 Constructor & Destructor Documentation

22.148.2.1 AIRINV::InventoryParserHelper::storeOverbooking::storeOverbooking (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 591 of file InventoryParserHelper.cpp.

22.148.3 Member Function Documentation

22.148.3.1 void AIRINV::InventoryParserHelper::storeOverbooking::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 596 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_overbookingPercentage.

22.148.4 Member Data Documentation

22.148.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

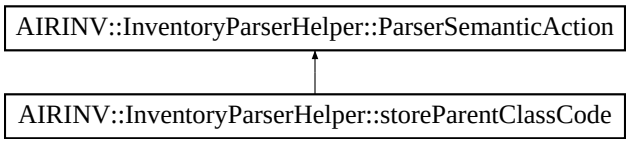
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.149 AIRINV::InventoryParserHelper::storeParentClassCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeParentClassCode:



Public Member Functions

- storeParentClassCode (FlightDateStruct &)
- void operator() (char iChar) const

Public Attributes

- FlightDateStruct & _flightDate

22.149.1 Detailed Description

Store the parsed class code of the parent sub-class.

Definition at line 277 of file InventoryParserHelper.hpp.

22.149.2 Constructor & Destructor Documentation

22.149.2.1 AIRINV::InventoryParserHelper::storeParentClassCode::storeParentClassCode (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 523 of file InventoryParserHelper.cpp.

22.149.3 Member Function Documentation

22.149.3.1 void AIRINV::InventoryParserHelper::storeParentClassCode::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 528 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_parentClassCode.

22.149.4 Member Data Documentation

22.149.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::Inventory-

ParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

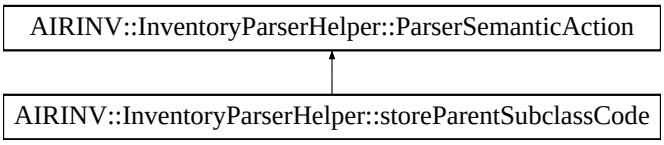
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.150 AIRINV::InventoryParserHelper::storeParentSubclassCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeParentSubclassCode:



Public Member Functions

- storeParentSubclassCode (FlightDateStruct &)
- void operator() (unsigned int iNumber) const

Public Attributes

- FlightDateStruct & _flightDate

22.150.1 Detailed Description

Store the parsed sub-class code of the parent sub-class.

Definition at line 285 of file InventoryParserHelper.hpp.

22.150.2 Constructor & Destructor Documentation

22.150.2.1 AIRINV::InventoryParserHelper::storeParentSubclassCode::storeParentSubclassCode (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 535 of file InventoryParserHelper.cpp.

22.150.3 Member Function Documentation

22.150.3.1 void AIRINV::InventoryParserHelper::storeParentSubclassCode::operator() (unsigned int *iNumber*) const

Actor Function (functor).

Definition at line 540 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_parentSubclassCode.

22.150.4 Member Data Documentation

22.150.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

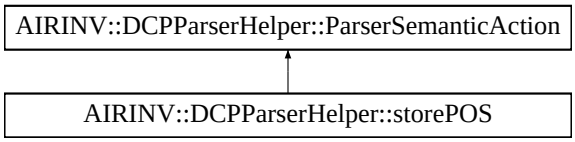
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.151 AIRINV::DCPParserHelper::storePOS Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storePOS:



Public Member Functions

- storePOS (DCPRuleStruct &)
- void operator() (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.151.1 Detailed Description

Store the parsed customer position.

Definition at line 108 of file DCPParserHelper.hpp.

22.151.2 Constructor & Destructor Documentation

22.151.2.1 AIRINV::DCPParserHelper::storePOS::storePOS (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 150 of file DCPParserHelper.cpp.

22.151.3 Member Function Documentation

22.151.3.1 void AIRINV::DCPParserHelper::storePOS::operator() (std::vector< char > *iChar*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 155 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.151.4 Member Data Documentation

22.151.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

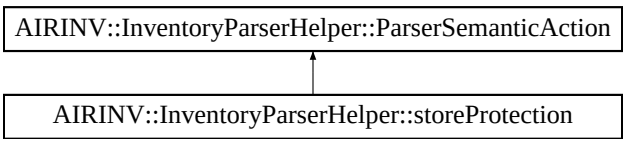
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.152 AIRINV::InventoryParserHelper::storeProtection Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeProtection:



Public Member Functions

- storeProtection (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.152.1 Detailed Description

Store the parsed protection (at booking class level).

Definition at line 301 of file InventoryParserHelper.hpp.

22.152.2 Constructor & Destructor Documentation

22.152.2.1 AIRINV::InventoryParserHelper::storeProtection::storeProtection (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 558 of file InventoryParserHelper.cpp.

22.152.3 Member Function Documentation

22.152.3.1 void AIRINV::InventoryParserHelper::storeProtection::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 563 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_protection.

22.152.4 Member Data Documentation

22.152.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

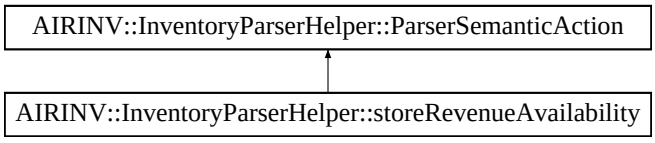
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.153 AIRINV::InventoryParserHelper::storeRevenueAvailability Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeRevenueAvailability:



Public Member Functions

- storeRevenueAvailability (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.153.1 Detailed Description

Store the parsed number of net revenue availability (at booking class level).

Definition at line 401 of file InventoryParserHelper.hpp.

22.153.2 Constructor & Destructor Documentation

22.153.2.1 AIRINV::InventoryParserHelper::storeRevenueAvailability::storeRevenueAvailability (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 694 of file InventoryParserHelper.cpp.

22.153.3 Member Function Documentation

22.153.3.1 void AIRINV::InventoryParserHelper::storeRevenueAvailability::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 699 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_netRevenueAvailability.

22.153.4 Member Data Documentation

22.153.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegment-

OffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

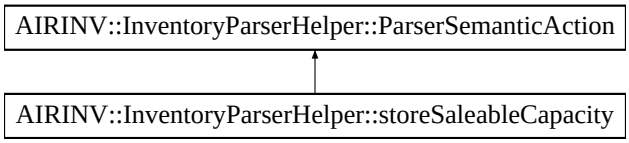
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.154 AIRINV::InventoryParserHelper::storeSaleableCapacity Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeSaleableCapacity:



Public Member Functions

- storeSaleableCapacity (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.154.1 Detailed Description

Store the parsed saleable capacity.

Definition at line 141 of file InventoryParserHelper.hpp.

22.154.2 Constructor & Destructor Documentation

22.154.2.1 AIRINV::InventoryParserHelper::storeSaleableCapacity::storeSaleableCapacity (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 252 of file InventoryParserHelper.cpp.

22.154.3 Member Function Documentation

22.154.3.1 void AIRINV::InventoryParserHelper::storeSaleableCapacity::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 257 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itLegCabin, and AIRINV::LegCabinStruct::_saleableCapacity.

22.154.4 Member Data Documentation

22.154.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

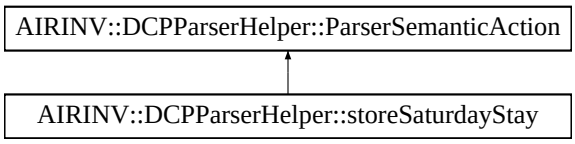
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.155 AIRINV::DCPParserHelper::storeSaturdayStay Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeSaturdayStay:



Public Member Functions

- storeSaturdayStay (DCPRuleStruct &)
- void operator() (char, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.155.1 Detailed Description

Store the parsed saturday night.

Definition at line 148 of file DCPParserHelper.hpp.

22.155.2 Constructor & Destructor Documentation

22.155.2.1 AIRINV::DCPParserHelper::storeSaturdayStay::storeSaturdayStay (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 223 of file DCPParserHelper.cpp.

22.155.3 Member Function Documentation

22.155.3.1 void AIRINV::DCPParserHelper::storeSaturdayStay::operator() (char *iSaturdayStay,* boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 228 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.155.4 Member Data Documentation

22.155.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), AIRINV::DCPParserHelper::storeStartRangeTime::operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(),

operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

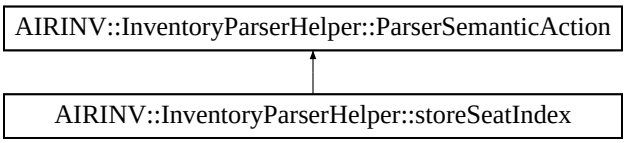
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.156 AIRINV::InventoryParserHelper::storeSeatIndex Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeSeatIndex:



Public Member Functions

- storeSeatIndex (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.156.1 Detailed Description

Store the parsed leg-cabin seat index.

Definition at line 221 of file InventoryParserHelper.hpp.

22.156.2 Constructor & Destructor Documentation

22.156.2.1 AIRINV::InventoryParserHelper::storeSeatIndex::storeSeatIndex (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 371 of file InventoryParserHelper.cpp.

22.156.3 Member Function Documentation

22.156.3.1 void AIRINV::InventoryParserHelper::storeSeatIndex::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 376 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBucket, and AIRINV::BucketStruct::_seatIndex.

22.156.4 Member Data Documentation

22.156.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

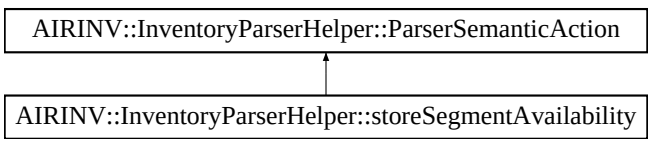
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.157 AIRINV::InventoryParserHelper::storeSegmentAvailability Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentAvailability:



Public Member Functions

- storeSegmentAvailability (FlightDateStruct &)

- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.157.1 Detailed Description

Store the parsed number of segment availability (at booking class level).

Definition at line 392 of file InventoryParserHelper.hpp.

22.157.2 Constructor & Destructor Documentation

22.157.2.1 AIRINV::InventoryParserHelper::storeSegmentAvailability::storeSegmentAvailability (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 682 of file InventoryParserHelper.cpp.

22.157.3 Member Function Documentation

22.157.3.1 void AIRINV::InventoryParserHelper::storeSegmentAvailability::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 687 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_segmentAvailability.

22.157.4 Member Data Documentation

22.157.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper-

::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

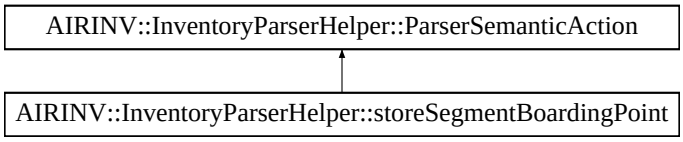
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.158 AIRINV::InventoryParserHelper::storeSegmentBoardingPoint Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentBoardingPoint:



Public Member Functions

- storeSegmentBoardingPoint (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.158.1 Detailed Description

Store the parsed segment boarding point.

Definition at line 229 of file InventoryParserHelper.hpp.

22.158.2 Constructor & Destructor Documentation

22.158.2.1 AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::storeSegmentBoardingPoint (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 383 of file InventoryParserHelper.cpp.

22.158.3 Member Function Documentation

22.158.3.1 void AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 388 of file InventoryParserHelper.cpp.

References AIRINV::SegmentStruct::_boardingPoint, AIRINV::LegCabinStruct::_bucketList, AIRINV::LegCabinStruct::_cabinCode, AIRINV::SegmentStruct::_cabinList, AIRINV::LegStruct::_cabinList, AIRINV::BookingClassStruct::_classCode, AIRINV::FareFamilyStruct::_classList, AIRINV::SegmentCabinStruct::_fareFamilies, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, AIRINV::FlightDateStruct::_itBucket, AIRINV::SegmentCabinStruct::_itFareFamily, AIRINV::FlightDateStruct::_itLeg, AIRINV::FlightDateStruct::_itLegCabin, AIRINV::FlightDateStruct::_itSegment, AIRINV::FlightDateStruct::_itSegmentCabin, AIRINV::FlightDateStruct::_legList, and AIRINV::FlightDateStruct::_segmentList.

22.158.4 Member Data Documentation

22.158.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

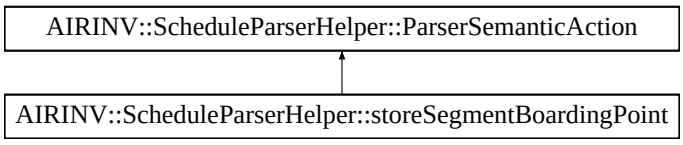
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.159 AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint:



Public Member Functions

- storeSegmentBoardingPoint (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.159.1 Detailed Description

Store the parsed segment boarding point.

Definition at line 144 of file ScheduleParserHelper.hpp.

22.159.2 Constructor & Destructor Documentation

22.159.2.1 AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::storeSegmentBoardingPoint (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 273 of file ScheduleParserHelper.cpp.

22.159.3 Member Function Documentation

22.159.3.1 void AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 278 of file ScheduleParserHelper.cpp.

References AIRINV::SegmentStruct::_boardingPoint, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, and AIRINV::FlightPeriodStruct::_itSegment.

22.159.4 Member Data Documentation

22.159.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

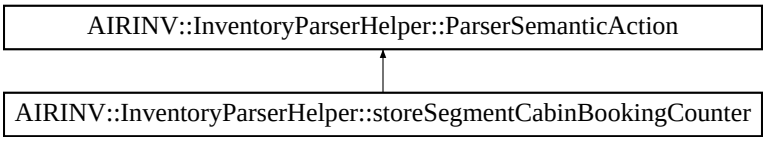
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.160 AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter:



Public Member Functions

- storeSegmentCabinBookingCounter (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.160.1 Detailed Description

Store the parsed segment cabin number of bookings.

Definition at line 253 of file InventoryParserHelper.hpp.

22.160.2 Constructor & Destructor Documentation

22.160.2.1 AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::storeSegmentCabinBookingCounter (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 481 of file InventoryParserHelper.cpp.

22.160.3 Member Function Documentation

22.160.3.1 void AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 486 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itSegmentCabin, and AIRINV::SegmentCabinStruct::_nbOfBookings.

22.160.4 Member Data Documentation

22.160.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

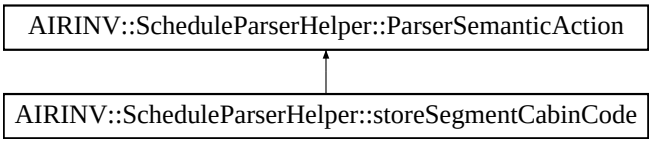
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.161 AIRINV::ScheduleParserHelper::storeSegmentCabinCode Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentCabinCode:



Public Member Functions

- storeSegmentCabinCode (FlightPeriodStruct &)
- void operator() (char iChar) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.161.1 Detailed Description

Store the parsed segment cabin code.

Definition at line 160 of file ScheduleParserHelper.hpp.

22.161.2 Constructor & Destructor Documentation

22.161.2.1 AIRINV::ScheduleParserHelper::storeSegmentCabinCode::storeSegmentCabinCode (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 299 of file ScheduleParserHelper.cpp.

22.161.3 Member Function Documentation

22.161.3.1 void AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 304 of file ScheduleParserHelper.cpp.

References AIRINV::SegmentCabinStruct::_cabinCode, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, and AIRINV::FlightPeriodStruct::_itSegmentCabin.

22.161.4 Member Data Documentation

22.161.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::-

ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

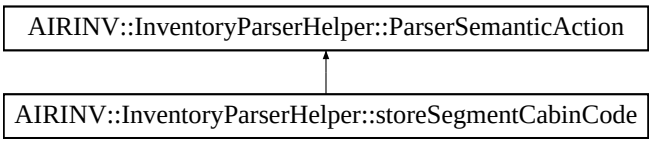
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.162 AIRINV::InventoryParserHelper::storeSegmentCabinCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentCabinCode:



Public Member Functions

- storeSegmentCabinCode (FlightDateStruct &)
- void operator() (char iChar) const

Public Attributes

- FlightDateStruct & _flightDate

22.162.1 Detailed Description

Store the parsed segment cabin code.

Definition at line 245 of file InventoryParserHelper.hpp.

22.162.2 Constructor & Destructor Documentation

22.162.2.1 AIRINV::InventoryParserHelper::storeSegmentCabinCode::storeSegmentCabinCode (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 446 of file InventoryParserHelper.cpp.

22.162.3 Member Function Documentation

22.162.3.1 void AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 451 of file InventoryParserHelper.cpp.

References AIRINV::SegmentCabinStruct::_cabinCode, AIRINV::SegmentStruct::_cabinList, AIRINV::BookingClassStruct::_classCode, AIRINV::FareFamilyStruct::_classList, AIRINV::SegmentCabinStruct::_fareFamilies, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, AIRINV::SegmentCabinStruct::_itFareFamily, AIRINV::FlightDateStruct::_itSegment, and AIRINV::FlightDateStruct::_itSegmentCabin.

22.162.4 Member Data Documentation

22.162.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

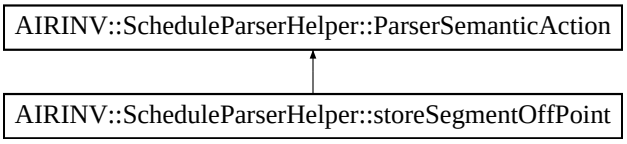
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.163 AIRINV::ScheduleParserHelper::storeSegmentOffPoint Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentOffPoint:



Public Member Functions

- storeSegmentOffPoint (FlightPeriodStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.163.1 Detailed Description

Store the parsed segment off point.

Definition at line 152 of file ScheduleParserHelper.hpp.

22.163.2 Constructor & Destructor Documentation

22.163.2.1 AIRINV::ScheduleParserHelper::storeSegmentOffPoint::storeSegmentOffPoint (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 286 of file ScheduleParserHelper.cpp.

22.163.3 Member Function Documentation

22.163.3.1 void AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 291 of file ScheduleParserHelper.cpp.

References AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, AIRINV::FlightPeriodStruct::_itSegment, and AIRINV::SegmentStruct::_offPoint.

22.163.4 Member Data Documentation

22.163.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator()(), AIRINV::ScheduleParser-

Helper::storeSegmentBoardingPoint::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

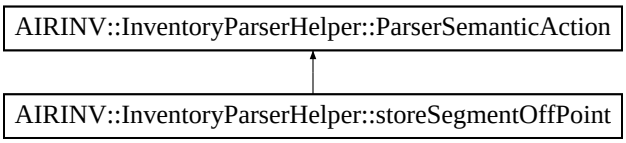
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.164 AIRINV::InventoryParserHelper::storeSegmentOffPoint Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentOffPoint:



Public Member Functions

- storeSegmentOffPoint (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.164.1 Detailed Description

Store the parsed segment off point.

Definition at line 237 of file InventoryParserHelper.hpp.

22.164.2 Constructor & Destructor Documentation

22.164.2.1 AIRINV::InventoryParserHelper::storeSegmentOffPoint::storeSegmentOffPoint (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 432 of file InventoryParserHelper.cpp.

22.164.3 Member Function Documentation

22.164.3.1 void AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 437 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itSegment, and AIRINV::SegmentStruct::_offPoint.

22.164.4 Member Data Documentation

22.164.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

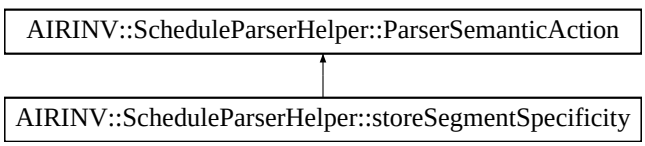
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.165 AIRINV::ScheduleParserHelper::storeSegmentSpecificity Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`

Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentSpecificity:



Public Member Functions

- storeSegmentSpecificity (FlightPeriodStruct &)

- void operator() (char iChar) const

Public Attributes

- FlightPeriodStruct & _flightPeriod

22.165.1 Detailed Description

Store whether or not the segment definitions are specific. Specific means that there is a definition for each segment. General (not specific) means that a single definition defines all the segments.

Definition at line 136 of file ScheduleParserHelper.hpp.

22.165.2 Constructor & Destructor Documentation

22.165.2.1 AIRINV::ScheduleParserHelper::storeSegmentSpecificity::storeSegmentSpecificity (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 247 of file ScheduleParserHelper.cpp.

22.165.3 Member Function Documentation

22.165.3.1 void AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 252 of file ScheduleParserHelper.cpp.

References AIRINV::FlightPeriodStruct::_airportList, AIRINV::FlightPeriodStruct::_airportOrderedList, AIRINV::FlightPeriodStruct::_areSegmentDefinitionsSpecific, AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod, and AIRINV::FlightPeriodStruct::buildSegments().

22.165.4 Member Data Documentation

22.165.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::storeAirlineCode::operator()(), AIRINV::ScheduleParserHelper::storeFlightNumber::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeStart::operator()(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator()(), AIRINV::ScheduleParserHelper::storeDow::operator()(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(), AIRINV::ScheduleParserHelper::storeOffTime::operator()(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeCapacity::operator()(), operator()(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator()(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator()(), AIRINV::ScheduleParserHelper::storeClasses::operator()(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator()(), AIRINV::ScheduleParserHelper::storeFClasses::operator()(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()().

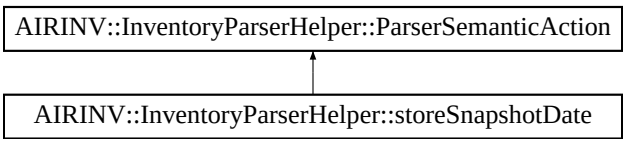
The documentation for this struct was generated from the following files:

- airinv/command/ScheduleParserHelper.hpp
- airinv/command/ScheduleParserHelper.cpp

22.166 AIRINV::InventoryParserHelper::storeSnapshotDate Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeSnapshotDate:



Public Member Functions

- storeSnapshotDate (FlightDateStruct &)
- void operator() (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- FlightDateStruct & _flightDate

22.166.1 Detailed Description

Store the snapshot date.

Definition at line 37 of file InventoryParserHelper.hpp.

22.166.2 Constructor & Destructor Documentation

22.166.2.1 AIRINV::InventoryParserHelper::storeSnapshotDate::storeSnapshotDate (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 32 of file InventoryParserHelper.cpp.

22.166.3 Member Function Documentation

22.166.3.1 void AIRINV::InventoryParserHelper::storeSnapshotDate::operator() (iterator_t *iStr,* iterator_t *iStrEnd*) const

Actor Function (functor).

Definition at line 37 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_flightDate, and AIRINV::FlightDateStruct::getDate().

22.166.4 Member Data Documentation

22.166.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlight-

VisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::-InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate-::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper-::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParser-Helper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV-::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeA-CP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::store-YieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::-InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoarding-Point::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParser-Helper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBooking-Counter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParser-Helper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::store-CumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::-InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), A-IRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs-::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper-::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB-::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper-::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses-::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

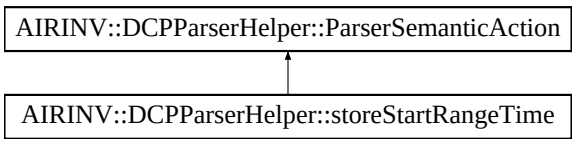
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.167 AIRINV::DCPParserHelper::storeStartRangeTime Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>`

Inheritance diagram for AIRINV::DCPParserHelper::storeStartRangeTime:



Public Member Functions

- storeStartRangeTime (DCPRuleStruct &)
- void operator() (boost::spirit::qi::unused_type, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & _DCPRule

22.167.1 Detailed Description

Store the parsed start range time.

Definition at line 88 of file DCPParserHelper.hpp.

22.167.2 Constructor & Destructor Documentation

22.167.2.1 AIRINV::DCPParserHelper::storeStartRangeTime::storeStartRangeTime (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 116 of file DCPParserHelper.cpp.

22.167.3 Member Function Documentation

22.167.3.1 void AIRINV::DCPParserHelper::storeStartRangeTime::operator() (boost::spirit::qi::unused_type , boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 121 of file DCPParserHelper.cpp.

References AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule.

22.167.4 Member Data Documentation

22.167.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file DCPParserHelper.hpp.

Referenced by AIRINV::DCPParserHelper::storeDCPId::operator()(), AIRINV::DCPParserHelper::storeOrigin::operator()(), AIRINV::DCPParserHelper::storeDestination::operator()(), AIRINV::DCPParserHelper::storeDateRangeStart::operator()(), AIRINV::DCPParserHelper::storeDateRangeEnd::operator()(), operator()(), AIRINV::DCPParserHelper::storeEndRangeTime::operator()(), AIRINV::DCPParserHelper::storePOS::operator()(), AIRINV::DCPParserHelper::storeCabinCode::operator()(), AIRINV::DCPParserHelper::storeChannel::operator()(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator()(), AIRINV::DCPParserHelper::storeSaturdayStay::operator()(), AIRINV::DCPParserHelper::storeChangeFees::operator()(), AIRINV::DCPParserHelper::storeNonRefundable::operator()(), AIRINV::DCPParserHelper::storeMinimumStay::operator()(), AIRINV::DCPParserHelper::storeDCP::operator()(), AIRINV::DCPParserHelper::storeAirlineCode::operator()(), AIRINV::DCPParserHelper::storeClass::operator()(), and AIRINV::DCPParserHelper::doEndDCP::operator()().

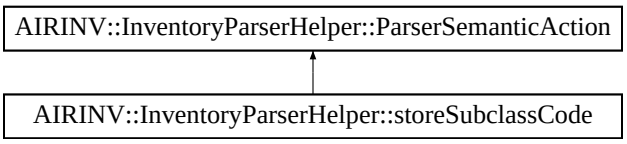
The documentation for this struct was generated from the following files:

- airinv/command/vault/DCPParserHelper.hpp
- airinv/command/vault/DCPParserHelper.cpp

22.168 AIRINV::InventoryParserHelper::storeSubclassCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeSubclassCode:



Public Member Functions

- storeSubclassCode (FlightDateStruct &)
- void operator() (unsigned int iNumber) const

Public Attributes

- FlightDateStruct & _flightDate

22.168.1 Detailed Description

Store the parsed sub-class code.

Definition at line 269 of file InventoryParserHelper.hpp.

22.168.2 Constructor & Destructor Documentation

22.168.2.1 AIRINV::InventoryParserHelper::storeSubclassCode::storeSubclassCode (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 511 of file InventoryParserHelper.cpp.

22.168.3 Member Function Documentation

22.168.3.1 void AIRINV::InventoryParserHelper::storeSubclassCode::operator() (unsigned int *iNumber*) const

Actor Function (functor).

Definition at line 516 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_subclassCode.

22.168.4 Member Data Documentation

22.168.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AI-

RINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter-::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGA-V::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeE-TB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParser-Helper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::-InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegment-OffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::Inventory-ParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode-::operator()(), operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::Inventory-ParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection-::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper-::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParser-Helper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::-InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPending-GroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::Inventory-ParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AI-RINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegment-Availability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::Inventory-ParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

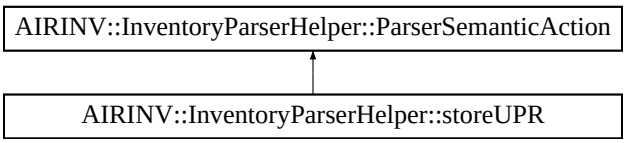
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.169 AIRINV::InventoryParserHelper::storeUPR Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeUPR:



Public Member Functions

- storeUPR (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.169.1 Detailed Description

Store the parsed Unsold Protected (UPR).

Definition at line 157 of file InventoryParserHelper.hpp.

22.169.2 Constructor & Destructor Documentation

22.169.2.1 AIRINV::InventoryParserHelper::storeUPR::storeUPR (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 274 of file InventoryParserHelper.cpp.

22.169.3 Member Function Documentation

22.169.3.1 void AIRINV::InventoryParserHelper::storeUPR::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 279 of file InventoryParserHelper.cpp.

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itLegCabin, and AIRINV::LegCabinStruct::_upr.

22.169.4 Member Data Documentation

22.169.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

The documentation for this struct was generated from the following files:

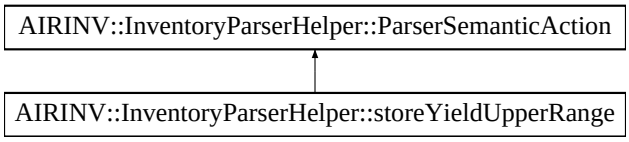
- airinv/command/InventoryParserHelper.hpp

- airinv/command/InventoryParserHelper.cpp

22.170 AIRINV::InventoryParserHelper::storeYieldUpperRange Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`

Inheritance diagram for AIRINV::InventoryParserHelper::storeYieldUpperRange:



Public Member Functions

- storeYieldUpperRange (FlightDateStruct &)
- void operator() (double iReal) const

Public Attributes

- FlightDateStruct & _flightDate

22.170.1 Detailed Description

Store the parsed Yield Upper Range value.

Definition at line 205 of file InventoryParserHelper.hpp.

22.170.2 Constructor & Destructor Documentation

22.170.2.1 AIRINV::InventoryParserHelper::storeYieldUpperRange::storeYieldUpperRange (FlightDateStruct & *ioFlightDate*)

Actor Constructor.

Definition at line 340 of file InventoryParserHelper.cpp.

22.170.3 Member Function Documentation

22.170.3.1 void AIRINV::InventoryParserHelper::storeYieldUpperRange::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 345 of file InventoryParserHelper.cpp.

References AIRINV::LegCabinStruct::_bucketList, AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_itBucket, AIRINV::FlightDateStruct::_itLegCabin, and AIRINV::BucketStruct::_yieldRangeUpperValue.

22.170.4 Member Data Documentation

22.170.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file InventoryParserHelper.hpp.

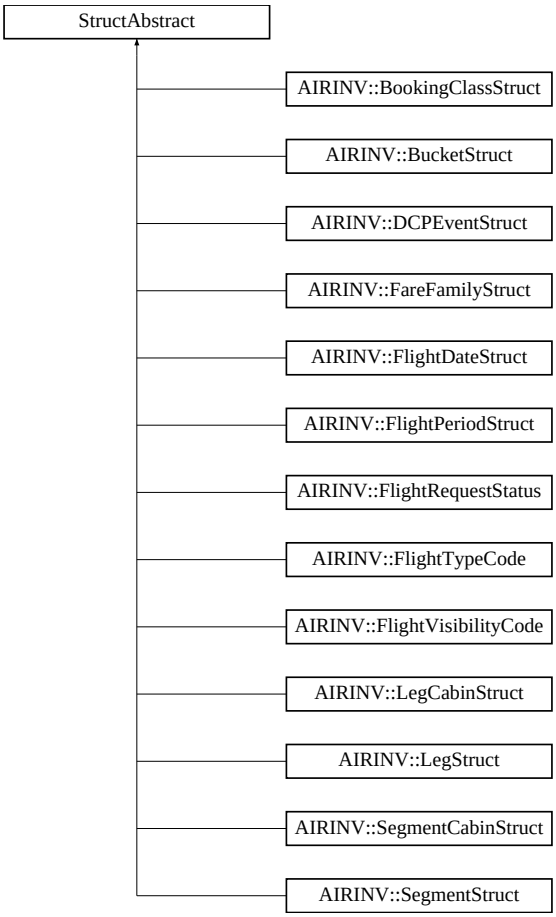
Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator()(), AIRINV::InventoryParserHelper::storeAirlineCode::operator()(), AIRINV::InventoryParserHelper::storeFlightNumber::operator()(), AIRINV::InventoryParserHelper::storeFlightDate::operator()(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator()(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator()(), AIRINV::InventoryParserHelper::storeBoardingDate::operator()(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()(), AIRINV::InventoryParserHelper::storeOffDate::operator()(), AIRINV::InventoryParserHelper::storeOffTime::operator()(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(), AIRINV::InventoryParserHelper::storeAU::operator()(), AIRINV::InventoryParserHelper::storeUPR::operator()(), AIRINV::InventoryParserHelper::storeBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeNAV::operator()(), AIRINV::InventoryParserHelper::storeGAV::operator()(), AIRINV::InventoryParserHelper::storeACP::operator()(), AIRINV::InventoryParserHelper::storeETB::operator()(), operator()(), AIRINV::InventoryParserHelper::storeBucketAvaibality::operator()(), AIRINV::InventoryParserHelper::storeSeatIndex::operator()(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()(), AIRINV::InventoryParserHelper::storeClassCode::operator()(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeParentClassCode::operator()(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(), AIRINV::InventoryParserHelper::storeProtection::operator()(), AIRINV::InventoryParserHelper::storeNego::operator()(), AIRINV::InventoryParserHelper::storeNoShow::operator()(), AIRINV::InventoryParserHelper::storeOverbooking::operator()(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(), AIRINV::InventoryParserHelper::storeClassETB::operator()(), AIRINV::InventoryParserHelper::storeClassAvailability::operator()(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(), AIRINV::InventoryParserHelper::storeFamilyCode::operator()(), AIRINV::InventoryParserHelper::storeFClasses::operator()(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()().

The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

22.171 StructAbstract Class Reference

Inheritance diagram for StructAbstract:

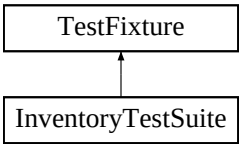


The documentation for this class was generated from the following file:

- airinv/bom/SegmentStruct.hpp

22.172 TestFixture Class Reference

Inheritance diagram for TestFixture:



The documentation for this class was generated from the following file:

- test/airinv/InventoryTestSuite.hpp

23 File Documentation

23.1 airinv/AIRINV_Master_Service.hpp File Reference

```
#include <string>
```

```
#include <stdair/stdair_basic_types.hpp>
#include <stdair/stdair_service_types.hpp>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/stdair_maths_types.hpp>
#include <stdair/basic/ForecastingMethod.hpp>
#include <stdair/basic/PartnershipTechnique.hpp>
#include <airrac/AIRRAC_Types.hpp>
```

Classes

- class AIRINV::AIRINV_Master_Service

  Interface for the AIRINV Services.

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.2 AIRINV_Master_Service.hpp

```
00001 #ifndef __AIRINV_SVC_AIRINV_MASTER_SERVICE_HPP
00002 #define __AIRINV_SVC_AIRINV_MASTER_SERVICE_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_basic_types.hpp>
00011 #include <stdair/stdair_service_types.hpp>
00012 #include <stdair/stdair_inventory_types.hpp>
00013 #include <stdair/stdair_maths_types.hpp>
00014 #include <stdair/basic/ForecastingMethod.hpp>
00015 #include <stdair/basic/PartnershipTechnique.hpp>
00016 // AirRAC
00017 #include <airrac/AIRRAC_Types.hpp>
00018
00019
00021 namespace stdair {
00022   class AirlineFeatureSet;
00023   class Inventory;
00024   class STDAIR_Service;
00025   struct BasLogParams;
00026   struct BasDBParams;
00027   struct SnapshotStruct;
00028   struct RMEventStruct;
00029   struct TravelSolutionStruct;
00030 }
00031
00032 namespace AIRINV {
00033
00035   class AIRINV_Master_ServiceContext;
00036
00037
00041   class AIRINV_Master_Service {
00042   public:
00043     // ////////// Constructors and destructors //////////
00059     AIRINV_Master_Service (const stdair::BasLogParams&,
00060                            const stdair::BasDBParams&);
00061
00073     AIRINV_Master_Service (const stdair::BasLogParams&);
00074
00090     AIRINV_Master_Service (stdair::STDAIR_ServicePtr_T);
00091
00100     void parseAndLoad (const stdair::Filename_T& iInventoryFilename
      );
00101
00112     void parseAndLoad (const stdair::Filename_T& iScheduleFilename,
00113                        const stdair::Filename_T& iODInputFilename,
```

```
00114                       const AIRRAC::YieldFilePath& iYieldFilename);
00115
00119     ~AIRINV_Master_Service();
00120
00125     void initSnapshotAndRMEvents (const stdair::Date_T&,
       const stdair::Date_T&);
00126
00127
00128   public:
00129     // /////////// Business Methods /////////////
00137     void buildSampleBom();
00138
00142     void calculateAvailability (
      stdair::TravelSolutionStruct&,
00143                                 const stdair::PartnershipTechnique&);
00144
00153     bool sell (const std::string& iSegmentDateKey, const
      stdair::ClassCode_T&,
00154                const stdair::PartySize_T&);
00164     bool cancel (const std::string& iSegmentDateKey, const
      stdair::ClassCode_T&,
00165                  const stdair::PartySize_T&);
00166
00170     void takeSnapshots (const stdair::SnapshotStruct&);
00171
00175     void optimise (const stdair::RMEventStruct&,
00176                    const stdair::ForecastingMethod&,
00177                    const stdair::PartnershipTechnique&);
00178
00179
00180   public:
00181     // ///////////////// Export support methods /////////////////
00192     std::string jsonExport (const stdair::AirlineCode_T&,
00193                             const stdair::FlightNumber_T&,
00194                             const stdair::Date_T& iDepartureDate) const;
00195
00196
00197   public:
00198     // ///////////////// Display support methods /////////////////
00212     std::string list (const stdair::AirlineCode_T& iAirlineCode = "all",
00213                       const stdair::FlightNumber_T& iFlightNumber = 0) const;
00214
00224     bool check (const stdair::AirlineCode_T&, const stdair::FlightNumber_T
      &,
00225                 const stdair::Date_T& iDepartureDate) const;
00226
00234     std::string csvDisplay() const;
00235
00247     std::string csvDisplay (const stdair::AirlineCode_T&,
00248                             const stdair::FlightNumber_T&,
00249                             const stdair::Date_T& iDepartureDate) const;
00250
00251
00252   private:
00253     // /////// Construction and Destruction helper methods ///////
00257     AIRINV_Master_Service();
00258
00262     AIRINV_Master_Service (const AIRINV_Master_Service
      &);
00263
00273     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&,
00274                                                    const stdair::BasDBParams&);
00275
00284     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&)
      ;
00285
00294     void addStdAirService (stdair::STDAIR_ServicePtr_T,
00295                            const bool iOwnStdairService);
00296
00301     void initServiceContext();
00302
00309     void initSlaveAirinvService();
00310
00314     void finalise();
00315
00316
00317   private:
00318     // ///////// Service Context /////////
00322     AIRINV_Master_ServiceContext*
      _airinvMasterServiceContext;
00323   };
00324 }
00325 #endif // __AIRINV_SVC_AIRINV_MASTER_SERVICE_HPP
```

23.3 airinv/AIRINV_Service.hpp File Reference

```
#include <string>
#include <stdair/stdair_basic_types.hpp>
#include <stdair/stdair_service_types.hpp>
#include <stdair/basic/ForecastingMethod.hpp>
#include <stdair/basic/PartnershipTechnique.hpp>
#include <stdair/bom/RMEventTypes.hpp>
#include <airrac/AIRRAC_Types.hpp>
```

Classes

- class AIRINV::AIRINV_Service

  Interface for the AIRINV Services.

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.4 AIRINV_Service.hpp

```
00001 #ifndef __AIRINV_SVC_AIRINV_SERVICE_HPP
00002 #define __AIRINV_SVC_AIRINV_SERVICE_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_basic_types.hpp>
00011 #include <stdair/stdair_service_types.hpp>
00012 #include <stdair/basic/ForecastingMethod.hpp>
00013 #include <stdair/basic/PartnershipTechnique.hpp>
00014 #include <stdair/bom/RMEventTypes.hpp>
00015 // AirRAC
00016 #include <airrac/AIRRAC_Types.hpp>
00017
00019 namespace stdair {
00020   class AirlineFeatureSet;
00021   class STDAIR_Service;
00022   class Inventory;
00023   struct TravelSolutionStruct;
00024   struct BasLogParams;
00025   struct BasDBParams;
00026 }
00027
00028 namespace AIRINV {
00029
00031   class AIRINV_ServiceContext;
00032
00033
00037   class AIRINV_Service {
00038   public:
00039     // ////////// Constructors and destructors /////////
00055     AIRINV_Service (const stdair::BasLogParams&, const
      stdair::BasDBParams&);
00056
00068     AIRINV_Service (const stdair::BasLogParams&);
00069
00086     AIRINV_Service (stdair::STDAIR_ServicePtr_T);
00087
00096     void parseAndLoad (const stdair::Filename_T& iInventoryFilename
      );
00097
00108     void parseAndLoad (const stdair::Filename_T& iScheduleFilename,
00109                        const stdair::Filename_T& iODInputFilename,
00110                        const AIRRAC::YieldFilePath& iYieldFilename);
```

```
00111
00115     ~AIRINV_Service();
00116
00117
00118   public:
00119     // /////////// Business Methods /////////////
00127     void buildSampleBom();
00128
00134     stdair::RMEventList_T initRMEvents (const stdair::Date_T&
      iStartDate,
00135                                         const stdair::Date_T& iEndDate);
00136
00140     void calculateAvailability (
      stdair::TravelSolutionStruct&,
00141                                 const stdair::PartnershipTechnique&);
00142
00151     bool sell (const std::string& iSegmentDateKey, const
      stdair::ClassCode_T&,
00152                const stdair::PartySize_T&);
00153
00163     bool cancel (const std::string& iSegmentDateKey, const
      stdair::ClassCode_T&,
00164                  const stdair::PartySize_T&);
00165
00169     void takeSnapshots (const stdair::AirlineCode_T&,
00170                         const stdair::DateTime_T&);
00171
00175     void optimise (const stdair::AirlineCode_T&,
00176                    const stdair::KeyDescription_T&,
00177                    const stdair::DateTime_T&,
00178                    const stdair::ForecastingMethod&,
00179                    const stdair::PartnershipTechnique&);
00180
00181   public:
00182     // ///////////////// Export support methods /////////////////
00193     std::string jsonExport (const stdair::AirlineCode_T&,
00194                             const stdair::FlightNumber_T&,
00195                             const stdair::Date_T& iDepartureDate) const;
00196
00197   public:
00198     // ///////////////// Display support methods /////////////////
00212     std::string list (const stdair::AirlineCode_T& iAirlineCode = "all",
00213                       const stdair::FlightNumber_T& iFlightNumber = 0) const;
00214
00224     bool check (const stdair::AirlineCode_T&, const stdair::FlightNumber_T
      &,
00225                 const stdair::Date_T& iDepartureDate) const;
00226
00234     std::string csvDisplay() const;
00235
00247     std::string csvDisplay (const stdair::AirlineCode_T&,
00248                             const stdair::FlightNumber_T&,
00249                             const stdair::Date_T& iDepartureDate) const;
00250
00251
00252   private:
00253     // /////// Construction and Destruction helper methods ///////
00257     AIRINV_Service ();
00258
00262     AIRINV_Service (const AIRINV_Service&);
00263
00273     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&,
00274                                                    const stdair::BasDBParams&);
00275
00284     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&)
      ;
00285
00289     void initRMOLService();
00290
00294     void initAIRRACService();
00295
00304     void addStdAirService (stdair::STDAIR_ServicePtr_T,
00305                            const bool iOwnStdairService);
00306
00311     void initServiceContext();
00312
00319     void initAirinvService();
00320
00324     void finalise();
00325
00326
00327   private:
00328     // ///////// Service Context /////////
00332     AIRINV_ServiceContext* _airinvServiceContext;
00333   };
00334 }
00335 #endif // __AIRINV_SVC_AIRINV_SERVICE_HPP
```

23.5 airinv/AIRINV_Types.hpp File Reference

```
#include <map>
#include <boost/shared_ptr.hpp>
#include <stdair/stdair_exceptions.hpp>
#include <stdair/stdair_inventory_types.hpp>
```

Classes

- class AIRINV::InventoryFileParsingFailedException
- class AIRINV::ScheduleFileParsingFailedException
- class AIRINV::SegmentDateNotFoundException
- class AIRINV::InventoryInputFileNotFoundException
- class AIRINV::ScheduleInputFileNotFoundException
- class AIRINV::FlightDateDuplicationException
- class AIRINV::BookingException

Namespaces

- namespace AIRINV

Typedefs

- typedef boost::shared_ptr < AIRINV_Service > AIRINV::AIRINV_ServicePtr_T
- typedef boost::shared_ptr < AIRINV_Master_Service > AIRINV::AIRINV_Master_ServicePtr_T
- typedef std::map< const stdair::AirlineCode_T, AIRINV_ServicePtr_T > AIRINV::AIRINV_ServicePtr_Map_T
- typedef std::map< const stdair::DTD_T, double > AIRINV::FRAT5Curve_T

23.6 AIRINV_Types.hpp

```
00001 #ifndef __AIRINV_AIRINV_TYPES_HPP
00002 #define __AIRINV_AIRINV_TYPES_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <map>
00009 // Boost
00010 #include <boost/shared_ptr.hpp>
00011 // StdAir
00012 #include <stdair/stdair_exceptions.hpp>
00013 #include <stdair/stdair_inventory_types.hpp>
00014
00015 namespace AIRINV {
00016
00017   // Forward declarations
00018   class AIRINV_Service;
00019   class AIRINV_Master_Service;
00020
00021
00022   // ///////// Exceptions //////////
00023
00027   class InventoryFileParsingFailedException
00028     : public stdair::ParsingFileFailedException {
00029   public:
00033     InventoryFileParsingFailedException (
      const std::string& iWhat)
```

```
00034       : stdair::ParsingFileFailedException (iWhat) {}
00035   };
00036
00040   class ScheduleFileParsingFailedException
00041     : public stdair::ParsingFileFailedException {
00042   public:
00046     ScheduleFileParsingFailedException (const
       std::string& iWhat)
00047       : stdair::ParsingFileFailedException (iWhat) {}
00048   };
00049
00054   class SegmentDateNotFoundException : public
      stdair::ParserException {
00055   public:
00059     SegmentDateNotFoundException (const std::string
      & iWhat)
00060       : stdair::ParserException (iWhat) {}
00061   };
00062
00066   class InventoryInputFileNotFoundException
       : public stdair::FileNotFoundException {
00067   public:
00071     InventoryInputFileNotFoundException (
      const std::string& iWhat)
00072       : stdair::FileNotFoundException (iWhat) {}
00073   };
00074
00078   class ScheduleInputFileNotFoundException :
      public stdair::FileNotFoundException {
00079   public:
00083     ScheduleInputFileNotFoundException (const
       std::string& iWhat)
00084       : stdair::FileNotFoundException (iWhat) {}
00085   };
00086
00090   class FlightDateDuplicationException : public
      stdair::ObjectCreationgDuplicationException {
00091   public:
00095     FlightDateDuplicationException (const
      std::string& iWhat)
00096       : stdair::ObjectCreationgDuplicationException
       (iWhat) {}
00097   };
00098
00102   class BookingException : public stdair::RootException {
00103   };
00104
00105
00106   // //////// Type definitions /////////
00110   typedef boost::shared_ptr<AIRINV_Service> AIRINV_ServicePtr_T
      ;
00111
00115   typedef boost::shared_ptr<AIRINV_Master_Service> AIRINV_Master_ServicePtr_T
      ;
00116
00121   typedef std::map<const stdair::AirlineCode_T,
00122                    AIRINV_ServicePtr_T>
      AIRINV_ServicePtr_Map_T;
00123
00127   typedef std::map<const stdair::DTD_T, double> FRAT5Curve_T;
00128
00129 }
00130 #endif // __AIRINV_AIRINV_TYPES_HPP
00131
```

23.7 airinv/basic/BasConst.cpp File Reference

```
#include <airinv/basic/BasConst_General.hpp>
#include <airinv/basic/BasConst_Curves.hpp>
#include <airinv/basic/BasConst_AIRINV_Service.hpp>
```

Namespaces

- namespace AIRINV

Variables

- const std::string AIRINV::DEFAULT_AIRLINE_CODE = "BA"
- const FRAT5Curve_T AIRINV::DEFAULT_PICKUP_FRAT5_CURVE

23.8 BasConst.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 #include <airinv/basic/BasConst_General.hpp>
00005 #include <airinv/basic/BasConst_Curves.hpp>
00006 #include <airinv/basic/BasConst_AIRINV_Service.hpp
      >
00007
00008 namespace AIRINV {
00009
00011   const std::string DEFAULT_AIRLINE_CODE = "BA";
00012
00014   const FRAT5Curve_T DEFAULT_PICKUP_FRAT5_CURVE
       =
00015     DefaultMap::createPickupFRAT5Curve();
00016   FRAT5Curve_T DefaultMap::createPickupFRAT5Curve
      () {
00017     FRAT5Curve_T oCurve;
00018     // oCurve[365] = 1.1; oCurve[63] = 1.4;  oCurve[56] = 1.45;
00019     // oCurve[49] = 1.5;  oCurve[42] = 1.55; oCurve[35] = 1.6;
00020     // oCurve[31] = 1.7;  oCurve[27] = 1.8;  oCurve[23] = 2.0;
00021     // oCurve[19] = 2.3;  oCurve[16] = 2.6;  oCurve[13] = 3.0;
00022     // oCurve[10] = 3.3;  oCurve[7]  = 3.4;  oCurve[5]  = 3.44;
00023     // oCurve[3] = 3.47;  oCurve[1]  = 3.5;  oCurve[0]  = 3.5;
00024     // oCurve[365] = 1.0; oCurve[63] = 1.1;  oCurve[56] = 1.13;
00025     // oCurve[49] = 1.17;  oCurve[42] = 1.22; oCurve[35] = 1.28;
00026     // oCurve[31] = 1.32;  oCurve[27] = 1.37;  oCurve[23] = 1.43;
00027     // oCurve[19] = 1.51;  oCurve[16] = 1.6;  oCurve[13] = 1.7;
00028     // oCurve[10] = 1.8;  oCurve[7]  = 1.9;  oCurve[5]  = 1.93;
00029     // oCurve[3] = 1.96;  oCurve[1]  = 2.0;  oCurve[0]  = 2.0;
00030     // oCurve[365] = 1.0; oCurve[63] = 1.05;  oCurve[56] = 1.07;
00031     // oCurve[49] = 1.09;  oCurve[42] = 1.11; oCurve[35] = 1.14;
00032     // oCurve[31] = 1.16;  oCurve[27] = 1.18;  oCurve[23] = 1.21;
00033     // oCurve[19] = 1.24;  oCurve[16] = 1.27;  oCurve[13] = 1.3;
00034     // oCurve[10] = 1.33;  oCurve[7]  = 1.37;  oCurve[5]  = 1.4;
00035     // oCurve[3] = 1.45;  oCurve[1]  = 1.5;  oCurve[0]  = 1.5;
00036     // oCurve[365] = 1.1; oCurve[63] = 1.4;
00037     // oCurve[49] = 1.5;  oCurve[35] = 1.6;
00038     // oCurve[23] = 2.0;  oCurve[16] = 2.6;
00039     // oCurve[10] = 3.3;  oCurve[5]  = 3.44;
00040     // oCurve[1]  = 3.5;  oCurve[0]  = 3.5;
00041     // oCurve[365] = 1.1; oCurve[63] = 1.4;
00042     // oCurve[49] = 1.7;  oCurve[48] = 3.6; oCurve[35] = 3.6; oCurve[24] = 3.6;
00043     // oCurve[23] = 2.6;  oCurve[16] = 2.7;
00044     // oCurve[10] = 3.2;  oCurve[5]  = 3.24; oCurve[4]  = 2.8;
00045     // oCurve[1]  = 2.4;  oCurve[0]  = 2.4;
00046
00047     oCurve[365] = 1.1; oCurve[63] = 1.4;
00048     /*1*/oCurve[62] = 1.4;  oCurve[56] = 1.45;
00049     /*2*/oCurve[55] = 1.45; oCurve[49] = 1.5;
00050     /*3*/oCurve[48] = 1.5;  oCurve[42] = 1.55;
00051     /*4*/oCurve[41] = 1.95;  oCurve[35] = 2.2;
00052     /*5*/oCurve[34] = 2.2;  oCurve[31] = 2.4;
00053     /*6*/oCurve[30] = 2.4;  oCurve[27] = 2.8;
00054     /*7*/oCurve[26] = 2.9;  oCurve[23] = 3.1;
00055     /*8*/oCurve[22] = 3.1;  oCurve[19] = 3.3;
00056     /*9*/oCurve[18] = 3.3;  oCurve[16] = 3.3;
00057     /*10*/oCurve[15] = 3.3; oCurve[13] = 3.3;
00058     /*11*/oCurve[12] = 3.0; oCurve[10] = 3.1;
00059     /*12*/oCurve[9] = 3.1;  oCurve[7]  = 3.1;
00060     /*13*/oCurve[6] = 3.1; oCurve[5]  = 3.0;
00061     /*14*/oCurve[4] = 3.1; oCurve[3]  = 3.0;
00062     /*15*/oCurve[2] = 3.0;  oCurve[1]  = 2.8;
00063     /*16*/oCurve[0]  = 2.8;
00064
00065
00066     // oCurve[365] = 1.1; oCurve[63] = 1.4;
00067     // /*1*/oCurve[62] = 1.4;  oCurve[56] = 1.55;
00068     // /*2*/oCurve[55] = 1.55; oCurve[49] = 1.7;
00069     // /*3*/oCurve[48] = 3.6;  oCurve[42] = 3.6;
00070     // /*4*/oCurve[41] = 3.6;  oCurve[35] = 3.6;
00071     // /*5*/oCurve[34] = 3.6;  oCurve[31] = 3.6;
00072     // /*6*/oCurve[30] = 3.6;  oCurve[27] = 3.6;
00073     // /*7*/oCurve[26] = 3.6;  oCurve[23] = 3.6;
00074     // /*8*/oCurve[22] = 3.5;  oCurve[19] = 3.3;
00075     // /*9*/oCurve[18] = 3.3;  oCurve[16] = 3.0;
```

```
00076     // /*10*/oCurve[15] = 2.8; oCurve[13] = 2.5;
00077     // /*11*/oCurve[12] = 2.9; oCurve[10] = 3.2;
00078     // /*12*/oCurve[9] = 3.2;  oCurve[7]  = 3.22;
00079     // /*13*/oCurve[6] = 3.25; oCurve[5]  = 3.3;
00080     // /*14*/oCurve[4] = 3.0; oCurve[3]  = 2.8;
00081     // /*15*/oCurve[2] = 2.7;  oCurve[1]  = 2.5;
00082     // /*16*/oCurve[0]  = 2.5;
00083
00084
00085     // oCurve[365] = 1.1; oCurve[63] = 1.4;
00086     // /*1*/oCurve[62] = 1.4;  oCurve[49] = 1.7;
00087     // /*2*/oCurve[48] = 3.6;  oCurve[35] = 3.6;
00088     // /*3*/oCurve[34] = 3.5;  oCurve[23] = 3.4;
00089     // /*4*/oCurve[22] = 3.3;  oCurve[16] = 3.1;
00090     // /*5*/oCurve[15] = 2.7; oCurve[10] = 3.1;
00091     // /*6*/oCurve[9] = 3.0;  oCurve[5]  = 2.8;
00092     // /*7*/oCurve[4] = 2.3; oCurve[1]  = 2.5;
00093     // /*8*/oCurve[0]  = 2.5;
00094     return oCurve;
00095   };
00096
00097 }
```

23.9 airinv/basic/BasConst_AIRINV_Service.hpp File Reference

```
#include <string>
```

Namespaces

- namespace AIRINV

23.10 BasConst_AIRINV_Service.hpp

```
00001 #ifndef __AIRINV_BAS_BASCONST_AIRINV_SERVICE_HPP
00002 #define __AIRINV_BAS_BASCONST_AIRINV_SERVICE_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 #include <string>
00008
00009 namespace AIRINV {
00010
00012   extern const std::string DEFAULT_AIRLINE_CODE;
00013
00014 }
00015 #endif // __AIRINV_BAS_BASCONST_AIRINV_SERVICE_HPP
```

23.11 airinv/basic/BasConst_Curves.hpp File Reference

```
#include <airinv/AIRINV_Types.hpp>
```

Classes

- struct AIRINV::DefaultMap

Namespaces

- namespace AIRINV

23.12 BasConst_Curves.hpp

```
00001 #ifndef __AIRINV_BAS_BASCONST_CURVES_HPP
00002 #define __AIRINV_BAS_BASCONST_CURVES_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // AIRINV
00008 #include <airinv/AIRINV_Types.hpp>
00009
00010 namespace AIRINV {
00011
00013   extern const FRAT5Curve_T DEFAULT_PICKUP_FRAT5_CURVE
      ;
00014
00016   struct DefaultMap {
00017     static FRAT5Curve_T createPickupFRAT5Curve
      ();
00018   };
00019 }
00020 #endif // __AIRINV_BAS_BASCONST_CURVES_HPP
```

23.13 airinv/basic/BasConst_General.hpp File Reference

Namespaces

- namespace AIRINV

23.14 BasConst_General.hpp

```
00001 #ifndef __AIRINV_BAS_BASCONST_GENERAL_HPP
00002 #define __AIRINV_BAS_BASCONST_GENERAL_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007
00008 namespace AIRINV {
00009
00010 }
00011 #endif // __AIRINV_BAS_BASCONST_GENERAL_HPP
```

23.15 airinv/basic/BasParserTypes.hpp File Reference

```
#include <string>
#include <boost/spirit/home/classic/core.hpp>
#include <boost/spirit/home/classic/attribute.hpp>
#include <boost/spirit/home/classic/utility/functor_parser.hpp>
#include <boost/spirit/home/classic/utility/loops.hpp>
#include <boost/spirit/home/classic/utility/chset.hpp>
#include <boost/spirit/home/classic/utility/confix.hpp>
#include <boost/spirit/home/classic/iterator/file_iterator.hpp>
#include <boost/spirit/home/classic/actor/push_back_actor.hpp>
#include <boost/spirit/home/classic/actor/assign_actor.hpp>
```

Namespaces

- namespace AIRINV

Typedefs

- typedef char AIRINV::char_t

- typedef boost::spirit::classic::file_iterator < char_t > AIRINV::iterator_t
- typedef boost::spirit::classic::scanner < iterator_t > AIRINV::scanner_t
- typedef boost::spirit::classic::rule < scanner_t > AIRINV::rule_t
- typedef boost::spirit::classic::int_parser < unsigned int, 10, 1, 1 > AIRINV::int1_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 2, 2 > AIRINV::uint2_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 2 > AIRINV::uint1_2_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 3 > AIRINV::uint1_3_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 4, 4 > AIRINV::uint4_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 4 > AIRINV::uint1_4_p_t
- typedef boost::spirit::classic::chset < char_t > AIRINV::chset_t
- typedef boost::spirit::classic::impl::loop_traits < chset_t, unsigned int, unsigned int >::type AIRINV::repeat_p_t
- typedef boost::spirit::classic::bounded < uint2_p_t, unsigned int > AIRINV::bounded2_p_t
- typedef boost::spirit::classic::bounded < uint1_2_p_t, unsigned int > AIRINV::bounded1_2_p_t
- typedef boost::spirit::classic::bounded < uint1_3_p_t, unsigned int > AIRINV::bounded1_3_p_t
- typedef boost::spirit::classic::bounded < uint4_p_t, unsigned int > AIRINV::bounded4_p_t
- typedef boost::spirit::classic::bounded < uint1_4_p_t, unsigned int > AIRINV::bounded1_4_p_t

23.16 BasParserTypes.hpp

```
00001 #ifndef __AIRINV_BAS_BASCOMPARSERTYPES_HPP
00002 #define __AIRINV_BAS_BASCOMPARSERTYPES_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
```

```
00008 #include <string>
00009 // Boost
00010 //#define BOOST_SPIRIT_DEBUG
00011 #include <boost/spirit/home/classic/core.hpp>
00012 #include <boost/spirit/home/classic/attribute.hpp>
00013 #include <boost/spirit/home/classic/utility/functor_parser.hpp>
00014 #include <boost/spirit/home/classic/utility/loops.hpp>
00015 #include <boost/spirit/home/classic/utility/chset.hpp>
00016 #include <boost/spirit/home/classic/utility/confix.hpp>
00017 #include <boost/spirit/home/classic/iterator/file_iterator.hpp>
00018 #include <boost/spirit/home/classic/actor/push_back_actor.hpp>
00019 #include <boost/spirit/home/classic/actor/assign_actor.hpp>
00020
00021 namespace AIRINV {
00022
00023   // ////////////////////////////////////////////////////////////////////
00024   //
00025   //  Definition of Basic Types
00026   //
00027   // ////////////////////////////////////////////////////////////////////
00028   // For a file, the parsing unit is the character (char). For a string,
00029   // it is a "char const *".
00030   // typedef char const* iterator_t;
00031   typedef char char_t;
00032
00033   // The types of iterator, scanner and rule are then derived from
00034   // the parsing unit.
00035   typedef boost::spirit::classic::file_iterator<char_t> iterator_t;
00036   typedef boost::spirit::classic::scanner<iterator_t> scanner_t;
00037   typedef boost::spirit::classic::rule<scanner_t> rule_t;
00038
00039   // ////////////////////////////////////////////////////////////////////
00040   //
00041   //  Parser related types
00042   //
00043   // ////////////////////////////////////////////////////////////////////
00045   typedef boost::spirit::classic::int_parser<unsigned int, 10, 1, 1> int1_p_t
      ;
00046
00048   typedef boost::spirit::classic::uint_parser<unsigned int, 10, 2, 2> uint2_p_t
      ;
00049
00051   typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 2>
      uint1_2_p_t;
00052
00054   typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 3>
      uint1_3_p_t;
00055
00057   typedef boost::spirit::classic::uint_parser<unsigned int, 10, 4, 4> uint4_p_t
      ;
00058
00060   typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 4>
      uint1_4_p_t;
00061
00063   typedef boost::spirit::classic::chset<char_t> chset_t;
00064
00067   typedef boost::spirit::classic::impl::loop_traits<chset_t,
00068                                                     unsigned int,
00069                                                     unsigned int>::type repeat_p_t
      ;
00070
00072   typedef boost::spirit::classic::bounded<uint2_p_t, unsigned int> bounded2_p_t
      ;
00073   typedef boost::spirit::classic::bounded<uint1_2_p_t, unsigned int>
      bounded1_2_p_t;
00074   typedef boost::spirit::classic::bounded<uint1_3_p_t, unsigned int>
      bounded1_3_p_t;
00075   typedef boost::spirit::classic::bounded<uint4_p_t, unsigned int> bounded4_p_t
      ;
00076   typedef boost::spirit::classic::bounded<uint1_4_p_t, unsigned int>
      bounded1_4_p_t;
00077 }
00078 #endif // __AIRINV_BAS_BASCOMPARSERTYPES_HPP
```

23.17 airinv/basic/FlightRequestStatus.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/FlightRequestStatus.hpp>
```

Namespaces

- namespace AIRINV

23.18 FlightRequestStatus.cpp

```
00001 // //////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // Airinv
00010 #include <airinv/AIRINV_Types.hpp>
00011 #include <airinv/FlightRequestStatus.hpp>
00012
00013 namespace AIRINV {
00014
00015   // //////////////////////////////////////////////////////////////////////
00016   const std::string FlightRequestStatus::_labels[LAST_VALUE] =
00017     { "OK", "Not Found", "Internal Error"};
00018
00019   const std::string FlightRequestStatus::_codeLabels[LAST_VALUE] =
00020     { "OK", "NF", "IE" };
00021
00022
00023   // //////////////////////////////////////////////////////////////////////
00024   FlightRequestStatus::
00025   FlightRequestStatus (const EN_FlightRequestStatus
      & iFlightRequestStatus)
00026     : _code (iFlightRequestStatus) {
00027   }
00028
00029   // //////////////////////////////////////////////////////////////////////
00030   FlightRequestStatus::FlightRequestStatus
       (const std::string& iCode) {
00031     _code = LAST_VALUE;
00032
00033     if (iCode == "OK") {
00034       _code = OK;
00035
00036     } else if (iCode == "NF") {
00037       _code = NOT_FOUND;
00038
00039     } else if (iCode == "IE") {
00040       _code = INTERNAL_ERROR;
00041
00042     }
00043
00044     if (_code == LAST_VALUE) {
00045       const std::string& lLabels = describeLabels();
00046       STDAIR_LOG_ERROR ("The flight request status '" << iCode
00047                         << "' is not known. Known flight request status: "
00048                         << lLabels);
00049       throw stdair::CodeConversionException ("The flight request status '"
00050                                              + iCode
00051                                              + "' is not known. Known flight
       request status: "
00052                                              + lLabels);
00053     }
00054   }
00055
00056   // //////////////////////////////////////////////////////////////////////
00057   const std::string& FlightRequestStatus::
00058   getLabel (const EN_FlightRequestStatus& iCode
      ) {
00059     return _labels[iCode];
00060   }
00061
00062   // //////////////////////////////////////////////////////////////////////
00063   const std::string& FlightRequestStatus::
00064   getCodeLabel (const EN_FlightRequestStatus
      & iCode) {
00065     return _codeLabels[iCode];
00066   }
00067
00068   // //////////////////////////////////////////////////////////////////////
```

```
00069   std::string FlightRequestStatus::describeLabels
      () {
00070     std::ostringstream ostr;
00071     for (unsigned short idx = 0; idx != LAST_VALUE; ++idx) {
00072       if (idx != 0) {
00073         ostr << ", ";
00074       }
00075       ostr << _labels[idx];
00076     }
00077     return ostr.str();
00078   }
00079
00080   // ////////////////////////////////////////////////////////////////////
00081   FlightRequestStatus::EN_FlightRequestStatus
       FlightRequestStatus::
00082   getCode() const {
00083     return _code;
00084   }
00085
00086   // ////////////////////////////////////////////////////////////////////
00087   const std::string FlightRequestStatus::describe(
      ) const {
00088     std::ostringstream ostr;
00089     ostr << _labels[_code];
00090     return ostr.str();
00091   }
00092
00093 }
```

23.19 airinv/basic/FlightTypeCode.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/basic/FlightTypeCode.hpp>
```

Namespaces

- namespace AIRINV

23.20 FlightTypeCode.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // Airinv
00010 #include <airinv/AIRINV_Types.hpp>
00011 #include <airinv/basic/FlightTypeCode.hpp>
00012
00013 namespace AIRINV {
00014
00015   // ////////////////////////////////////////////////////////////////////
00016   const std::string FlightTypeCode::_labels[LAST_VALUE] =
00017     { "Domestic", "International", "Ground Handling"};
00018
00019   const std::string FlightTypeCode::_codeLabels[LAST_VALUE] =
00020     { "DOM", "INT", "GRD" };
00021
00022
00023   // ////////////////////////////////////////////////////////////////////
00024   FlightTypeCode::FlightTypeCode (const
      EN_FlightTypeCode& iFlightTypeCode)
00025     : _code (iFlightTypeCode) {
00026   }
00027
00028   // ////////////////////////////////////////////////////////////////////
00029   FlightTypeCode::FlightTypeCode (const
      std::string& iCode) {
```

```
00030     _code = LAST_VALUE;
00031
00032     if (iCode == "DOM") {
00033       _code = DOMESTIC;
00034
00035     } else if (iCode == "INT") {
00036       _code = INTERNATIONAL;
00037
00038     } else if (iCode == "GRD") {
00039       _code = GROUND_HANDLING;
00040     }
00041
00042     if (_code == LAST_VALUE) {
00043       const std::string& lLabels = describeLabels();
00044       STDAIR_LOG_ERROR ("The flight type code '" << iCode
00045                         << "' is not known. Known flight type codes: "
00046                         << lLabels);
00047       throw stdair::CodeConversionException ("The flight type code '" + iCode
00048                                              + "' is not known. Known flight
      type codes: "
00049                                              + lLabels);
00050     }
00051   }
00052
00053   // ////////////////////////////////////////////////////////////////////
00054   const std::string& FlightTypeCode::getLabel (const
      EN_FlightTypeCode& iCode) {
00055     return _labels[iCode];
00056   }
00057
00058   // ////////////////////////////////////////////////////////////////////
00059   const std::string& FlightTypeCode::
00060   getCodeLabel (const EN_FlightTypeCode& iCode)
      {
00061     return _codeLabels[iCode];
00062   }
00063
00064   // ////////////////////////////////////////////////////////////////////
00065   std::string FlightTypeCode::describeLabels() {
00066     std::ostringstream ostr;
00067     for (unsigned short idx = 0; idx != LAST_VALUE; ++idx) {
00068       if (idx != 0) {
00069         ostr << ", ";
00070       }
00071       ostr << _labels[idx];
00072     }
00073     return ostr.str();
00074   }
00075
00076   // ////////////////////////////////////////////////////////////////////
00077   FlightTypeCode::EN_FlightTypeCode
      FlightTypeCode::getCode() const {
00078     return _code;
00079   }
00080
00081   // ////////////////////////////////////////////////////////////////////
00082   const std::string FlightTypeCode::describe() const {
00083     std::ostringstream ostr;
00084     ostr << _labels[_code];
00085     return ostr.str();
00086   }
00087
00088 }
```

23.21 airinv/basic/FlightTypeCode.hpp File Reference

```
#include <string>
#include <stdair/basic/StructAbstract.hpp>
```

Classes

- struct AIRINV::FlightTypeCode

Namespaces

- namespace AIRINV

23.22 FlightTypeCode.hpp

```
00001 #ifndef __AIRINV_BAS_FLIGHTTYPECODE_HPP
00002 #define __AIRINV_BAS_FLIGHTTYPECODE_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/basic/StructAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00015   struct FlightTypeCode : public stdair::StructAbstract {
00016   public:
00017     typedef enum {
00018       DOMESTIC = 0,
00019       INTERNATIONAL,
00020       GROUND_HANDLING,
00021       LAST_VALUE
00022     } EN_FlightTypeCode;
00023
00025     static const std::string& getLabel (const EN_FlightTypeCode
    &);
00026
00028     static const std::string& getCodeLabel (const EN_FlightTypeCode
    &);
00029
00031     static std::string describeLabels();
00032
00034     EN_FlightTypeCode getCode() const;
00035
00037     const std::string describe() const;
00038
00039
00040   public:
00042     FlightTypeCode (const EN_FlightTypeCode&);
00044     FlightTypeCode (const std::string& iCode);
00045
00046
00047   private:
00049     static const std::string _labels[LAST_VALUE];
00051     static const std::string _codeLabels[LAST_VALUE];
00052
00053
00054   private:
00055     // //////// Attributes /////////
00057     EN_FlightTypeCode _code;
00058   };
00059
00060 }
00061 #endif // __AIRINV_BAS_FLIGHTTYPECODE_HPP
```

23.23 airinv/basic/FlightVisibilityCode.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/basic/FlightVisibilityCode.hpp>
```

Namespaces

- namespace AIRINV

23.24 FlightVisibilityCode.cpp

```
00001 // //////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
```

```
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // Airinv
00010 #include <airinv/AIRINV_Types.hpp>
00011 #include <airinv/basic/FlightVisibilityCode.hpp
      >
00012
00013 namespace AIRINV {
00014
00015   // ////////////////////////////////////////////////////////////////////
00016   const std::string FlightVisibilityCode::_labels[LAST_VALUE] =
00017     { "Normal", "Hidden", "Pseudo"};
00018
00019   const std::string FlightVisibilityCode::_codeLabels[LAST_VALUE] =
00020     { "NOR", "HID", "PSD" };
00021
00022
00023   // ////////////////////////////////////////////////////////////////////
00024   FlightVisibilityCode::
00025   FlightVisibilityCode (const EN_FlightVisibilityCode
      & iFlightVisibilityCode)
00026     : _code (iFlightVisibilityCode) {
00027   }
00028
00029   // ////////////////////////////////////////////////////////////////////
00030   FlightVisibilityCode::FlightVisibilityCode
       (const std::string& iCode) {
00031     _code = LAST_VALUE;
00032
00033     if (iCode == "NOR") {
00034       _code = NORMAL;
00035
00036     } else if (iCode == "HID") {
00037       _code = HIDDEN;
00038
00039     } else if (iCode == "PSD") {
00040       _code = PSEUDO;
00041     }
00042
00043     if (_code == LAST_VALUE) {
00044       const std::string& lLabels = describeLabels();
00045       STDAIR_LOG_ERROR ("The flight visibility code '" << iCode
00046                         << "' is not known. Known flight visibility codes: "
00047                         << lLabels);
00048       throw stdair::CodeConversionException ("The flight visibility code '"
00049                                              + iCode
00050                                              + "' is not known. Known flight
       visibility codes: "
00051                                              + lLabels);
00052     }
00053   }
00054
00055   // ////////////////////////////////////////////////////////////////////
00056   const std::string& FlightVisibilityCode::
00057   getLabel (const EN_FlightVisibilityCode&
      iCode) {
00058     return _labels[iCode];
00059   }
00060
00061   // ////////////////////////////////////////////////////////////////////
00062   const std::string& FlightVisibilityCode::
00063   getCodeLabel (const EN_FlightVisibilityCode
      & iCode) {
00064     return _codeLabels[iCode];
00065   }
00066
00067   // ////////////////////////////////////////////////////////////////////
00068   std::string FlightVisibilityCode::describeLabels
      () {
00069     std::ostringstream ostr;
00070     for (unsigned short idx = 0; idx != LAST_VALUE; ++idx) {
00071       if (idx != 0) {
00072         ostr << ", ";
00073       }
00074       ostr << _labels[idx];
00075     }
00076     return ostr.str();
00077   }
00078
00079   // ////////////////////////////////////////////////////////////////////
00080   FlightVisibilityCode::EN_FlightVisibilityCode
       FlightVisibilityCode::
00081   getCode() const {
00082     return _code;
00083   }
00084
```

```
00085   // ////////////////////////////////////////////////////////////////////
00086   const std::string FlightVisibilityCode::describe
      () const {
00087     std::ostringstream ostr;
00088     ostr << _labels[_code];
00089     return ostr.str();
00090   }
00091
00092 }
```

23.25 airinv/basic/FlightVisibilityCode.hpp File Reference

```
#include <string>
#include <stdair/basic/StructAbstract.hpp>
```

Classes

- struct AIRINV::FlightVisibilityCode

Namespaces

- namespace AIRINV

23.26 FlightVisibilityCode.hpp

```
00001 #ifndef __AIRINV_BAS_FLIGHTVISIBILITYCODE_HPP
00002 #define __AIRINV_BAS_FLIGHTVISIBILITYCODE_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/basic/StructAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00015   struct FlightVisibilityCode : public
      stdair::StructAbstract {
00016   public:
00017     typedef enum {
00018       NORMAL = 0,
00019       HIDDEN,
00020       PSEUDO,
00021       LAST_VALUE
00022     } EN_FlightVisibilityCode;
00023
00025     static const std::string& getLabel (const EN_FlightVisibilityCode
      &);
00026
00028     static const std::string& getCodeLabel (const
      EN_FlightVisibilityCode&);
00029
00031     static std::string describeLabels();
00032
00034     EN_FlightVisibilityCode getCode() const;
00035
00037     const std::string describe() const;
00038
00039
00040   public:
00042     FlightVisibilityCode (const EN_FlightVisibilityCode
      &);
00044     FlightVisibilityCode (const std::string& iCode);
00045
00046
00047   private:
00049     static const std::string _labels[LAST_VALUE];
00051     static const std::string _codeLabels[LAST_VALUE];
00052
00053
00054   private:
```

```
00055     // ///////// Attributes /////////
00057     EN_FlightVisibilityCode _code;
00058   };
00059
00060 }
00061 #endif // __AIRINV_BAS_FLIGHTVISIBILITYCODE_HPP
```

23.27 airinv/batches/airinv_parseInventory.cpp File Reference

23.28 airinv_parseInventory.cpp

```
00001
00005 // STL
00006 #include <cassert>
00007 #include <iostream>
00008 #include <sstream>
00009 #include <fstream>
00010 #include <string>
00011 // Boost (Extended STL)
00012 #include <boost/program_options.hpp>
00013 #include <boost/tokenizer.hpp>
00014 // StdAir
00015 #include <stdair/basic/BasLogParams.hpp>
00016 #include <stdair/basic/BasDBParams.hpp>
00017 #include <stdair/service/Logger.hpp>
00018 // AirInv
00019 #include <airinv/AIRINV_Master_Service.hpp>
00020 #include <airinv/config/airinv-paths.hpp>
00021
00022 // ///////// Constants //////
00026 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("airinv_parseInventory.log");
00027
00031 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00032                                                         "/invdump01.csv");
00036 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00037                                                       "/schedule01.csv");
00041 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00042                                                  "/ond01.csv");
00043
00047 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00048                                                    "/yieldstore01.csv");
00049
00053 const std::string K_AIRINV_DEFAULT_SEGMENT_DATE_KEY ("SV,5,2010-03-11,KBP,JFK")
      ;
00054
00058 const stdair::ClassCode_T K_AIRINV_DEFAULT_CLASS_CODE ("Y");
00059
00063 const stdair::PartySize_T K_AIRINV_DEFAULT_PARTY_SIZE (2);
00064
00069 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00070
00075 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00076
00080 const int K_AIRINV_EARLY_RETURN_STATUS = 99;
00081
00082 // ///////// Parsing of Options & Configuration /////////
00083 // A helper function to simplify the main part.
00084 template<class T> std::ostream& operator<< (std::ostream& os,
00085                                             const std::vector<T>& v) {
00086   std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00087   return os;
00088 }
00089
00093 int readConfiguration (int argc, char* argv[],
00094                        bool& ioIsBuiltin, bool& ioIsForSchedule,
00095                        stdair::Filename_T& ioInventoryFilename,
00096                        stdair::Filename_T& ioScheduleInputFilename,
00097                        stdair::Filename_T& ioODInputFilename,
00098                        stdair::Filename_T& ioYieldInputFilename,
00099                        std::string& ioSegmentDateKey,
00100                        stdair::ClassCode_T& ioClassCode,
00101                        stdair::PartySize_T& ioPartySize,
00102                        std::string& ioLogFilename) {
00103   // Default for the built-in input
00104   ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;
00105
00106   // Default for the inventory or schedule option
00107   ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00108
00109   // Declare a group of options that will be allowed only on command line
00110   boost::program_options::options_description generic ("Generic options");
00111   generic.add_options()
00112     ("prefix", "print installation prefix")
```

```
00113     ("version,v", "print version string")
00114     ("help,h", "produce help message");
00115
00116   // Declare a group of options that will be allowed both on command
00117   // line and in config file
00118
00119   boost::program_options::options_description config ("Configuration");
00120   config.add_options()
00121     ("builtin,b",
00122      "The sample BOM tree can be either built-in or parsed from an input file.
       That latter must then be given with the -i/--inventory or -s/--schedule option")
00123     ("for_schedule,f",
00124      "The BOM tree should be built from a schedule file (instead of from an
       inventory dump)")
00125     ("inventory,i",
00126      boost::program_options::value< std::string >(&ioInventoryFilename)->
      default_value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00127      "(CSV) input file for the inventory")
00128     ("schedule,s",
00129      boost::program_options::value< std::string >(&ioScheduleInputFilename)->
      default_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00130      "(CSV) input file for the schedule")
00131     ("ond,o",
00132      boost::program_options::value< std::string >(&ioODInputFilename)->
      default_value(K_AIRINV_DEFAULT_OND_FILENAME),
00133      "(CSV) input file for the O&D")
00134     ("yield,y",
00135      boost::program_options::value< std::string >(&ioYieldInputFilename)->
      default_value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00136      "(CSV) input file for the yield")
00137     ("segment_date_key,k",
00138      boost::program_options::value< std::string >(&ioSegmentDateKey)->
      default_value(K_AIRINV_DEFAULT_SEGMENT_DATE_KEY),
00139      "Segment-date key")
00140     ("class_code,c",
00141      boost::program_options::value< stdair::ClassCode_T >(&ioClassCode)->
      default_value(K_AIRINV_DEFAULT_CLASS_CODE),
00142      "Class code")
00143     ("party_size,p",
00144      boost::program_options::value< stdair::PartySize_T >(&ioPartySize)->
      default_value(K_AIRINV_DEFAULT_PARTY_SIZE),
00145      "Party size")
00146     ("log,l",
00147      boost::program_options::value< std::string >(&ioLogFilename)->
      default_value(K_AIRINV_DEFAULT_LOG_FILENAME),
00148      "Filename for the logs")
00149     ;
00150
00151   // Hidden options, will be allowed both on command line and
00152   // in config file, but will not be shown to the user.
00153   boost::program_options::options_description hidden ("Hidden options");
00154   hidden.add_options()
00155     ("copyright",
00156      boost::program_options::value< std::vector<std::string> >(),
00157      "Show the copyright (license)");
00158
00159   boost::program_options::options_description cmdline_options;
00160   cmdline_options.add(generic).add(config).add(hidden);
00161
00162   boost::program_options::options_description config_file_options;
00163   config_file_options.add(config).add(hidden);
00164   boost::program_options::options_description visible ("Allowed options");
00165   visible.add(generic).add(config);
00166
00167   boost::program_options::positional_options_description p;
00168   p.add ("copyright", -1);
00169
00170   boost::program_options::variables_map vm;
00171   boost::program_options::
00172     store (boost::program_options::command_line_parser (argc, argv).
00173            options (cmdline_options).positional(p).run(), vm);
00174
00175   std::ifstream ifs ("airinv.cfg");
00176   boost::program_options::store (parse_config_file (ifs, config_file_options),
00177                                  vm);
00178   boost::program_options::notify (vm);
00179
00180   if (vm.count ("help")) {
00181     std::cout << visible << std::endl;
00182     return K_AIRINV_EARLY_RETURN_STATUS;
00183   }
00184
00185   if (vm.count ("version")) {
00186     std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION
      << std::endl;
00187     return K_AIRINV_EARLY_RETURN_STATUS;
00188   }
```

```
00189
00190   if (vm.count ("prefix")) {
00191     std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00192     return K_AIRINV_EARLY_RETURN_STATUS;
00193   }
00194
00195   if (vm.count ("builtin")) {
00196     ioIsBuiltin = true;
00197   }
00198   const std::string isBuiltinStr = (ioIsBuiltin == true)?"yes":"no";
00199   std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
00200
00201   if (vm.count ("for_schedule")) {
00202     ioIsForSchedule = true;
00203   }
00204   const std::string isForScheduleStr = (ioIsForSchedule == true)?"yes":"no";
00205   std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00206             << std::endl;
00207
00208   if (ioIsBuiltin == false) {
00209
00210     if (ioIsForSchedule == false) {
00211       // The BOM tree should be built from parsing an inventory dump
00212       if (vm.count ("inventory")) {
00213         ioInventoryFilename = vm["inventory"].as< std::string >();
00214         std::cout << "Input inventory filename is: " << ioInventoryFilename
00215                   << std::endl;
00216
00217       } else {
00218         // The built-in option is not selected. However, no inventory dump
00219         // file is specified
00220         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00221                   << " -f/--for_schedule and -s/--schedule options "
00222                   << "must be specified" << std::endl;
00223       }
00224
00225     } else {
00226       // The BOM tree should be built from parsing a schedule (and O&D) file
00227       if (vm.count ("schedule")) {
00228         ioScheduleInputFilename = vm["schedule"].as< std::string >();
00229         std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00230                   << std::endl;
00231
00232       } else {
00233         // The built-in option is not selected. However, no schedule file
00234         // is specified
00235         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00236                   << " -f/--for_schedule and -s/--schedule options "
00237                   << "must be specified" << std::endl;
00238       }
00239
00240       if (vm.count ("ond")) {
00241         ioODInputFilename = vm["ond"].as< std::string >();
00242         std::cout << "Input O&D filename is: " << ioODInputFilename <<
    std::endl;
00243       }
00244
00245       if (vm.count ("yield")) {
00246         ioYieldInputFilename = vm["yield"].as< std::string >();
00247         std::cout << "Input yield filename is: "
00248                   << ioYieldInputFilename << std::endl;
00249       }
00250     }
00251   }
00252
00253   if (vm.count ("log")) {
00254     ioLogFilename = vm["log"].as< std::string >();
00255     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00256   }
00257
00258   return 0;
00259 }
00260
00261
00262 // ///////// M A I N ////////////
00263 int main (int argc, char* argv[]) {
00264
00265   // State whether the BOM tree should be built-in or parsed from an
00266   // input file
00267   bool isBuiltin;
00268   bool isForSchedule;
00269
00270   // Input file names
00271   stdair::Filename_T lInventoryFilename;
00272   stdair::Filename_T lScheduleInputFilename;
00273   stdair::Filename_T lODInputFilename;
00274   stdair::Filename_T lYieldInputFilename;
```

```
00275
00276   // Parameters for the sale
00277   std::string lSegmentDateKey;
00278   stdair::ClassCode_T lClassCode;
00279   stdair::PartySize_T lPartySize;
00280
00281   // Output log File
00282   stdair::Filename_T lLogFilename;
00283
00284   // Call the command-line option parser
00285   const int lOptionParserStatus =
00286     readConfiguration (argc, argv, isBuiltin, isForSchedule, lInventoryFilename
      ,
00287                        lScheduleInputFilename, lODInputFilename,
00288                        lYieldInputFilename, lSegmentDateKey, lClassCode,
00289                        lPartySize, lLogFilename);
00290
00291   if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00292     return 0;
00293   }
00294
00295   // Set the log parameters
00296   std::ofstream logOutputFile;
00297   // Open and clean the log outputfile
00298   logOutputFile.open (lLogFilename.c_str());
00299   logOutputFile.clear();
00300
00301   // Initialise the inventory service
00302   const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00303   AIRINV::AIRINV_Master_Service airinvService (
      lLogParams);
00304
00305   // DEBUG
00306   STDAIR_LOG_DEBUG ("Welcome to AirInv");
00307
00308   // Check wether or not a (CSV) input file should be read
00309   if (isBuiltin == true) {
00310
00311     // Build the sample BOM tree for RMOL
00312     airinvService.buildSampleBom();
00313
00314     // Define a specific segment-date key for the sample BOM tree
00315     lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
00316
00317   } else {
00318     if (isForSchedule == true) {
00319       // Build the BOM tree from parsing a schedule file (and O&D list)
00320       AIRRAC::YieldFilePath lYieldFilePath (lYieldInputFilename);
00321       airinvService.parseAndLoad (lScheduleInputFilename, lODInputFilename,
00322                                   lYieldFilePath);
00323
00324       if (lSegmentDateKey == K_AIRINV_DEFAULT_SEGMENT_DATE_KEY) {
00325         // Define a specific segment-date key for the schedule-based inventory
00326         lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
00327       }
00328
00329     } else {
00330       // Build the BOM tree from parsing an inventory dump file
00331       airinvService.parseAndLoad (lInventoryFilename);
00332     }
00333   }
00334
00335   // Make a booking
00336   const bool isSellSuccessful =
00337     airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);
00338
00339   // DEBUG
00340   STDAIR_LOG_DEBUG ("Sale ('" << lSegmentDateKey << "', " << lClassCode << ": "
00341                     << lPartySize << ") successful? " << isSellSuccessful);
00342
00343   // DEBUG: Display the whole BOM tree
00344   const std::string& lCSVDump = airinvService.csvDisplay();
00345   STDAIR_LOG_DEBUG (lCSVDump);
00346
00347   // Close the Log outputFile
00348   logOutputFile.close();
00349
00350   /*
00351     Note: as that program is not intended to be run on a server in
00352     production, it is better not to catch the exceptions. When it
00353     happens (that an exception is throwned), that way we get the
00354     call stack.
00355   */
00356
00357   return 0;
00358 }
```

23.29 airinv/batches/parseInventory.cpp File Reference

23.30 parseInventory.cpp

```
00001
00005 // STL
00006 #include <cassert>
00007 #include <iostream>
00008 #include <sstream>
00009 #include <fstream>
00010 #include <string>
00011 // Boost (Extended STL)
00012 #include <boost/program_options.hpp>
00013 #include <boost/tokenizer.hpp>
00014 // StdAir
00015 #include <stdair/basic/BasLogParams.hpp>
00016 #include <stdair/basic/BasDBParams.hpp>
00017 #include <stdair/service/Logger.hpp>
00018 // AirInv
00019 #include <airinv/AIRINV_Master_Service.hpp>
00020 #include <airinv/config/airinv-paths.hpp>
00021
00022 // //////// Constants //////
00026 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("parseInventory.log");
00027
00031 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00032                                                         "/invdump01.csv");
00036 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00037                                                       "/schedule01.csv");
00041 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00042                                                  "/ond01.csv");
00043
00047 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00048                                                    "/yieldstore01.csv");
00049
00053 const std::string K_AIRINV_DEFAULT_SEGMENT_DATE_KEY ("SV,5,2010-03-11,KBP,JFK")
      ;
00054
00058 const stdair::ClassCode_T K_AIRINV_DEFAULT_CLASS_CODE ("Y");
00059
00063 const stdair::PartySize_T K_AIRINV_DEFAULT_PARTY_SIZE (2);
00064
00069 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00070
00075 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00076
00080 const int K_AIRINV_EARLY_RETURN_STATUS = 99;
00081
00082 // ///////// Parsing of Options & Configuration /////////
00083 // A helper function to simplify the main part.
00084 template<class T> std::ostream& operator<< (std::ostream& os,
00085                                             const std::vector<T>& v) {
00086   std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00087   return os;
00088 }
00089
00093 int readConfiguration (int argc, char* argv[],
00094                        bool& ioIsBuiltin, bool& ioIsForSchedule,
00095                        stdair::Filename_T& ioInventoryFilename,
00096                        stdair::Filename_T& ioScheduleInputFilename,
00097                        stdair::Filename_T& ioODInputFilename,
00098                        stdair::Filename_T& ioYieldInputFilename,
00099                        std::string& ioSegmentDateKey,
00100                        stdair::ClassCode_T& ioClassCode,
00101                        stdair::PartySize_T& ioPartySize,
00102                        std::string& ioLogFilename) {
00103   // Default for the built-in input
00104   ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;
00105
00106   // Default for the inventory or schedule option
00107   ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00108
00109   // Declare a group of options that will be allowed only on command line
00110   boost::program_options::options_description generic ("Generic options");
00111   generic.add_options()
00112     ("prefix", "print installation prefix")
00113     ("version,v", "print version string")
00114     ("help,h", "produce help message");
00115
00116   // Declare a group of options that will be allowed both on command
00117   // line and in config file
00118
00119   boost::program_options::options_description config ("Configuration");
00120   config.add_options()
00121     ("builtin,b",
```

```
00122       "The sample BOM tree can be either built-in or parsed from an input file.
      That latter must then be given with the -i/--inventory or -s/--schedule option")
00123      ("for_schedule,f",
00124       "The BOM tree should be built from a schedule file (instead of from an
      inventory dump)")
00125      ("inventory,i",
00126       boost::program_options::value< std::string >(&ioInventoryFilename)->
     default_value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00127       "(CSV) input file for the inventory")
00128      ("schedule,s",
00129       boost::program_options::value< std::string >(&ioScheduleInputFilename)->
     default_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00130       "(CSV) input file for the schedule")
00131      ("ond,o",
00132       boost::program_options::value< std::string >(&ioODInputFilename)->
     default_value(K_AIRINV_DEFAULT_OND_FILENAME),
00133       "(CSV) input file for the O&D")
00134      ("yield,y",
00135       boost::program_options::value< std::string >(&ioYieldInputFilename)->
     default_value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00136       "(CSV) input file for the yield")
00137      ("segment_date_key,k",
00138       boost::program_options::value< std::string >(&ioSegmentDateKey)->
     default_value(K_AIRINV_DEFAULT_SEGMENT_DATE_KEY),
00139       "Segment-date key")
00140      ("class_code,c",
00141       boost::program_options::value< stdair::ClassCode_T >(&ioClassCode)->
     default_value(K_AIRINV_DEFAULT_CLASS_CODE),
00142       "Class code")
00143      ("party_size,p",
00144       boost::program_options::value< stdair::PartySize_T >(&ioPartySize)->
     default_value(K_AIRINV_DEFAULT_PARTY_SIZE),
00145       "Party size")
00146      ("log,l",
00147       boost::program_options::value< std::string >(&ioLogFilename)->
     default_value(K_AIRINV_DEFAULT_LOG_FILENAME),
00148       "Filename for the logs")
00149      ;
00150
00151    // Hidden options, will be allowed both on command line and
00152    // in config file, but will not be shown to the user.
00153    boost::program_options::options_description hidden ("Hidden options");
00154    hidden.add_options()
00155      ("copyright",
00156       boost::program_options::value< std::vector<std::string> >(),
00157       "Show the copyright (license)");
00158
00159    boost::program_options::options_description cmdline_options;
00160    cmdline_options.add(generic).add(config).add(hidden);
00161
00162    boost::program_options::options_description config_file_options;
00163    config_file_options.add(config).add(hidden);
00164    boost::program_options::options_description visible ("Allowed options");
00165    visible.add(generic).add(config);
00166
00167    boost::program_options::positional_options_description p;
00168    p.add ("copyright", -1);
00169
00170    boost::program_options::variables_map vm;
00171    boost::program_options::
00172      store (boost::program_options::command_line_parser (argc, argv).
00173             options (cmdline_options).positional(p).run(), vm);
00174
00175    std::ifstream ifs ("airinv.cfg");
00176    boost::program_options::store (parse_config_file (ifs, config_file_options),
00177                                   vm);
00178    boost::program_options::notify (vm);
00179
00180    if (vm.count ("help")) {
00181      std::cout << visible << std::endl;
00182      return K_AIRINV_EARLY_RETURN_STATUS;
00183    }
00184
00185    if (vm.count ("version")) {
00186      std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION
     << std::endl;
00187      return K_AIRINV_EARLY_RETURN_STATUS;
00188    }
00189
00190    if (vm.count ("prefix")) {
00191      std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00192      return K_AIRINV_EARLY_RETURN_STATUS;
00193    }
00194
00195    if (vm.count ("builtin")) {
00196      ioIsBuiltin = true;
00197    }
```

```
00198   const std::string isBuiltinStr = (ioIsBuiltin == true)?"yes":"no";
00199   std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
00200
00201   if (vm.count ("for_schedule")) {
00202     ioIsForSchedule = true;
00203   }
00204   const std::string isForScheduleStr = (ioIsForSchedule == true)?"yes":"no";
00205   std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00206             << std::endl;
00207
00208   if (ioIsBuiltin == false) {
00209
00210     if (ioIsForSchedule == false) {
00211       // The BOM tree should be built from parsing an inventory dump
00212       if (vm.count ("inventory")) {
00213         ioInventoryFilename = vm["inventory"].as< std::string >();
00214         std::cout << "Input inventory filename is: " << ioInventoryFilename
00215                   << std::endl;
00216
00217       } else {
00218         // The built-in option is not selected. However, no inventory dump
00219         // file is specified
00220         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00221                   << " -f/--for_schedule and -s/--schedule options "
00222                   << "must be specified" << std::endl;
00223       }
00224
00225     } else {
00226       // The BOM tree should be built from parsing a schedule (and O&D) file
00227       if (vm.count ("schedule")) {
00228         ioScheduleInputFilename = vm["schedule"].as< std::string >();
00229         std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00230                   << std::endl;
00231
00232       } else {
00233         // The built-in option is not selected. However, no schedule file
00234         // is specified
00235         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00236                   << " -f/--for_schedule and -s/--schedule options "
00237                   << "must be specified" << std::endl;
00238       }
00239
00240       if (vm.count ("ond")) {
00241         ioODInputFilename = vm["ond"].as< std::string >();
00242         std::cout << "Input O&D filename is: " << ioODInputFilename <<
      std::endl;
00243       }
00244
00245       if (vm.count ("yield")) {
00246         ioYieldInputFilename = vm["yield"].as< std::string >();
00247         std::cout << "Input yield filename is: "
00248                   << ioYieldInputFilename << std::endl;
00249       }
00250     }
00251   }
00252
00253   if (vm.count ("log")) {
00254     ioLogFilename = vm["log"].as< std::string >();
00255     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00256   }
00257
00258   return 0;
00259 }
00260
00261
00262 // ///////// M A I N ////////////
00263 int main (int argc, char* argv[]) {
00264
00265   // State whether the BOM tree should be built-in or parsed from an
00266   // input file
00267   bool isBuiltin;
00268   bool isForSchedule;
00269
00270   // Input file names
00271   stdair::Filename_T lInventoryFilename;
00272   stdair::Filename_T lScheduleInputFilename;
00273   stdair::Filename_T lODInputFilename;
00274   stdair::Filename_T lYieldInputFilename;
00275
00276   // Parameters for the sale
00277   std::string lSegmentDateKey;
00278   stdair::ClassCode_T lClassCode;
00279   stdair::PartySize_T lPartySize;
00280
00281   // Output log File
00282   stdair::Filename_T lLogFilename;
00283
```

```
00284   // Call the command-line option parser
00285   const int lOptionParserStatus =
00286     readConfiguration (argc, argv, isBuiltin, isForSchedule, lInventoryFilename
    ,
00287                        lScheduleInputFilename, lODInputFilename,
00288                        lYieldInputFilename, lSegmentDateKey, lClassCode,
00289                        lPartySize, lLogFilename);
00290
00291   if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00292     return 0;
00293   }
00294
00295   // Set the log parameters
00296   std::ofstream logOutputFile;
00297   // Open and clean the log outputfile
00298   logOutputFile.open (lLogFilename.c_str());
00299   logOutputFile.clear();
00300
00301   // Initialise the inventory service
00302   const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00303   AIRINV::AIRINV_Master_Service airinvService (
    lLogParams);
00304
00305   // DEBUG
00306   STDAIR_LOG_DEBUG ("Welcome to AirInv");
00307
00308   // Check wether or not a (CSV) input file should be read
00309   if (isBuiltin == true) {
00310
00311     // Build the sample BOM tree for RMOL
00312     airinvService.buildSampleBom();
00313
00314     // Define a specific segment-date key for the sample BOM tree
00315     //lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
00316     lSegmentDateKey = "SQ,11,2010-02-08,SIN,BKK";
00317
00318   } else {
00319     if (isForSchedule == true) {
00320       // Build the BOM tree from parsing a schedule file (and O&D list)
00321       AIRRAC::YieldFilePath lYieldFilePath (lYieldInputFilename);
00322       airinvService.parseAndLoad (lScheduleInputFilename, lODInputFilename,
00323                                   lYieldFilePath);
00324
00325       if (lSegmentDateKey == K_AIRINV_DEFAULT_SEGMENT_DATE_KEY) {
00326         // Define a specific segment-date key for the schedule-based inventory
00327         lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
00328       }
00329
00330     } else {
00331       // Build the BOM tree from parsing an inventory dump file
00332       airinvService.parseAndLoad (lInventoryFilename);
00333     }
00334   }
00335
00336   // Make a booking
00337   const bool isSellSuccessful =
00338     airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);
00339
00340   // DEBUG
00341   STDAIR_LOG_DEBUG ("Sale ('" << lSegmentDateKey << "', " << lClassCode << ": "
00342                     << lPartySize << ") successful? " << isSellSuccessful);
00343
00344   // DEBUG: Display the whole BOM tree
00345   const std::string& lCSVDump = airinvService.csvDisplay();
00346   STDAIR_LOG_DEBUG (lCSVDump);
00347
00348   // Close the Log outputFile
00349   logOutputFile.close();
00350
00351   /*
00352     Note: as that program is not intended to be run on a server in
00353     production, it is better not to catch the exceptions. When it
00354     happens (that an exception is throwned), that way we get the
00355     call stack.
00356   */
00357
00358   return 0;
00359 }
```

23.31 airinv/bom/AirportList.hpp File Reference

```
#include <set>
```

```
#include <vector>
#include <stdair/stdair_basic_types.hpp>
```

Namespaces

- namespace AIRINV

Typedefs

- typedef std::set
  < stdair::AirportCode_T > AIRINV::AirportList_T
- typedef std::vector
  < stdair::AirportCode_T > AIRINV::AirportOrderedList_T

23.32 AirportList.hpp

```
00001 #ifndef __AIRINV_BOM_AIRPORTLIST_HPP
00002 #define __AIRINV_BOM_AIRPORTLIST_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <set>
00009 #include <vector>
00010 // STDAIR
00011 #include <stdair/stdair_basic_types.hpp>
00012
00013 namespace AIRINV {
00014
00016   typedef std::set<stdair::AirportCode_T> AirportList_T;
00017   typedef std::vector<stdair::AirportCode_T> AirportOrderedList_T
      ;
00018
00019 }
00020 #endif // __AIRINV_BOM_AIRPORTLIST_HPP
```

23.33 airinv/bom/BomAbstract.cpp File Reference

```
#include <airinv/bom/BomAbstract.hpp>
```

Namespaces

- namespace AIRINV

23.34 BomAbstract.cpp

```
00001 // //////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////
00004 // AIRINV
00005 #include <airinv/bom/BomAbstract.hpp>
00006
00007 namespace AIRINV {
00008
00009 }
```

23.35 airinv/bom/BomAbstract.hpp File Reference

```
#include <iosfwd>
#include <string>
```

Classes

- class AIRINV::BomAbstract

Namespaces

- namespace AIRINV

Functions

- template<class charT , class traits >
  std::basic_ostream< charT,
  traits > & operator<< (std::basic_ostream< charT, traits > &ioOut, const AIRINV::BomAbstract &iBom)
- template<class charT , class traits >
  std::basic_istream< charT,
  traits > & operator>> (std::basic_istream< charT, traits > &ioIn, AIRINV::BomAbstract &ioBom)

23.35.1 Function Documentation

23.35.1.1 template<class charT , class traits > std::basic_ostream<charT, traits>& operator<< (std::basic_ostream< charT, traits > & *ioOut,* const AIRINV::BomAbstract & *iBom*) [inline]

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (p653) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line 56 of file BomAbstract.hpp.

23.35.1.2 template<class charT , class traits > std::basic_istream<charT, traits>& operator>> (std::basic_istream< charT, traits > & *ioIn,* AIRINV::BomAbstract & *ioBom*) [inline]

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (pp655-657) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line 84 of file BomAbstract.hpp.

References AIRINV::BomAbstract::fromStream().

23.36 BomAbstract.hpp

```
00001 #ifndef __AIRINV_BOM_BOMABSTRACT_HPP
00002 #define __AIRINV_BOM_BOMABSTRACT_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <iosfwd>
00009 #include <string>
00010
00011 namespace AIRINV {
00012
00014   class BomAbstract {
00015     friend class FacBomAbstract;
00016   public:
00017     // ////////// Display support methods /////////
00020     virtual void toStream (std::ostream& ioOut) const = 0;
```

```
00021
00024     virtual void fromStream (std::istream& ioIn) = 0;
00025
00027     virtual std::string toString() const = 0;
00028
00031     virtual std::string describeKey() const = 0;
00032
00035     virtual std::string describeShortKey() const = 0;
00036
00037
00038   protected:
00040     BomAbstract() {}
00041     BomAbstract(const BomAbstract&) {}
00042
00044     virtual ~BomAbstract() {}
00045   };
00046 }
00047
00053 template <class charT, class traits>
00054 inline
00055 std::basic_ostream<charT, traits>&
00056 operator<< (std::basic_ostream<charT, traits>& ioOut,
00057             const AIRINV::BomAbstract& iBom) {
00063   std::basic_ostringstream<charT,traits> ostr;
00064   ostr.copyfmt (ioOut);
00065   ostr.width (0);
00066
00067   // Fill string stream
00068   iBom.toStream (ostr);
00069
00070   // Print string stream
00071   ioOut << ostr.str();
00072
00073   return ioOut;
00074 }
00075
00081 template <class charT, class traits>
00082 inline
00083 std::basic_istream<charT, traits>&
00084 operator>> (std::basic_istream<charT, traits>& ioIn,
00085             AIRINV::BomAbstract& ioBom) {
00086   // Fill Bom object with input stream
00087   ioBom.fromStream (ioIn);
00088   return ioIn;
00089 }
00090
00091 #endif // __AIRINV_BOM_BOMABSTRACT_HPP
```

23.37 airinv/bom/BomRootHelper.cpp File Reference

```
#include <cassert>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/bom/Inventory.hpp>
#include <airinv/bom/BomRootHelper.hpp>
#include <airinv/bom/InventoryHelper.hpp>
```

Namespaces

- namespace AIRINV

23.38 BomRootHelper.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/BomManager.hpp>
00008 #include <stdair/bom/BomRoot.hpp>
00009 #include <stdair/bom/Inventory.hpp>
00010 // AIRINV
00011 #include <airinv/bom/BomRootHelper.hpp>
```

```
00012 #include <airinv/bom/InventoryHelper.hpp>
00013
00014 namespace AIRINV {
00015   // ////////////////////////////////////////////////////////////////////
00016   void BomRootHelper::fillFromRouting (const
      stdair::BomRoot& iBomRoot) {
00017     const stdair::InventoryList_T& lInventoryList =
00018       stdair::BomManager::getList<stdair::Inventory> (iBomRoot);
00019
00020     // Browse the list of inventories and update each inventory.
00021     for (stdair::InventoryList_T::const_iterator itInventory =
00022            lInventoryList.begin();
00023          itInventory != lInventoryList.end(); ++itInventory) {
00024       const stdair::Inventory* lCurrentInventory_ptr = *itInventory;
00025       assert (lCurrentInventory_ptr != NULL);
00026       InventoryHelper::fillFromRouting (*
      lCurrentInventory_ptr);
00027     }
00028   }
00029
00030 }
```

23.39 airinv/bom/BomRootHelper.hpp File Reference

Classes

- class AIRINV::BomRootHelper

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.40 BomRootHelper.hpp

```
00001 #ifndef __AIRINV_BOM_BOMROOTHELPER_HPP
00002 #define __AIRINV_BOM_BOMROOTHELPER_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007
00008 // Forward declarations.
00009 namespace stdair {
00010   class BomRoot;
00011 }
00012
00013 namespace AIRINV {
00016   class BomRootHelper {
00017   public:
00018     // ////////// Business Methods /////////
00021     static void fillFromRouting (const stdair::BomRoot&);
00022   };
00023
00024 }
00025 #endif // __AIRINV_BOM_BOMROOTHELPER_HPP
```

23.41 airinv/bom/BookingClassHelper.cpp File Reference

```
#include <cassert>
#include <stdair/bom/BookingClass.hpp>
#include <airinv/bom/BookingClassHelper.hpp>
```

Namespaces

- namespace AIRINV

23.42 BookingClassHelper.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/BookingClass.hpp>
00008 // AIRINV
00009 #include <airinv/bom/BookingClassHelper.hpp>
00010
00011 namespace AIRINV {
00012
00013 }
```

23.43 airinv/bom/BookingClassHelper.hpp File Reference

Classes

- class AIRINV::BookingClassHelper

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.44 BookingClassHelper.hpp

```
00001 #ifndef __AIRINV_BOM_BOOKINGCLASSHELPER_HPP
00002 #define __AIRINV_BOM_BOOKINGCLASSHELPER_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // StdAir
00008 //#include <stdair/stdair_basic_types.hpp>
00009
00010 // Forward declarations
00011 namespace stdair {
00012   class BookingClass;
00013 }
00014
00015 namespace AIRINV {
00016
00019   class BookingClassHelper {
00020
00021   };
00022
00023 }
00024 #endif // __AIRINV_BOM_BOOKINGCLASSHELPER_HPP
```

23.45 airinv/bom/BookingClassStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <airinv/bom/BookingClassStruct.hpp>
```

Namespaces

- namespace AIRINV

23.46 BookingClassStruct.cpp

```
00001 // //////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/bom/BookingClass.hpp>
00010 // AirInv
00011 #include <airinv/bom/BookingClassStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015   // //////////////////////////////////////////////////////////////////////
00016   BookingClassStruct::BookingClassStruct
      () {
00017   }
00018
00019   // //////////////////////////////////////////////////////////////////////
00020   stdair::ClassCode_T BookingClassStruct::getFullSubclassCode
      () const {
00021     std::ostringstream oStr;
00022     oStr << _classCode << _subclassCode;
00023     return oStr.str();
00024   }
00025
00026   // //////////////////////////////////////////////////////////////////////
00027   const std::string BookingClassStruct::describe()
       const {
00028     std::ostringstream ostr;
00029     ostr << "            " << _classCode << _subclassCode
00030          << " (" << _parentClassCode << _parentSubclassCode
       << ")"
00031          << ", " << _cumulatedProtection << ":" <<
      _protection
00032          << ", " << _nego
00033          << ", " << _noShowPercentage << ":" <<
      _overbookingPercentage
00034          << ", " << _nbOfBookings << ":" << _nbOfGroupBookings
00035          << ":" << _nbOfPendingGroupBookings << ":" <<
       _nbOfStaffBookings
00036          << ":" << _nbOfWLBookings << ":" << _etb
00037          << ", " << _netClassAvailability  << ":" <<
      _segmentAvailability
00038          << ":" << _netRevenueAvailability
00039          << std::endl;
00040     return ostr.str();
00041   }
00042
00043   // //////////////////////////////////////////////////////////////////////
00044   void BookingClassStruct::fill (stdair::BookingClass&
      ioBookingClass) const {
00045     // Set the Yield Range Upper Value
00046     // ioBookingClass.setYieldRangeValue (_yieldRangeUpperValue);
00047
00048     // Set the Availability
00049     // ioBookingClass.setAvailability (_availability);
00050
00051     // Set the number of seats
00052     // ioBookingClass.setNbOfSeats (_nbOfSeats);
00053
00054     // Set the Seat Index
00055     // ioBookingClass.setSeatIndex (_seatIndex);
00056   }
00057
00058 }
```

23.47 airinv/bom/BookingClassStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

Classes

- struct AIRINV::BookingClassStruct

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

Typedefs

- typedef std::vector
  < BookingClassStruct > AIRINV::BookingClassStructList_T

23.48 BookingClassStruct.hpp

```
00001 #ifndef __AIRINV_BOM_BOOKINGCLASSSTRUCT_HPP
00002 #define __AIRINV_BOM_BOOKINGCLASSSTRUCT_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/AIRINV_Types.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018   class BookingClass;
00019 }
00020
00021 namespace AIRINV {
00022
00024   struct BookingClassStruct : public stdair::StructAbstract {
00025     // Attributes
00026     stdair::ClassCode_T _classCode;
00027     stdair::SubclassCode_T _subclassCode;
00028     stdair::ClassCode_T _parentClassCode;
00029     stdair::SubclassCode_T _parentSubclassCode;
00030     stdair::AuthorizationLevel_T _cumulatedProtection;
00031     stdair::AuthorizationLevel_T _protection;
00032     stdair::NbOfSeats_T _nego;
00033     stdair::OverbookingRate_T _noShowPercentage;
00034     stdair::OverbookingRate_T _overbookingPercentage;
00035     stdair::NbOfBookings_T _nbOfBookings;
00036     stdair::NbOfBookings_T _nbOfGroupBookings;
00037     stdair::NbOfBookings_T _nbOfPendingGroupBookings;
00038     stdair::NbOfBookings_T _nbOfStaffBookings;
00039     stdair::NbOfBookings_T _nbOfWLBookings;
00040     stdair::NbOfBookings_T _etb;
00041     stdair::Availability_T _netClassAvailability;
00042     stdair::Availability_T _segmentAvailability;
00043     stdair::Availability_T _netRevenueAvailability;
00044
00046     stdair::ClassCode_T getFullSubclassCode() const;
00047
00050     void fill (stdair::BookingClass&) const;
00051
00053     const std::string describe() const;
00054
00056     BookingClassStruct();
00057   };
00058
00060   typedef std::vector<BookingClassStruct> BookingClassStructList_T
      ;
00061
00062 }
00063 #endif // __AIRINV_BOM_BOOKINGCLASSSTRUCT_HPP
```

23.49 airinv/bom/BucketStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/bom/Bucket.hpp>
#include <airinv/bom/BucketStruct.hpp>
```

Namespaces

- namespace AIRINV

23.50 BucketStruct.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/bom/Bucket.hpp>
00010 // AirInv
00011 #include <airinv/bom/BucketStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015   // ////////////////////////////////////////////////////////////////////
00016   BucketStruct::BucketStruct() {
00017   }
00018
00019   // ////////////////////////////////////////////////////////////////////
00020   const std::string BucketStruct::describe() const {
00021     std::ostringstream ostr;
00022     ostr << "            " << _yieldRangeUpperValue << ":"
       << _availability
00023          << ":" << _nbOfSeats  << ":" << _seatIndex
00024          << std::endl;
00025     return ostr.str();
00026   }
00027
00028   // ////////////////////////////////////////////////////////////////////
00029   void BucketStruct::fill (stdair::Bucket& ioBucket) const {
00030     // Set the Yield Range Upper Value
00031     ioBucket.setYieldRangeUpperValue (_yieldRangeUpperValue
      );
00032
00033     // Set the Availability
00034     ioBucket.setAvailability (_availability);
00035
00036     // Set the number of sold seats
00037     ioBucket.setSoldSeats (_nbOfSeats);
00038   }
00039
00040 }
```

23.51 airinv/bom/BucketStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

Classes

- struct AIRINV::BucketStruct

  Utility Structure for the parsing of Bucket structures.

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

Typedefs

- typedef std::vector< BucketStruct > AIRINV::BucketStructList_T

23.52 BucketStruct.hpp

```
00001 #ifndef __AIRINV_BOM_BUCKETSTRUCT_HPP
00002 #define __AIRINV_BOM_BUCKETSTRUCT_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/AIRINV_Types.hpp>
00015
00017 namespace stdair {
00018   class Bucket;
00019 }
00020
00021 namespace AIRINV {
00022
00026   struct BucketStruct : public stdair::StructAbstract {
00027     // Attributes
00028     stdair::Yield_T _yieldRangeUpperValue;
00029     stdair::CabinCapacity_T _availability;
00030     stdair::NbOfSeats_T _nbOfSeats;
00031     stdair::SeatIndex_T _seatIndex;
00032
00034     void fill (stdair::Bucket&) const;
00035
00037     const std::string describe() const;
00038
00040     BucketStruct();
00041   };
00042
00044   typedef std::vector<BucketStruct> BucketStructList_T;
00045
00046 }
00047 #endif // __AIRINV_BOM_BUCKETSTRUCT_HPP
```

23.53 airinv/bom/DCPEventStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <vector>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/bom/DCPEventStruct.hpp>
```

Namespaces

- namespace AIRINV

23.54 DCPEventStruct.cpp

```
00001 // //////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 #include <vector>
00008 // StdAir
00009 #include <stdair/basic/BasConst_General.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // AirInv
00012 #include <airinv/AIRINV_Types.hpp>
00013 #include <airinv/bom/DCPEventStruct.hpp>
00014
00015 namespace AIRINV {
00016
00017   // //////////////////////////////////////////////////////////////////
00018   DCPEventStruct::DCPEventStruct ()
00019     : _origin(""),
00020       _destination(""),
00021       _dateRangeStart(stdair::DEFAULT_DATE),
00022       _dateRangeEnd(stdair::DEFAULT_DATE),
00023       _timeRangeStart(stdair::DEFAULT_EPSILON_DURATION),
00024       _timeRangeEnd(stdair::DEFAULT_EPSILON_DURATION),
00025       _cabinCode (""),
00026       _pos (""),
00027       _advancePurchase(0),
00028       _saturdayStay("T"),
00029       _changeFees("T"),
00030       _nonRefundable("T"),
00031       _minimumStay(0),
00032       _DCP(0),
00033       _airlineCode(""),
00034       _classCode("") {
00035   }
00036
00037   // //////////////////////////////////////////////////////////////////
00038   stdair::Date_T DCPEventStruct::getDate() const {
00039     _itYear.check(); _itMonth.check(); _itDay.check();
00040     return stdair::Date_T (_itYear._value, _itMonth._value,
      _itDay._value);
00041   }
00042
00043   // //////////////////////////////////////////////////////////////////
00044   stdair::Duration_T DCPEventStruct::getTime() const {
00045     _itHours.check(); _itMinutes.check(); _itSeconds
      .check();
00046     return boost::posix_time::hours (_itHours._value)
00047       + boost::posix_time::minutes (_itMinutes._value)
00048       + boost::posix_time::seconds (_itSeconds._value);
00049   }
00050
00051
00052   // //////////////////////////////////////////////////////////////////
00053   const std::string DCPEventStruct::describe () const {
00054     std::ostringstream ostr;
00055     ostr << "DCPEvent: "
00056          << _origin << "-" << _destination
00057          << ", POS(" << _pos << "), ["
00058          << _dateRangeStart << "/" << _dateRangeEnd
       << "] - ["
00059          << boost::posix_time::to_simple_string(_timeRangeStart)
       << "/"
00060          << boost::posix_time::to_simple_string(_timeRangeEnd) <<
      "]\n    "
00061          << "-Cabin code- " << _cabinCode << "\n    "
00062          << "-Channel-    " << _channel << "\n    "
00063          << "-Conditions- " << _saturdayStay << ", " <<
      _changeFees << ", "
00064          << _nonRefundable << ", " << _advancePurchase
       << ", "
00065          << _minimumStay << "\n    "
00066          << "-DCP-       " << _DCP << "\n          ";
00067     assert (_airlineCodeList.size() == _classCodeList
      .size());
00068     stdair::ClassList_StringList_T::const_iterator lItCurrentClassCode =
00069       _classCodeList.begin();
```

```
00070     stdair::AirlineCode_T lAirlineCode;
00071     std::string lClassCode;
00072     for (stdair::AirlineCodeList_T::const_iterator lItCurrentAirlineCode =
00073            _airlineCodeList.begin();
00074          lItCurrentAirlineCode != _airlineCodeList.end();
00075          lItCurrentAirlineCode++) {
00076       lAirlineCode = *lItCurrentAirlineCode;
00077       lClassCode = *lItCurrentClassCode;
00078       ostr << lAirlineCode << ", " << lClassCode;
00079       ostr << "         ";
00080       lItCurrentClassCode++;
00081     }
00082     ostr << std::endl;
00083     return ostr.str();
00084   }
00085
00086   // ////////////////////////////////////////////////////////////////////
00087   const stdair::AirlineCode_T& DCPEventStruct::getFirstAirlineCode
       () const {
00088     assert (_airlineCodeList.size() > 0);
00089     stdair::AirlineCodeList_T::const_iterator itFirstAirlineCode =
00090       _airlineCodeList.begin();
00091     return *itFirstAirlineCode;
00092   }
00093
00094   // ////////////////////////////////////////////////////////////////////
00095   void DCPEventStruct::beginAirline () {
00096     _itCurrentAirlineCode = _airlineCodeList
      .begin();
00097   }
00098
00099   // ////////////////////////////////////////////////////////////////////
00100   bool DCPEventStruct::hasNotReachedEndAirline
       () const {
00101     bool result = (_itCurrentAirlineCode !=
      _airlineCodeList.end());
00102     return result;
00103   }
00104
00105   // ////////////////////////////////////////////////////////////////////
00106   stdair::AirlineCode_T DCPEventStruct::getCurrentAirlineCode
       () const {
00107     assert (_itCurrentAirlineCode != _airlineCodeList
      .end());
00108       return (*_itCurrentAirlineCode);
00109   }
00110
00111   // ////////////////////////////////////////////////////////////////////
00112   void DCPEventStruct::iterateAirline () {
00113     if (_itCurrentAirlineCode != _classCodeList
      .end()) {
00114       _itCurrentAirlineCode++;
00115     }
00116   }
00117
00118   // ////////////////////////////////////////////////////////////////////
00119   const std::string& DCPEventStruct::getFirstClassCode
       () const {
00120     assert (_classCodeList.size() > 0);
00121     stdair::ClassList_StringList_T::const_iterator itFirstClassCode =
00122       _classCodeList.begin();
00123     return *itFirstClassCode;
00124   }
00125
00126   // ////////////////////////////////////////////////////////////////////
00127   void DCPEventStruct::beginClassCode () {
00128     _itCurrentClassCode = _classCodeList.begin
      ();
00129   }
00130
00131   // ////////////////////////////////////////////////////////////////////
00132   bool DCPEventStruct::hasNotReachedEndClassCode
       () const {
00133     bool result = (_itCurrentClassCode != _classCodeList
      .end());
00134     return result;
00135   }
00136
00137   // ////////////////////////////////////////////////////////////////////
00138   std::string DCPEventStruct::getCurrentClassCode
       () const {
00139     assert (_itCurrentClassCode != _classCodeList
      .end());
00140     return (*_itCurrentClassCode);
00141   }
00142
00143
```

```
00144   // ////////////////////////////////////////////////////////////////////
00145   void DCPEventStruct::iterateClassCode () {
00146     if (_itCurrentClassCode != _classCodeList.
      end()) {
00147       _itCurrentClassCode++;
00148     }
00149   }
00150
00151 }
00152
```

23.55 airinv/bom/DCPEventStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_demand_types.hpp>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <stdair/basic/BasParserTypes.hpp>
#include <airinv/AIRINV_Types.hpp>
```

Classes

- struct AIRINV::DCPEventStruct

Namespaces

- namespace AIRINV

23.56 DCPEventStruct.hpp

```
00001 #ifndef __AIRINV_BOM_DCPEVENTSTRUCT_HPP
00002 #define __AIRINV_BOM_DCPEVENTSTRUCT_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_demand_types.hpp>
00012 #include <stdair/stdair_inventory_types.hpp>
00013 #include <stdair/basic/StructAbstract.hpp>
00014 #include <stdair/basic/BasParserTypes.hpp>
00015 // AirInv
00016 #include <airinv/AIRINV_Types.hpp>
00017
00018 namespace AIRINV {
00019
00021   struct DCPEventStruct : public stdair::StructAbstract {
00022   public:
00023
00025     DCPEventStruct ();
00026
00028     stdair::Date_T getDate() const;
00029
00031     stdair::Duration_T getTime() const;
00032
00034     const std::string describe() const;
00035
00037     const unsigned int getAirlineListSize () const {
00038       return _airlineCodeList.size();
00039     }
00040
00042     const unsigned int getClassCodeListSize () const {
00043       return _classCodeList.size();
00044     }
00045
00047     const stdair::AirlineCode_T& getFirstAirlineCode ()
```

```
    const;
00048
00052     void beginAirline ();
00053
00056     bool hasNotReachedEndAirline () const;
00057
00059     stdair::AirlineCode_T getCurrentAirlineCode () const;
00060
00063     void iterateAirline ();
00064
00066     const std::string& getFirstClassCode () const;
00067
00071     void beginClassCode ();
00072
00075     bool hasNotReachedEndClassCode () const;
00076
00078     std::string getCurrentClassCode () const;
00079
00082     void iterateClassCode ();
00083
00084   public:
00085     // ////////////////// Attributes /////////////////
00087     stdair::year_t _itYear;
00088     stdair::month_t _itMonth;
00089     stdair::day_t _itDay;
00090
00092     //long _itHours;
00093     stdair::hour_t _itHours;
00094     stdair::minute_t _itMinutes;
00095     stdair::second_t _itSeconds;
00096
00098     stdair::AirlineCodeList_T::iterator _itCurrentAirlineCode
    ;
00099
00101     stdair::ClassList_StringList_T::iterator _itCurrentClassCode
    ;
00102
00104     stdair::AirportCode_T _origin;
00105
00107     stdair::AirportCode_T _destination;
00108
00110     stdair::Date_T _dateRangeStart;
00111
00113     stdair::Date_T _dateRangeEnd;
00114
00116     stdair::Duration_T _timeRangeStart;
00117
00119     stdair::Duration_T _timeRangeEnd;
00120
00122     stdair::CabinCode_T _cabinCode;
00123
00125     stdair::CityCode_T _pos;
00126
00128     stdair::ChannelLabel_T _channel;
00129
00131     stdair::DayDuration_T _advancePurchase;
00132
00134     stdair::SaturdayStay_T _saturdayStay;
00135
00137     stdair::ChangeFees_T _changeFees;
00138
00140     stdair::NonRefundable_T _nonRefundable;
00141
00143     stdair::DayDuration_T _minimumStay;
00144
00146     stdair::PriceValue_T _DCP;
00147
00149     stdair::AirlineCode_T _airlineCode;
00150
00152     stdair::ClassCode_T _classCode;
00153
00155     stdair::AirlineCodeList_T _airlineCodeList;
00156
00158     //unsigned long int _nbOfAirlines;
00159
00161     stdair::ClassList_StringList_T _classCodeList;
00162
00163   };
00164
00165 }
00166 #endif // __AIRINV_BOM_DCPEVENTSTRUCT_HPP
```

23.57 airinv/bom/FareFamilyStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <airinv/bom/FareFamilyStruct.hpp>
```

Namespaces

- namespace AIRINV

23.58 FareFamilyStruct.cpp

```
00001 // //////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_Inventory.hpp>
00009 #include <stdair/bom/FareFamily.hpp>
00010 // AirInv
00011 #include <airinv/bom/FareFamilyStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015   // //////////////////////////////////////////////////////////////////////
00016   FareFamilyStruct::FareFamilyStruct()
00017     : _familyCode (stdair::DEFAULT_NULL_FARE_FAMILY_CODE),
00018       _classes (stdair::DEFAULT_NULL_CLASS_CODE) {
00019   }
00020
00021   // //////////////////////////////////////////////////////////////////////
00022   FareFamilyStruct::
00023   FareFamilyStruct (const stdair::FamilyCode_T& iFamilyCode,
00024                     const stdair::ClassList_String_T& iClasses)
00025     : _familyCode (iFamilyCode), _classes (iClasses) {
00026   }
00027
00028   // //////////////////////////////////////////////////////////////////////
00029   const std::string FareFamilyStruct::describe()
      const {
00030     std::ostringstream ostr;
00031
00032     ostr << "        " << _familyCode << " " << _classes <<
      ", ";
00033
00034     for (BookingClassStructList_T::const_iterator itBkgClass= _classList
      .begin();
00035          itBkgClass != _classList.end(); ++itBkgClass) {
00036       const BookingClassStruct& lBkgClass = *itBkgClass;
00037       ostr << lBkgClass.describe();
00038     }
00039     if (_classList.empty() == false) {
00040       ostr << std::endl;
00041     }
00042
00043     return ostr.str();
00044   }
00045
00046   // //////////////////////////////////////////////////////////////////////
00047   void FareFamilyStruct::fill (stdair::FareFamily&
      ioFareFamily) const {
00048     // Set attributes
00049     // ioFareFamily.setSomeAttribute (_someAttribute);
00050   }
00051
00052 }
```

23.59 airinv/bom/FareFamilyStruct.hpp File Reference

```
#include <string>
```

```
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/bom/BookingClassStruct.hpp>
```

Classes

- struct AIRINV::FareFamilyStruct

  Utility Structure for the parsing of fare family details.

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

Typedefs

- typedef std::vector
  < FareFamilyStruct > AIRINV::FareFamilyStructList_T

23.60 FareFamilyStruct.hpp

```
00001 #ifndef __AIRINV_BOM_FAREFAMILYSTRUCT_HPP
00002 #define __AIRINV_BOM_FAREFAMILYSTRUCT_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/bom/BookingClassStruct.hpp>
00015
00017 namespace stdair {
00018   class FareFamily;
00019 }
00020
00021 namespace AIRINV {
00022
00026   struct FareFamilyStruct : public stdair::StructAbstract {
00027     // Attributes
00028     stdair::FamilyCode_T _familyCode;
00029     stdair::ClassList_String_T _classes;
00030     BookingClassStructList_T _classList;
00031
00035     FareFamilyStruct();
00039     FareFamilyStruct (const stdair::FamilyCode_T&,
00040                       const stdair::ClassList_String_T&);
00041
00045     void fill (stdair::FareFamily&) const;
00046
00050     const std::string describe() const;
00051   };
00052
00056   typedef std::vector<FareFamilyStruct> FareFamilyStructList_T
      ;
00057
00058 }
00059 #endif // __AIRINV_BOM_FAREFAMILYSTRUCT_HPP
```

23.61 airinv/bom/FlightDateHelper.cpp File Reference

```
#include <cassert>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <airinv/bom/FlightDateHelper.hpp>
#include <airinv/bom/SegmentDateHelper.hpp>
#include <airinv/bom/SegmentCabinHelper.hpp>
```

Namespaces

- namespace AIRINV

23.62 FlightDateHelper.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/basic/BasConst_Inventory.hpp>
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/FlightDate.hpp>
00010 #include <stdair/bom/SegmentDate.hpp>
00011 #include <stdair/bom/SegmentCabin.hpp>
00012 #include <stdair/bom/LegCabin.hpp>
00013 // AIRINV
00014 #include <airinv/bom/FlightDateHelper.hpp>
00015 #include <airinv/bom/SegmentDateHelper.hpp>
00016 #include <airinv/bom/SegmentCabinHelper.hpp>
00017
00018 namespace AIRINV {
00019
00020   // ////////////////////////////////////////////////////////////////////
00021   void FlightDateHelper::
00022   updateBookingControls (stdair::FlightDate&
      ioFlightDate) {
00023
00024     // Parse the segment-cabin list and build the pseudo bid price vector.
00025     const stdair::SegmentDateList_T& lSDList =
00026       stdair::BomManager::getList<stdair::SegmentDate> (ioFlightDate);
00027     for (stdair::SegmentDateList_T::const_iterator itSD = lSDList.begin();
00028          itSD != lSDList.end(); ++itSD) {
00029       const stdair::SegmentDate* lSD_ptr = *itSD;
00030       assert (lSD_ptr != NULL);
00031
00032       //
00033       const stdair::SegmentCabinList_T& lSCList =
00034         stdair::BomManager::getList<stdair::SegmentCabin> (*lSD_ptr);
00035       for (stdair::SegmentCabinList_T::const_iterator itSC = lSCList.begin();
00036            itSC != lSCList.end(); ++itSC) {
00037         stdair::SegmentCabin* lSC_ptr = *itSC;
00038         assert (lSC_ptr != NULL);
00039
00040         // Build the pseudo bid price vector for the segment-cabin.
00041         SegmentCabinHelper::buildPseudoBidPriceVector
      (*lSC_ptr);
00042
00043         // Update the booking controls using the pseudo bid price vector.
00044         SegmentCabinHelper::
00045           updateBookingControlsUsingPseudoBidPriceVector
      (*lSC_ptr);
00046       }
00047     }
00048   }
00049
00050   // ////////////////////////////////////////////////////////////////////
00051   void FlightDateHelper::fillFromRouting(const
      stdair::FlightDate& iFlightDate){
```

```
00052     const stdair::SegmentDateList_T& lSegmentDateList =
00053       stdair::BomManager::getList<stdair::SegmentDate> (iFlightDate);
00054
00055     // Browse the list of segment-dates and update each segment-date.
00056     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00057            lSegmentDateList.begin();
00058          itSegmentDate != lSegmentDateList.end(); ++itSegmentDate) {
00059       stdair::SegmentDate* lCurrentSegmentDate_ptr = *itSegmentDate;
00060       assert (lCurrentSegmentDate_ptr != NULL);
00061       SegmentDateHelper::fillFromRouting (*
      lCurrentSegmentDate_ptr);
00062     }
00063   }
00064
00065   // ////////////////////////////////////////////////////////////////////
00066   void FlightDateHelper::
00067   updateAvailablityPool (const stdair::FlightDate&
      iFlightDate,
00068                          const stdair::CabinCode_T& iCabinCode){
00069     const stdair::SegmentDateList_T& lSegmentDateList =
00070       stdair::BomManager::getList<stdair::SegmentDate> (iFlightDate);
00071     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00072            lSegmentDateList.begin(); itSegmentDate != lSegmentDateList.end();
00073          ++itSegmentDate) {
00074       const stdair::SegmentDate* lSegmentDate_ptr = *itSegmentDate;
00075       assert (lSegmentDate_ptr != NULL);
00076       stdair::SegmentCabin& lSegmentCabin =
00077         stdair::BomManager::getObject<stdair::SegmentCabin> (*lSegmentDate_ptr,
00078                                                              iCabinCode);
00079
00080       // Update the availability pool of the segment-cabin to the minimal
00081       // availability pool of the member leg-cabins.
00082       const stdair::LegCabinList_T& lLegCabinList =
00083         stdair::BomManager::getList<stdair::LegCabin> (lSegmentCabin);
00084       stdair::Availability_T lAvailabilityPool = stdair::MAXIMAL_AVAILABILITY;
00085       for (stdair::LegCabinList_T::const_iterator itLegCabin =
00086              lLegCabinList.begin();
00087            itLegCabin != lLegCabinList.end(); ++itLegCabin) {
00088         const stdair::LegCabin* lLegCabin_ptr = *itLegCabin;
00089         assert (lLegCabin_ptr != NULL);
00090         const stdair::Availability_T& lLegCabinAvailabilityPool =
00091           lLegCabin_ptr->getAvailabilityPool();
00092         if (lAvailabilityPool > lLegCabinAvailabilityPool) {
00093           lAvailabilityPool = lLegCabinAvailabilityPool;
00094         }
00095       }
00096       lSegmentCabin.setAvailabilityPool (lAvailabilityPool);
00097     }
00098   }
00099
00100 }
```

23.63 airinv/bom/FlightDateHelper.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
```

Classes

- class AIRINV::FlightDateHelper

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.64 FlightDateHelper.hpp

```
00001 #ifndef __AIRINV_BOM_FLIGHTDATEHELPER_HPP
00002 #define __AIRINV_BOM_FLIGHTDATEHELPER_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
```

```
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009
00010 // Forward declarations
00011 namespace stdair {
00012   class FlightDate;
00013 }
00014
00015 namespace AIRINV {
00016
00019   class FlightDateHelper {
00020   public:
00021     // ////////// Business Methods /////////
00024     static void fillFromRouting (const stdair::FlightDate&);
00025
00028     static void updateAvailablityPool (const
      stdair::FlightDate&,
00029                                        const stdair::CabinCode_T&);
00030
00032     static void updateBookingControls (stdair::FlightDate&
      );
00033   };
00034
00035 }
00036 #endif // __AIRINV_BOM_FLIGHTDATEHELPER_HPP
```

23.65 airinv/bom/FlightDateStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/bom/FlightDateStruct.hpp>
```

Namespaces

- namespace AIRINV

23.66 FlightDateStruct.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/service/Logger.hpp>
00010 // AIRINV
00011 #include <airinv/AIRINV_Types.hpp>
00012 #include <airinv/bom/FlightDateStruct.hpp>
00013
00014 namespace AIRINV {
00015
00016   // ////////////////////////////////////////////////////////////////////
00017   FlightDateStruct::FlightDateStruct ()
00018     : _flightDate (stdair::DEFAULT_DATE),
00019       _flightTypeCode (FlightTypeCode::DOMESTIC),
00020       _flightVisibilityCode (FlightVisibilityCode::NORMAL),
00021       _itSeconds (0), _legAlreadyDefined (false) {
00022   }
00023
00024   // ////////////////////////////////////////////////////////////////////
00025   stdair::Date_T FlightDateStruct::getDate() const {
00026     return stdair::Date_T (_itYear + 2000, _itMonth, _itDay
      );
00027   }
00028
00029   // ////////////////////////////////////////////////////////////////////
00030   stdair::Duration_T FlightDateStruct::getTime() const
```

```
     {
00031    return boost::posix_time::hours (_itHours)
00032      + boost::posix_time::minutes (_itMinutes)
00033      + boost::posix_time::seconds (_itSeconds);
00034   }
00035
00036   // ////////////////////////////////////////////////////////////////////
00037   const std::string FlightDateStruct::describe()
      const {
00038    std::ostringstream ostr;
00039    ostr << _airlineCode << _flightNumber << ", " <<
      _flightDate
00040         << " (" << _flightTypeCode;
00041    if (_flightVisibilityCode.getCode() !=
      FlightVisibilityCode::NORMAL) {
00042      ostr << "/" << _flightVisibilityCode;
00043    }
00044    ostr << ")" << std::endl;
00045
00046    for (LegStructList_T::const_iterator itLeg = _legList.begin();
00047         itLeg != _legList.end(); ++itLeg) {
00048      const LegStruct& lLeg = *itLeg;
00049      ostr << lLeg.describe();
00050    }
00051
00052    for (SegmentStructList_T::const_iterator itSegment = _segmentList
      .begin();
00053         itSegment != _segmentList.end(); ++itSegment) {
00054      const SegmentStruct& lSegment = *itSegment;
00055      ostr << lSegment.describe();
00056    }
00057
00058    //ostr << "[Debug] - Staging Leg: ";
00059    //ostr << _itLeg.describe();
00060    //ostr << "[Debug] - Staging Cabin: ";
00061    //ostr << _itCabin.describe();
00062
00063    return ostr.str();
00064   }
00065
00066   // ////////////////////////////////////////////////////////////////////
00067   void FlightDateStruct::addAirport (const
      stdair::AirportCode_T& iAirport) {
00068    AirportList_T::const_iterator itAirport = _airportList.find (
      iAirport);
00069    if (itAirport == _airportList.end()) {
00070      // Add the airport code to the airport set
00071      const bool insertSuccessful = _airportList.insert (iAirport).
      second;
00072
00073      if (insertSuccessful == false) {
00074        // TODO: throw an exception
00075      }
00076
00077      // Add the airport code to the airport vector
00078      _airportOrderedList.push_back (iAirport);
00079    }
00080   }
00081
00082   // ////////////////////////////////////////////////////////////////////
00083   void FlightDateStruct::buildSegments () {
00084    // The list of airports encompasses all the airports on which
00085    // the flight takes off or lands. Moreover, that list is
00086    // time-ordered: the first airport is the initial departure of
00087    // the flight, and the last airport is the eventual point of
00088    // rest of the flight.
00089    // Be l the size of the ordered list of airports.
00090    // We want to generate all the segment combinations from the legs
00091    // and, hence, from all the possible (time-ordered) airport pairs.
00092    // Thus, we both iterator on i=0...l-1 and j=i+1...l
00093    assert (_airportOrderedList.size() >= 2);
00094
00095    _segmentList.clear();
00096    for (AirportOrderedList_T::const_iterator itAirport_i =
00097           _airportOrderedList.begin();
00098         itAirport_i != _airportOrderedList.end()-1; ++
      itAirport_i) {
00099      for (AirportOrderedList_T::const_iterator itAirport_j = itAirport_i + 1;
00100           itAirport_j != _airportOrderedList.end(); ++
      itAirport_j) {
00101        SegmentStruct lSegmentStruct;
00102        lSegmentStruct._boardingPoint = *itAirport_i;
00103        lSegmentStruct._offPoint = *itAirport_j;
00104
00105        _segmentList.push_back (lSegmentStruct);
00106      }
00107    }
```

```
00108
00109     // Clear the lists of airports, so that it is ready for the next flight
00110     _airportList.clear();
00111     _airportOrderedList.clear();
00112   }
00113
00114   // ////////////////////////////////////////////////////////////////////
00115   void FlightDateStruct::
00116   addSegmentCabin (const SegmentStruct& iSegment,
00117                    const SegmentCabinStruct& iCabin) {
00118     // Retrieve the Segment structure corresponding to the (boarding, off)
       point
00119     // pair.
00120     SegmentStructList_T::iterator itSegment = _segmentList.begin();
00121     for ( ; itSegment != _segmentList.end(); ++itSegment) {
00122       const SegmentStruct& lSegment = *itSegment;
00123
00124       const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint
      ;
00125       const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00126       if (lSegment._boardingPoint == lBoardingPoint
00127           && lSegment._offPoint == lOffPoint) {
00128         break;
00129       }
00130     }
00131
00132     // If the segment key (airport pair) given in the schedule input file
00133     // does not correspond to the leg (boarding, off) points, throw an
       exception
00134     // so that the user knows the schedule input file is corrupted.
00135     if (itSegment == _segmentList.end()) {
00136       STDAIR_LOG_ERROR ("Within the inventory input file, there is a "
00137                         << "flight for which the airports of segments "
00138                         << "and those of the legs do not correspond.");
00139       throw SegmentDateNotFoundException ("Within
       the inventory input file, "
00140                                           "there is a flight for which the "
00141                                           "airports of segments and those of "
00142                                           "the legs do not correspond.");
00143     }
00144
00145     // Add the Cabin structure to the Segment Cabin structure.
00146     assert (itSegment != _segmentList.end());
00147     SegmentStruct& lSegment = *itSegment;
00148     lSegment._cabinList.push_back (iCabin);
00149   }
00150
00151   // ////////////////////////////////////////////////////////////////////
00152   void FlightDateStruct::
00153   addSegmentCabin (const SegmentCabinStruct&
       iCabin) {
00154     // Iterate on all the Segment structures (as they get the same cabin
00155     // definitions)
00156
00157     for (SegmentStructList_T::iterator itSegment = _segmentList.
       begin();
00158          itSegment != _segmentList.end(); ++itSegment) {
00159       SegmentStruct& lSegment = *itSegment;
00160
00161       lSegment._cabinList.push_back (iCabin);
00162     }
00163   }
00164
00165   // ////////////////////////////////////////////////////////////////////
00166   void FlightDateStruct::
00167   addFareFamily (const SegmentStruct& iSegment,
00168                  const SegmentCabinStruct& iCabin,
00169                  const FareFamilyStruct& iFareFamily) {
00170     // Retrieve the Segment structure corresponding to the (boarding, off)
       point
00171     // pair.
00172     SegmentStructList_T::iterator itSegment = _segmentList.begin();
00173     for ( ; itSegment != _segmentList.end(); ++itSegment) {
00174       const SegmentStruct& lSegment = *itSegment;
00175
00176       const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint
      ;
00177       const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00178       if (lSegment._boardingPoint == lBoardingPoint
00179           && lSegment._offPoint == lOffPoint) {
00180         break;
00181       }
00182     }
00183
00184     // If the segment key (airport pair) given in the schedule input file
00185     // does not correspond to the leg (boarding, off) points, throw an
       exception
```

```
00186     // so that the user knows the schedule input file is corrupted.
00187     if (itSegment == _segmentList.end()) {
00188       STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00189                         << "for which the airports of segments and "
00190                         << "those of the legs do not correspond.");
00191       throw SegmentDateNotFoundException ("Within
      the schedule input file, "
00192                                           "there is a flight for which the "
00193                                           "airports of segments and those of "
00194                                           "the legs do not correspond.");
00195     }
00196
00197     // Add the Cabin structure to the Segment Cabin structure.
00198     assert (itSegment != _segmentList.end());
00199     SegmentStruct& lSegment = *itSegment;
00200
00201     // Retrieve the Segment cabin structure given the cabin code
00202     SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList.
      begin();
00203     for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00204       const SegmentCabinStruct& lCabin = *itCabin;
00205
00206       const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00207       if (iCabin._cabinCode == lCabinCode) {
00208         break;
00209       }
00210     }
00211
00212     // If the segmentCabin key (cabin code) given in the schedule input file
00213     // does not correspond to the stored cabin codes, throw an exception
00214     // so that the user knows the schedule input file is corrupted.
00215     if (itCabin == lSegment._cabinList.end()) {
00216       STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00217                         << "for which the cabin code does not exist.");
00218       throw SegmentDateNotFoundException ("Within
      the schedule input file, "
00219                                           "there is a flight for which the "
00220                                           "cabin code does not exist.");
00221     }
00222
00223     // Add the Cabin structure to the Segment Cabin structure.
00224     assert (itCabin != lSegment._cabinList.end());
00225     SegmentCabinStruct& lCabin = *itCabin;
00226     lCabin._fareFamilies.push_back (iFareFamily);
00227   }
00228
00229   // ////////////////////////////////////////////////////////////////////
00230   void FlightDateStruct::
00231   addFareFamily (const SegmentCabinStruct&
      iCabin,
00232                  const FareFamilyStruct& iFareFamily) {
00233     // Iterate on all the Segment structures (as they get the same cabin
00234     // definitions)
00235
00236     for (SegmentStructList_T::iterator itSegment = _segmentList.
      begin();
00237          itSegment != _segmentList.end(); ++itSegment) {
00238       SegmentStruct& lSegment = *itSegment;
00239
00240       // Retrieve the Segment cabin structure given the cabin code
00241       SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList
      .begin();
00242       for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00243         const SegmentCabinStruct& lCabin = *itCabin;
00244
00245         const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00246         if (iCabin._cabinCode == lCabinCode) {
00247           break;
00248         }
00249       }
00250
00251       // If the segmentCabin key (cabin code) given in the schedule input file
00252       // does not correspond to the stored cabin codes, throw an exception
00253       // so that the user knows the schedule input file is corrupted.
00254       if (itCabin == lSegment._cabinList.end()) {
00255         STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight"
00256                           << " for which the cabin code does not exist.");
00257         throw SegmentDateNotFoundException ("Within
      the schedule input file, "
00258                                             "there is a flight for which the "
00259                                             "cabin code does not exist.");
00260       }
00261
00262       // Add the Cabin structure to the Segment Cabin structure.
00263       assert (itCabin != lSegment._cabinList.end());
00264       SegmentCabinStruct& lCabin = *itCabin;
00265       lCabin._fareFamilies.push_back (iFareFamily);
```

```
00266     }
00267   }
00268
00269 }
```

23.67 airinv/bom/FlightDateStruct.hpp File Reference

```
#include <string>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <stdair/bom/DoWStruct.hpp>
#include <airinv/basic/FlightTypeCode.hpp>
#include <airinv/basic/FlightVisibilityCode.hpp>
#include <airinv/bom/LegStruct.hpp>
#include <airinv/bom/LegCabinStruct.hpp>
#include <airinv/bom/BucketStruct.hpp>
#include <airinv/bom/SegmentStruct.hpp>
#include <airinv/bom/SegmentCabinStruct.hpp>
#include <airinv/bom/FareFamilyStruct.hpp>
#include <airinv/bom/AirportList.hpp>
```

Classes

- struct AIRINV::FlightDateStruct

Namespaces

- namespace AIRINV

23.68 FlightDateStruct.hpp

```
00001 #ifndef __AIRINV_BOM_FLIGHTDATESTRUCT_HPP
00002 #define __AIRINV_BOM_FLIGHTDATESTRUCT_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_inventory_types.hpp>
00011 #include <stdair/basic/StructAbstract.hpp>
00012 #include <stdair/bom/DoWStruct.hpp>
00013 // AirInv
00014 #include <airinv/basic/FlightTypeCode.hpp>
00015 #include <airinv/basic/FlightVisibilityCode.hpp
      >
00016 #include <airinv/bom/LegStruct.hpp>
00017 #include <airinv/bom/LegCabinStruct.hpp>
00018 #include <airinv/bom/BucketStruct.hpp>
00019 #include <airinv/bom/SegmentStruct.hpp>
00020 #include <airinv/bom/SegmentCabinStruct.hpp>
00021 #include <airinv/bom/FareFamilyStruct.hpp>
00022 #include <airinv/bom/AirportList.hpp>
00023
00024 namespace AIRINV {
00025
00027   struct FlightDateStruct : public stdair::StructAbstract {
00028
00030     stdair::Date_T getDate() const;
00031
00033     stdair::Duration_T getTime() const;
00034
00036     const std::string describe() const;
00037
00040     void addAirport (const stdair::AirportCode_T&);
00041
```

```
00043     void buildSegments ();
00044
00051     void addSegmentCabin (const SegmentStruct&,
00052                           const SegmentCabinStruct&);
00053
00059     void addSegmentCabin (const SegmentCabinStruct
      &);
00060
00067     void addFareFamily (const SegmentStruct&, const
      SegmentCabinStruct&,
00068                         const FareFamilyStruct&);
00069
00075     void addFareFamily (const SegmentCabinStruct
      &, const FareFamilyStruct&);
00076
00078     FlightDateStruct ();
00079
00080     // Attributes
00081     stdair::AirlineCode_T _airlineCode;
00082     stdair::FlightNumber_T _flightNumber;
00083     stdair::Date_T _flightDate;
00084     FlightTypeCode _flightTypeCode;
00085     FlightVisibilityCode _flightVisibilityCode
      ;
00086     LegStructList_T _legList;
00087     SegmentStructList_T _segmentList;
00088
00090     unsigned int _itYear;
00091     unsigned int _itMonth;
00092     unsigned int _itDay;
00093     int _dateOffSet;
00094
00096     long _itHours;
00097     long _itMinutes;
00098     long _itSeconds;
00099
00102     AirportList_T _airportList;
00103     AirportOrderedList_T _airportOrderedList
      ;
00104
00107     bool _legAlreadyDefined;
00108     LegStruct _itLeg;
00109     LegCabinStruct _itLegCabin;
00110     BucketStruct _itBucket;
00111
00113     bool _areSegmentDefinitionsSpecific;
00114     SegmentStruct _itSegment;
00115     SegmentCabinStruct _itSegmentCabin;
00116     BookingClassStruct _itBookingClass;
00117   };
00118
00119 }
00120 #endif // __AIRINV_BOM_FLIGHTDATESTRUCT_HPP
```

23.69 airinv/bom/FlightPeriodStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasConst_Period_BOM.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/bom/FlightPeriodStruct.hpp>
```

Namespaces

- namespace AIRINV

23.70 FlightPeriodStruct.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
```

```
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_Period_BOM.hpp>
00009 #include <stdair/service/Logger.hpp>
00010 // AIRINV
00011 #include <airinv/AIRINV_Types.hpp>
00012 #include <airinv/bom/FlightPeriodStruct.hpp>
00013
00014 namespace AIRINV {
00015
00016   // ////////////////////////////////////////////////////////////////////
00017   FlightPeriodStruct::FlightPeriodStruct
      ()
00018     : _dateRange (stdair::BOOST_DEFAULT_DATE_PERIOD),
00019       _dow (stdair::DEFAULT_DOW_STRING),
00020       _legAlreadyDefined (false), _itSeconds (0) {
00021   }
00022
00023   // ////////////////////////////////////////////////////////////////////
00024   stdair::Date_T FlightPeriodStruct::getDate() const
      {
00025     return stdair::Date_T (_itYear, _itMonth, _itDay);
00026   }
00027
00028   // ////////////////////////////////////////////////////////////////////
00029   stdair::Duration_T FlightPeriodStruct::getTime()
      const {
00030     return boost::posix_time::hours (_itHours)
00031       + boost::posix_time::minutes (_itMinutes)
00032       + boost::posix_time::seconds (_itSeconds);
00033   }
00034
00035   // ////////////////////////////////////////////////////////////////////
00036   const std::string FlightPeriodStruct::describe()
      const {
00037     std::ostringstream ostr;
00038     ostr << _airlineCode << _flightNumber << ", " <<
     _dateRange
00039          << " - " << _dow << std::endl;
00040
00041     for (LegStructList_T::const_iterator itLeg = _legList.begin();
00042          itLeg != _legList.end(); ++itLeg) {
00043       const LegStruct& lLeg = *itLeg;
00044       ostr << lLeg.describe();
00045     }
00046
00047     for (SegmentStructList_T::const_iterator itSegment = _segmentList
     .begin();
00048          itSegment != _segmentList.end(); ++itSegment) {
00049       const SegmentStruct& lSegment = *itSegment;
00050       ostr << lSegment.describe();
00051     }
00052
00053     //ostr << "[Debug] - Staging Leg: ";
00054     //ostr << _itLeg.describe();
00055     //ostr << "[Debug] - Staging Cabin: ";
00056     //ostr << _itCabin.describe();
00057
00058     return ostr.str();
00059   }
00060
00061   // ////////////////////////////////////////////////////////////////////
00062   void FlightPeriodStruct::addAirport (const
     stdair::AirportCode_T& iAirport) {
00063     AirportList_T::const_iterator itAirport = _airportList.find (
     iAirport);
00064     if (itAirport == _airportList.end()) {
00065       // Add the airport code to the airport set
00066       const bool insertSuccessful = _airportList.insert (iAirport).
     second;
00067
00068       if (insertSuccessful == false) {
00069         // TODO: throw an exception
00070       }
00071
00072       // Add the airport code to the airport vector
00073       _airportOrderedList.push_back (iAirport);
00074     }
00075   }
00076
00077   // ////////////////////////////////////////////////////////////////////
00078   void FlightPeriodStruct::buildSegments () {
00079     // The list of airports encompasses all the airports on which
00080     // the flight takes off or lands. Moreover, that list is
00081     // time-ordered: the first airport is the initial departure of
00082     // the flight, and the last airport is the eventual point of
00083     // rest of the flight.
```

```
00084     // Be l the size of the ordered list of airports.
00085     // We want to generate all the segment combinations from the legs
00086     // and, hence, from all the possible (time-ordered) airport pairs.
00087     // Thus, we both iterator on i=0...l-1 and j=i+1...l
00088     assert (_airportOrderedList.size() >= 2);
00089
00090     _segmentList.clear();
00091     for (AirportOrderedList_T::const_iterator itAirport_i =
00092            _airportOrderedList.begin();
00093          itAirport_i != _airportOrderedList.end()-1; ++
      itAirport_i) {
00094       for (AirportOrderedList_T::const_iterator itAirport_j = itAirport_i + 1;
00095            itAirport_j != _airportOrderedList.end(); ++
      itAirport_j) {
00096         SegmentStruct lSegmentStruct;
00097         lSegmentStruct._boardingPoint = *itAirport_i;
00098         lSegmentStruct._offPoint = *itAirport_j;
00099
00100         _segmentList.push_back (lSegmentStruct);
00101       }
00102     }
00103
00104     // Clear the lists of airports, so that it is ready for the next flight
00105     _airportList.clear();
00106     _airportOrderedList.clear();
00107   }
00108
00109   // ////////////////////////////////////////////////////////////////////
00110   void FlightPeriodStruct::
00111   addSegmentCabin (const SegmentStruct& iSegment,
00112                    const SegmentCabinStruct& iCabin) {
00113     // Retrieve the Segment structure corresponding to the (boarding, off)
       point
00114     // pair.
00115     SegmentStructList_T::iterator itSegment = _segmentList.begin();
00116     for ( ; itSegment != _segmentList.end(); ++itSegment) {
00117       const SegmentStruct& lSegment = *itSegment;
00118
00119       const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint
      ;
00120       const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00121       if (lSegment._boardingPoint == lBoardingPoint
00122           && lSegment._offPoint == lOffPoint) {
00123         break;
00124       }
00125     }
00126
00127     // If the segment key (airport pair) given in the schedule input file
00128     // does not correspond to the leg (boarding, off) points, throw an
       exception
00129     // so that the user knows the schedule input file is corrupted.
00130     if (itSegment == _segmentList.end()) {
00131       STDAIR_LOG_ERROR ("Within the schedule input file, there is a "
00132                         << "flight for which the airports of segments "
00133                         << "and those of the legs do not correspond.");
00134       throw SegmentDateNotFoundException ("Within
       the schedule input file, "
00135                                           "there is a flight for which the "
00136                                           "airports of segments and those of "
00137                                           "the legs do not correspond.");
00138     }
00139
00140     // Add the Cabin structure to the Segment Cabin structure.
00141     assert (itSegment != _segmentList.end());
00142     SegmentStruct& lSegment = *itSegment;
00143     lSegment._cabinList.push_back (iCabin);
00144   }
00145
00146   // ////////////////////////////////////////////////////////////////////
00147   void FlightPeriodStruct::
00148   addSegmentCabin (const SegmentCabinStruct&
       iCabin) {
00149     // Iterate on all the Segment structures (as they get the same cabin
00150     // definitions)
00151     for (SegmentStructList_T::iterator itSegment = _segmentList.
      begin();
00152          itSegment != _segmentList.end(); ++itSegment) {
00153       SegmentStruct& lSegment = *itSegment;
00154
00155       lSegment._cabinList.push_back (iCabin);
00156     }
00157   }
00158
00159   // ////////////////////////////////////////////////////////////////////
00160   void FlightPeriodStruct::
00161   addFareFamily (const SegmentStruct& iSegment,
00162                  const SegmentCabinStruct& iCabin,
```

```
00163                 const FareFamilyStruct& iFareFamily) {
00164     // Retrieve the Segment structure corresponding to the (boarding, off)
      point
00165     // pair.
00166     SegmentStructList_T::iterator itSegment = _segmentList.begin();
00167     for ( ; itSegment != _segmentList.end(); ++itSegment) {
00168       const SegmentStruct& lSegment = *itSegment;
00169
00170       const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint
      ;
00171       const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00172       if (lSegment._boardingPoint == lBoardingPoint
00173           && lSegment._offPoint == lOffPoint) {
00174         break;
00175       }
00176     }
00177
00178     // If the segment key (airport pair) given in the schedule input file
00179     // does not correspond to the leg (boarding, off) points, throw an
      exception
00180     // so that the user knows the schedule input file is corrupted.
00181     if (itSegment == _segmentList.end()) {
00182       STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00183                         << "for which the airports of segments and "
00184                         << "those of the legs do not correspond.");
00185       throw SegmentDateNotFoundException ("Within
      the schedule input file, "
00186                                           "there is a flight for which the "
00187                                           "airports of segments and those of "
00188                                           "the legs do not correspond.");
00189     }
00190
00191     // Add the Cabin structure to the Segment Cabin structure.
00192     assert (itSegment != _segmentList.end());
00193     SegmentStruct& lSegment = *itSegment;
00194
00195     // Retrieve the Segment cabin structure given the cabin code
00196     SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList.
      begin();
00197     for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00198       const SegmentCabinStruct& lCabin = *itCabin;
00199
00200       const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00201       if (iCabin._cabinCode == lCabinCode) {
00202         break;
00203       }
00204     }
00205
00206     // If the segmentCabin key (cabin code) given in the schedule input file
00207     // does not correspond to the stored cabin codes, throw an exception
00208     // so that the user knows the schedule input file is corrupted.
00209     if (itCabin == lSegment._cabinList.end()) {
00210       STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00211                         << "for which the cabin code does not exist.");
00212       throw SegmentDateNotFoundException ("Within
      the schedule input file, "
00213                                           "there is a flight for which the "
00214                                           "cabin code does not exist.");
00215     }
00216
00217     // Add the Cabin structure to the Segment Cabin structure.
00218     assert (itCabin != lSegment._cabinList.end());
00219     SegmentCabinStruct& lCabin = *itCabin;
00220     lCabin._fareFamilies.push_back(iFareFamily);
00221   }
00222
00223   // ////////////////////////////////////////////////////////////////////
00224   void FlightPeriodStruct::
00225   addFareFamily (const SegmentCabinStruct&
      iCabin,
00226                  const FareFamilyStruct& iFareFamily) {
00227     // Iterate on all the Segment structures (as they get the same cabin
00228     // definitions)
00229
00230     for (SegmentStructList_T::iterator itSegment = _segmentList.
      begin();
00231          itSegment != _segmentList.end(); ++itSegment) {
00232       SegmentStruct& lSegment = *itSegment;
00233
00234       // Retrieve the Segment cabin structure given the cabin code
00235       SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList
      .begin();
00236       for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00237         const SegmentCabinStruct& lCabin = *itCabin;
00238
00239         const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00240         if (iCabin._cabinCode == lCabinCode) {
```

```
00241           break;
00242         }
00243       }
00244
00245       // If the segmentCabin key (cabin code) given in the schedule input file
00246       // does not correspond to the stored cabin codes, throw an exception
00247       // so that the user knows the schedule input file is corrupted.
00248       if (itCabin == lSegment._cabinList.end()) {
00249         STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight"
00250                           << " for which the cabin code does not exist.");
00251         throw SegmentDateNotFoundException ("Within
      the schedule input file, "
00252                                             "there is a flight for which the "
00253                                             "cabin code does not exist.");
00254       }
00255
00256       // Add the Cabin structure to the Segment Cabin structure.
00257       assert (itCabin != lSegment._cabinList.end());
00258       SegmentCabinStruct& lCabin = *itCabin;
00259       lCabin._fareFamilies.push_back(iFareFamily);
00260     }
00261   }
00262
00263 }
```

23.71 airinv/bom/FlightPeriodStruct.hpp File Reference

```
#include <string>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <stdair/bom/DoWStruct.hpp>
#include <airinv/bom/LegCabinStruct.hpp>
#include <airinv/bom/LegStruct.hpp>
#include <airinv/bom/SegmentStruct.hpp>
#include <airinv/bom/SegmentCabinStruct.hpp>
#include <airinv/bom/FareFamilyStruct.hpp>
#include <airinv/bom/AirportList.hpp>
```

Classes

- struct AIRINV::FlightPeriodStruct

Namespaces

- namespace AIRINV

23.72 FlightPeriodStruct.hpp

```
00001 #ifndef __AIRINV_BOM_FLIGHTPERIODSTRUCT_HPP
00002 #define __AIRINV_BOM_FLIGHTPERIODSTRUCT_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_inventory_types.hpp>
00011 #include <stdair/basic/StructAbstract.hpp>
00012 #include <stdair/bom/DoWStruct.hpp>
00013 // AirInv
00014 #include <airinv/bom/LegCabinStruct.hpp>
00015 #include <airinv/bom/LegStruct.hpp>
00016 #include <airinv/bom/SegmentStruct.hpp>
00017 #include <airinv/bom/SegmentCabinStruct.hpp>
00018 #include <airinv/bom/FareFamilyStruct.hpp>
00019 #include <airinv/bom/AirportList.hpp>
00020
00021 namespace AIRINV {
```

```
00022
00024   struct FlightPeriodStruct : public stdair::StructAbstract {
00025
00027     stdair::Date_T getDate() const;
00028
00030     stdair::Duration_T getTime() const;
00031
00033     const std::string describe() const;
00034
00037     void addAirport (const stdair::AirportCode_T&);
00038
00040     void buildSegments ();
00041
00048     void addSegmentCabin (const SegmentStruct&,
00049                           const SegmentCabinStruct&);
00050
00056     void addSegmentCabin (const SegmentCabinStruct
      &);
00057
00064     void addFareFamily (const SegmentStruct&,
00065                         const SegmentCabinStruct&,
00066                         const FareFamilyStruct&);
00067
00073     void addFareFamily (const SegmentCabinStruct
      &,
00074                         const FareFamilyStruct&);
00075
00077     FlightPeriodStruct ();
00078
00079     // Attributes
00080     stdair::AirlineCode_T _airlineCode;
00081     stdair::FlightNumber_T _flightNumber;
00082     stdair::DatePeriod_T _dateRange;
00083     stdair::DoWStruct _dow;
00084     LegStructList_T _legList;
00085     SegmentStructList_T _segmentList;
00086
00089     bool _legAlreadyDefined;
00090     LegStruct _itLeg;
00091     LegCabinStruct _itLegCabin;
00092
00094     stdair::Date_T _dateRangeStart;
00095     stdair::Date_T _dateRangeEnd;
00096     unsigned int _itYear;
00097     unsigned int _itMonth;
00098     unsigned int _itDay;
00099     int _dateOffset;
00100
00102     long _itHours;
00103     long _itMinutes;
00104     long _itSeconds;
00105
00108     AirportList_T _airportList;
00109     AirportOrderedList_T _airportOrderedList
      ;
00110
00112     bool _areSegmentDefinitionsSpecific;
00113     SegmentStruct _itSegment;
00114     SegmentCabinStruct _itSegmentCabin;
00115   };
00116
00117 }
00118 #endif // __AIRINV_BOM_FLIGHTPERIODSTRUCT_HPP
```

23.73 airinv/bom/GuillotineBlockHelper.cpp File Reference

```
#include <cassert>
```

```
#include <cmath>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/bom/BomRetriever.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <stdair/bom/GuillotineBlock.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/basic/BasConst_Curves.hpp>
#include <airinv/bom/GuillotineBlockHelper.hpp>
#include <airinv/bom/FlightDateHelper.hpp>
#include <airinv/bom/SegmentCabinHelper.hpp>
```

Namespaces

- namespace AIRINV

23.74 GuillotineBlockHelper.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <cmath>
00007 // StdAir
00008 #include <stdair/basic/BasConst_Inventory.hpp>
00009 #include <stdair/bom/BomRetriever.hpp>
00010 #include <stdair/bom/BomManager.hpp>
00011 #include <stdair/bom/SegmentDate.hpp>
00012 #include <stdair/bom/SegmentCabin.hpp>
00013 #include <stdair/bom/FareFamily.hpp>
00014 #include <stdair/bom/BookingClass.hpp>
00015 #include <stdair/bom/GuillotineBlock.hpp>
00016 #include <stdair/service/Logger.hpp>
00017 // AirInv
00018 #include <airinv/basic/BasConst_Curves.hpp>
00019 #include <airinv/bom/GuillotineBlockHelper.hpp
    >
00020 #include <airinv/bom/FlightDateHelper.hpp>
00021 #include <airinv/bom/SegmentCabinHelper.hpp>
00022
00023 namespace AIRINV {
00024
00025   // ////////////////////////////////////////////////////////////////////
00026   void GuillotineBlockHelper::
00027   takeSnapshots (stdair::GuillotineBlock& ioGuillotineBlock,
00028                  const stdair::DateTime_T& iSnapshotTime) {
00029     // Retrieve the segment-cabin index and take the snapshots for
00030     // each segment-cabin.
00031     const stdair::SegmentCabinIndexMap_T& lSegmentCabinIndexMap =
00032       ioGuillotineBlock.getSegmentCabinIndexMap();
00033     for (stdair::SegmentCabinIndexMap_T::const_iterator itSCIdx =
00034            lSegmentCabinIndexMap.begin();
00035          itSCIdx != lSegmentCabinIndexMap.end(); ++itSCIdx) {
00036       const stdair::SegmentCabin* lSC_ptr = itSCIdx->first;
00037       assert (lSC_ptr != NULL);
00038       const stdair::BlockNumber_T& lSCIdx = itSCIdx->second;
00039
00040       const stdair::Date_T& lSnapshotDate = iSnapshotTime.date();
00041
00042       // Compare the date of the snapshot time and the departure date of
00043       // the segment-cabin in order to verify the necescity of taking
    snapshots.
00044       const stdair::SegmentDate& lSegmentDate =
00045         stdair::BomManager::getParent<stdair::SegmentDate> (*lSC_ptr);
00046       const stdair::Date_T& lDepartureDate = lSegmentDate.getBoardingDate();
00047       const stdair::DateOffset_T lDateOffset = lDepartureDate - lSnapshotDate;
00048       const stdair::DTD_T lDTD = lDateOffset.days() + 1;
00049
00050       if (lDTD >= 0 && lDTD <= stdair::DEFAULT_MAX_DTD) {
```

```
00051         SegmentCabinHelper::updateAvailabilities
       (*lSC_ptr);
00052         takeSnapshots (ioGuillotineBlock, lDTD, *lSC_ptr, lSCIdx);
00053         registerProductAndPriceOrientedBookings (ioGuillotineBlock,
00054                                                  lDTD, *lSC_ptr, lSCIdx);
00055       }
00056     }
00057   }
00058
00059   // ////////////////////////////////////////////////////////////////////
00060   void GuillotineBlockHelper::
00061   takeSnapshots (stdair::GuillotineBlock& ioGuillotineBlock,
00062                  const stdair::DTD_T& iDTD,
00063                  const stdair::SegmentCabin& iSegmentCabin,
00064                  const stdair::BlockNumber_T iSegmentCabinIdx) {
00065
00066     // Extract the views for the corresponding DTD and segment-cabin.
00067     stdair::SegmentCabinDTDSnapshotView_T lBookingView = ioGuillotineBlock.
00068       getSegmentCabinDTDBookingSnapshotView (iSegmentCabinIdx,
00069                                              iSegmentCabinIdx, iDTD);
00070     stdair::SegmentCabinDTDSnapshotView_T lCancellationView = ioGuillotineBlock
       .
00071       getSegmentCabinDTDCancellationSnapshotView (iSegmentCabinIdx,
00072                                                   iSegmentCabinIdx, iDTD);
00073     stdair::SegmentCabinDTDSnapshotView_T lAvailabilityView = ioGuillotineBlock
       .
00074       getSegmentCabinDTDAvailabilitySnapshotView (iSegmentCabinIdx,
00075                                                   iSegmentCabinIdx, iDTD);
00076
00077     // Retrieve the block index of the segment-cabin.
00078     std::ostringstream lSCMapKey;
00079     lSCMapKey << stdair::DEFAULT_SEGMENT_CABIN_VALUE_TYPE
00080               << iSegmentCabin.describeKey();
00081     const stdair::BlockIndex_T& lCabinIdx =
00082       ioGuillotineBlock.getBlockIndex (lSCMapKey.str());
00083     lAvailabilityView[lCabinIdx] = iSegmentCabin.getAvailabilityPool();
00084
00085
00086     // Browse the booking class list
00087     const stdair::BookingClassList_T& lBCList =
00088       stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00089     for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00090          itBC != lBCList.end(); ++itBC) {
00091       const stdair::BookingClass* lBookingClass_ptr = *itBC;
00092       assert (lBookingClass_ptr != NULL);
00093
00094       // Retrieve the block index of the booking class.
00095       const stdair::BlockIndex_T& lIdx =
00096         ioGuillotineBlock.getBlockIndex (lBookingClass_ptr->describeKey());
00097
00098       // DEBUG
00099       // STDAIR_LOG_DEBUG ("Taking snapshot for "
00100       //                   << iSegmentCabin.describeKey() << ", "
00101       //                   << lBookingClass_ptr->describeKey()
00102       //                   << ", DTD: " << iDTD << ", nb of bookings: "
00103       //                   << lBookingClass_ptr->getNbOfBookings());
00104
00105       // Write the snapshot.
00106       lBookingView[lIdx]=lBookingClass_ptr->getNbOfBookings();
00107       lCancellationView[lIdx] =
00108         lBookingClass_ptr->getNbOfCancellations();
00109       lAvailabilityView[lIdx] =
00110         lBookingClass_ptr->getSegmentAvailability();
00111     }
00112   }
00113
00114   // ////////////////////////////////////////////////////////////////////
00115   void GuillotineBlockHelper::registerProductAndPriceOrientedBookings
00116   (stdair::GuillotineBlock& ioGuillotineBlock, const stdair::DTD_T& iDTD,
00117    const stdair::SegmentCabin& iSegmentCabin,
00118    const stdair::BlockNumber_T iSegmentCabinIdx) {
00119
00120     // Extract the views for the corresponding DTD and segment-cabin.
00121     stdair::SegmentCabinDTDRangeSnapshotView_T lRangeBookingView =
00122       ioGuillotineBlock.getSegmentCabinDTDRangeBookingSnapshotView (
       iSegmentCabinIdx, iSegmentCabinIdx, iDTD, iDTD + 1);
00123     stdair::SegmentCabinDTDRangeSnapshotView_T lRangeCancellationView =
00124       ioGuillotineBlock.getSegmentCabinDTDRangeCancellationSnapshotView (
       iSegmentCabinIdx, iSegmentCabinIdx, iDTD, iDTD + 1);
00125     stdair::SegmentCabinDTDSnapshotView_T lProductAndPriceOrientedBookingView =
00126       ioGuillotineBlock.
       getSegmentCabinDTDProductAndPriceOrientedBookingSnapshotView (iSegmentCabinIdx, iSegmentCabinIdx, iDTD);
00127
00128     // Retrieve the block index of the segment-cabin.
00129     std::ostringstream lSCMapKey;
00130     lSCMapKey << stdair::DEFAULT_SEGMENT_CABIN_VALUE_TYPE
00131               << iSegmentCabin.describeKey();
```

```
00132     const stdair::BlockIndex_T& lCabinIdx =
00133       ioGuillotineBlock.getBlockIndex (lSCMapKey.str());
00134
00135     // Retrieve the lowest class and treat the number of gross
00136     // bookings of this class the price oriented bookings.
00137     const stdair::BookingClassList_T& lBCList =
00138       stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00139     stdair::BookingClassList_T::const_reverse_iterator itBC = lBCList.rbegin();
00140     assert (itBC != lBCList.rend());
00141     stdair::BookingClass* lLowestClass_ptr = *itBC; ++itBC;
00142     assert (lLowestClass_ptr != NULL);
00143
00144     // Retrieve the block index of the booking class.
00145     const stdair::BlockIndex_T& lClassIdx =
00146       ioGuillotineBlock.getBlockIndex (lLowestClass_ptr->describeKey());
00147
00148     // Compute the number of gross bookings for this class.
00149     const stdair::NbOfBookings_T lNbOfNetBkgs =
00150       lRangeBookingView[lClassIdx][0] - lRangeBookingView[lClassIdx][1];
00151     const stdair::NbOfCancellations_T lNbOfCx =
00152       lRangeCancellationView[lClassIdx][0]-lRangeCancellationView[lClassIdx][1]
    ;
00153     const stdair::NbOfBookings_T lNbOfGrossBkgs = lNbOfNetBkgs + lNbOfCx;
00154
00155     // Write this number of bookings to the price-oriented value.
00156     lProductAndPriceOrientedBookingView[lCabinIdx] = lNbOfGrossBkgs;
00157
00158     // Retrieve the lowest yield.
00159     const stdair::Yield_T& lLowestYield = lLowestClass_ptr->getYield();
00160
00161     // Boolean for "no lower class available" verification.
00162     bool noLowerClassAvl = true;
00163     if (lLowestClass_ptr->getSegmentAvailability() >= 1.0) {
00164       noLowerClassAvl = false;
00165     }
00166
00167     // Retrieve the FRAT5 coefficient and compute the sell-up coef.
00168     const double lFRAT5Coef = getFRAT5Coefficient (iDTD);
00169     const double lSellUpCoef = -log(0.5) / (lFRAT5Coef - 1);
00170
00171     // Browse the booking class list
00172     for (; itBC != lBCList.rend(); ++itBC) {
00173       const stdair::BookingClass* lBookingClass_ptr = *itBC;
00174       assert (lBookingClass_ptr != NULL);
00175
00176       // Retrieve the yield of the this class.
00177       const stdair::Yield_T& lYield = lBookingClass_ptr->getYield();
00178       assert (lYield > lLowestYield);
00179
00180       // Retrieve the block index of the booking class.
00181       const stdair::BlockIndex_T& lIdx =
00182         ioGuillotineBlock.getBlockIndex (lBookingClass_ptr->describeKey());
00183
00184       // Compute the number of gross bookings for this class.
00185       const stdair::NbOfBookings_T lNetBkgs =
00186         lRangeBookingView[lIdx][0] - lRangeBookingView[lIdx][1];
00187       const stdair::NbOfCancellations_T lCx =
00188         lRangeCancellationView[lIdx][0] - lRangeCancellationView[lIdx][1];
00189       const stdair::NbOfBookings_T lGrossBkgs = lNetBkgs + lCx;
00190
00191       // If there is a lower class available, these gross bookings
00192       // will be considered product-oriented. Otherwise, they will be
00193       // considered price-oriented
00194       if (noLowerClassAvl == false) {
00195         lProductAndPriceOrientedBookingView[lIdx] = lGrossBkgs;
00196       } else {
00197         // Convert the bookings to Q-equivalent bookings.
00198         const stdair::NbOfBookings_T lQEquiBkgs =
00199           lGrossBkgs / exp ((1.0 - lYield/lLowestYield) * lSellUpCoef);
00200         lProductAndPriceOrientedBookingView[lCabinIdx] += lQEquiBkgs;
00201
00202         if (lBookingClass_ptr->getSegmentAvailability() >= 1.0) {
00203           noLowerClassAvl = false;
00204         }
00205       }
00206     }
00207   }
00208
00209   // ////////////////////////////////////////////////////////////////////
00210   double GuillotineBlockHelper::getFRAT5Coefficient (const stdair::DTD_T& iDTD)
    {
00211     FRAT5Curve_T::const_iterator itFRAT5 =
00212       DEFAULT_PICKUP_FRAT5_CURVE.lower_bound (iDTD);
00213     assert (itFRAT5 != DEFAULT_PICKUP_FRAT5_CURVE.end
    ());
00214
00215     if (itFRAT5 == DEFAULT_PICKUP_FRAT5_CURVE.begin()
```

```
    ) {
00216       return itFRAT5->second;
00217     }
00218
00219     assert (itFRAT5 != DEFAULT_PICKUP_FRAT5_CURVE.
    begin());
00220     FRAT5Curve_T::const_iterator itNextFRAT5 = itFRAT5; --itNextFRAT5;
00221
00222     const stdair::DTD_T& lPrevDTD = itFRAT5->first;
00223     const stdair::DTD_T& lNextDTD = itNextFRAT5->first;
00224     const double& lPrevFRAT5 = itFRAT5->second;
00225     const double& lNextFRAT5 = itNextFRAT5->second;
00226     assert (lPrevDTD > lNextDTD);
00227
00228     double oFRAT5 = lPrevFRAT5
00229       + (iDTD - lNextDTD) * (lNextFRAT5 - lPrevFRAT5) / (lPrevDTD - lNextDTD);
00230
00231     return oFRAT5;
00232   }
00233 }
```

23.75 airinv/bom/GuillotineBlockHelper.hpp File Reference

```
#include <string>
#include <stdair/stdair_basic_types.hpp>
```

Classes

- class AIRINV::GuillotineBlockHelper

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.76 GuillotineBlockHelper.hpp

```
00001 #ifndef __AIRINV_BOM_GUILLOTINEBLOCKHELPER_HPP
00002 #define __AIRINV_BOM_GUILLOTINEBLOCKHELPER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_basic_types.hpp>
00011
00012 // Forward declarations
00013 namespace stdair {
00014   class GuillotineBlock;
00015   class SegmentCabin;
00016 }
00017
00018 namespace AIRINV {
00019
00022   class GuillotineBlockHelper {
00023   public:
00024     // ////////// Business Methods /////////
00026     static void takeSnapshots (stdair::GuillotineBlock&,
00027                                const stdair::DateTime_T&);
00028   private:
00029     // ////////// Helpers for business methods. //////////
00031     static void takeSnapshots (stdair::GuillotineBlock&, const
    stdair::DTD_T&,
00032                                const stdair::SegmentCabin&,
00033                                const stdair::BlockNumber_T);
00034
00036     static void registerProductAndPriceOrientedBookings
00037     (stdair::GuillotineBlock&, const stdair::DTD_T&,
```

```
00038      const stdair::SegmentCabin&, const stdair::BlockNumber_T);
00039
00041     static double getFRAT5Coefficient (const stdair::DTD_T&);
00042   };
00043
00044 }
00045 #endif // __AIRINV_BOM_GUILLOTINEBLOCKHELPER_HPP
```

23.77 airinv/bom/InventoryHelper.cpp File Reference

```
#include <cassert>
#include <stdair/bom/BomRetriever.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <stdair/bom/GuillotineBlock.hpp>
#include <stdair/bom/TravelSolutionStruct.hpp>
#include <stdair/service/Logger.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <airinv/bom/InventoryHelper.hpp>
#include <airinv/bom/FlightDateHelper.hpp>
#include <airinv/bom/GuillotineBlockHelper.hpp>
#include <airinv/bom/SegmentCabinHelper.hpp>
```

Namespaces

- namespace AIRINV

23.78 InventoryHelper.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/bom/BomRetriever.hpp>
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/Inventory.hpp>
00010 #include <stdair/bom/FlightDate.hpp>
00011 #include <stdair/bom/SegmentDate.hpp>
00012 #include <stdair/bom/SegmentCabin.hpp>
00013 #include <stdair/bom/FareFamily.hpp>
00014 #include <stdair/bom/BookingClass.hpp>
00015 #include <stdair/bom/GuillotineBlock.hpp>
00016 #include <stdair/bom/TravelSolutionStruct.hpp>
00017 #include <stdair/service/Logger.hpp>
00018 #include <stdair/bom/LegCabin.hpp>
00019 // AirInv
00020 #include <airinv/bom/InventoryHelper.hpp>
00021 #include <airinv/bom/FlightDateHelper.hpp>
00022 #include <airinv/bom/GuillotineBlockHelper.hpp
      >
00023 #include <airinv/bom/SegmentCabinHelper.hpp>
00024
00025 namespace AIRINV {
00026
00027   // ////////////////////////////////////////////////////////////////////
00028   void InventoryHelper::fillFromRouting (const
      stdair::Inventory& iInventory) {
00029     const stdair::FlightDateList_T& lFlightDateList =
00030       stdair::BomManager::getList<stdair::FlightDate> (iInventory);
00031
00032     // Browse the list of flight-dates and update each flight-date.
```

```
00033     for (stdair::FlightDateList_T::const_iterator itFlightDate =
00034            lFlightDateList.begin();
00035          itFlightDate != lFlightDateList.end(); ++itFlightDate) {
00036       const stdair::FlightDate* lCurrentFlightDate_ptr = *itFlightDate;
00037       assert (lCurrentFlightDate_ptr != NULL);
00038       FlightDateHelper::fillFromRouting (*
      lCurrentFlightDate_ptr);
00039     }
00040   }
00041
00042   // ////////////////////////////////////////////////////////////////////
00043   void InventoryHelper::
00044   calculateAvailability (const stdair::Inventory&
      iInventory,
00045                          const std::string& iFullSegmentDateKey,
00046                          stdair::TravelSolutionStruct& ioTravelSolution) {
00047
00048     // Create the map of class/availability for the given segment date.
00049     stdair::ClassAvailabilityMap_T lClassAvailabilityMap;
00050
00051     // DEBUG
00052     STDAIR_LOG_DEBUG (iFullSegmentDateKey);
00053     //
00054     stdair::SegmentDate* lSegmentDate_ptr =
00055       stdair::BomRetriever::retrieveSegmentDateFromLongKey(iInventory,
00056                                                            iFullSegmentDateKey)
      ;
00057     assert (lSegmentDate_ptr != NULL);
00058
00059     // Browse the segment-cabins and fill the map with the availability of
00060     // each booking class.
00061     const stdair::SegmentCabinList_T& lSegmentCabinList =
00062       stdair::BomManager::getList<stdair::SegmentCabin> (*lSegmentDate_ptr);
00063     for (stdair::SegmentCabinList_T::const_iterator itCabin =
00064            lSegmentCabinList.begin();
00065          itCabin != lSegmentCabinList.end(); ++itCabin) {
00066       stdair::SegmentCabin* lSegmentCabin_ptr = *itCabin;
00067       assert (lSegmentCabin_ptr != NULL);
00068
00069
00070       // Compute the availability using the AU and the cumulative
00071       // booking counter.
00072       SegmentCabinHelper::updateAvailabilities
       (*lSegmentCabin_ptr);
00073       const stdair::BookingClassList_T& lBCList =
00074         stdair::BomManager::getList<stdair::BookingClass> (*lSegmentCabin_ptr);
00075       for (stdair::BookingClassList_T::const_reverse_iterator itBC =
00076            lBCList.rbegin(); itBC != lBCList.rend(); ++itBC) {
00077         stdair::BookingClass* lBC_ptr = *itBC;
00078         assert (lBC_ptr != NULL);
00079
00080         const stdair::Availability_T lAvl = lBC_ptr->getSegmentAvailability();
00081
00082         const stdair::ClassCode_T& lClassCode = lBC_ptr->getClassCode();

00083         const bool insertSuccessful = lClassAvailabilityMap.
00084           insert (stdair::ClassAvailabilityMap_T::value_type (lClassCode,
00085                                                               lAvl)).second;
00086         assert (insertSuccessful == true);
00087       }
00088     }
00089
00090     //
00091     ioTravelSolution.addClassAvailabilityMap (lClassAvailabilityMap);
00092   }
00093
00094
00095   // ////////////////////////////////////////////////////////////////////
00096   void InventoryHelper::
00097   getYieldAndBidPrice (const stdair::Inventory& iInventory
      ,
00098                          const std::string& iFullSegmentDateKey,
00099                          stdair::TravelSolutionStruct& ioTravelSolution) {
00100
00101     // Create the map of class/availability for the given segment date.
00102     // stdair::ClassAvailabilityMap_T lClassAvailabilityMap;
00103
00104     stdair::ClassYieldMap_T lClassYieldMap;
00105
00106     stdair::ClassBpvMap_T lClassBpvMap;
00107
00108     // DEBUG
00109     STDAIR_LOG_DEBUG (iFullSegmentDateKey);
00110     //
00111     stdair::SegmentDate* lSegmentDate_ptr =
00112       stdair::BomRetriever::retrieveSegmentDateFromLongKey (iInventory,
00113                                                             iFullSegmentDateKey
```

```
      );
00114     assert (lSegmentDate_ptr != NULL);
00115
00116     // Browse the segment-cabins and fill the maps with the bid price vector
       reference
00117     // and yield of each booking class.
00118     const stdair::SegmentCabinList_T& lSegmentCabinList =
00119       stdair::BomManager::getList<stdair::SegmentCabin> (*lSegmentDate_ptr);
00120     for (stdair::SegmentCabinList_T::const_iterator itCabin =
00121            lSegmentCabinList.begin();
00122          itCabin != lSegmentCabinList.end(); ++itCabin) {
00123       stdair::SegmentCabin* lSegmentCabin_ptr = *itCabin;
00124       assert (lSegmentCabin_ptr != NULL);
00125
00126       stdair::BidPriceVector_T lBPV;
00127
00128
00129       //stdair::BidPriceVector_T lBPV;
00130       stdair::LegCabinList_T lLegCabinList =
00131         stdair::BomManager::getList<stdair::LegCabin> (*lSegmentCabin_ptr);
00132       assert (!lLegCabinList.empty());
00133       if (lLegCabinList.size() > 1) {
00134         // Compute the sum of bid prices and return a vector containing that
       value.
00135         stdair::BidPrice_T lBidPriceValue = 0;
00136         for (stdair::LegCabinList_T::const_iterator itLC = lLegCabinList.begin(
      );
00137              itLC != lLegCabinList.end(); ++itLC) {
00138           const stdair::LegCabin* lLegCabin_ptr = *itLC;
00139           const stdair::BidPriceVector_T& lLegCabinBPV = lLegCabin_ptr->
      getBidPriceVector();
00140           if (!lLegCabinBPV.empty()) {
00141             lBidPriceValue += lLegCabinBPV.back();
00142           } else {
00143             // If the remaining capacity is zero (empty bid price vector) on
       one of the legs,
00144             // then the remaining capacity of the segment is also zero (return
       an empty bid price).
00145             lBidPriceValue = std::numeric_limits<stdair::BidPrice_T>::max();
00146             break;
00147           }
00148         }
00149         if (lBidPriceValue < std::numeric_limits<stdair::BidPrice_T>::max()) {
00150           lBPV.push_back(lBidPriceValue);
00151         }
00152
00153       } else {
00154         const stdair::LegCabin* lLegCabin_ptr = lLegCabinList.front();
00155         lBPV = lLegCabin_ptr->getBidPriceVector();
00156       }
00157
00158
00159       // const stdair::CabinCapacity_T& lCabinCapacity =
       lSegmentCabin_ptr->getCapacity();
00160       // const stdair::CommittedSpace_T& lCommittedSpace =
       lSegmentCabin_ptr->getCommittedSpace();
00161       // assert (lCabinCapacity - lCommittedSpace > 0);
00162       // lBPV.resize(lCabinCapacity - lCommittedSpace);
00163
00164       const stdair::Availability_T& lAvailabilityPool =
00165         lSegmentCabin_ptr->getAvailabilityPool();
00166       //assert (lAvailabilityPool > 0);
00167
00168       if (lAvailabilityPool < lBPV.size()) {
00169         lBPV.resize(lAvailabilityPool);
00170       }
00171
00172
00173       //
00174       ioTravelSolution.addBidPriceVector (lBPV);
00175
00176       const stdair::BidPriceVectorHolder_T& lBidPriceVectorHolder =
00177         ioTravelSolution.getBidPriceVectorHolder();
00178       const stdair::BidPriceVectorHolder_T::const_reverse_iterator itBPV =
00179         lBidPriceVectorHolder.rbegin();
00180       const stdair::BidPriceVector_T& lBpvRef = *itBPV;
00181
00182       const stdair::FareFamilyList_T& lFFList =
00183         stdair::BomManager::getList<stdair::FareFamily> (*lSegmentCabin_ptr);
00184       for (stdair::FareFamilyList_T::const_iterator itFF = lFFList.begin();
00185            itFF != lFFList.end(); ++itFF) {
00186         const stdair::FareFamily* lFareFamily_ptr = *itFF;
00187         assert (lFareFamily_ptr != NULL);
00188
00189         const stdair::BookingClassList_T& lBCList =
00190           stdair::BomManager::getList<stdair::BookingClass> (*lFareFamily_ptr);
00191         for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
```

```
00192             itBC != lBCList.end(); ++itBC) {
00193           const stdair::BookingClass* lBC_ptr = *itBC;
00194           assert (lBC_ptr != NULL);
00195
00196           const stdair::ClassCode_T& lClassCode = lBC_ptr->getClassCode();
00197
00198           const stdair::YieldValue_T lYld = lBC_ptr->getYield() ;
00199           const bool insertYieldMapSuccessful = lClassYieldMap.
00200             insert (stdair::ClassYieldMap_T::value_type (lClassCode,
00201                                                          lYld)).second;
00202           assert (insertYieldMapSuccessful == true);
00203
00204           const bool insertBpvMapSuccessful = lClassBpvMap.
00205             insert (stdair::ClassBpvMap_T::value_type (lClassCode,
00206                                                        &lBpvRef)).second;
00207           assert (insertBpvMapSuccessful == true);
00208
00209           // DEBUG
00210           // STDAIR_LOG_DEBUG ("Class: " << lClassCode
00211           //                   << ", " << "Yield: " << lYld << ", "
00212           //                   << "Bid price: " << lBpvRef.back() << ", "
00213           //                   << "Remaining capacity: "
00214           //                   << lCabinCapacity - lCommittedSpace);
00215
00216           //
00217           stdair::BidPrice_T lBpvVal = std::numeric_limits<double>::max();
00218           if (lBpvRef.empty() == false) {
00219             lBpvVal = lBpvRef.back();
00220           }
00221
00222           //lBpvVal = boost::lexical_cast<std::string> (lBpvRef.back());
00223           STDAIR_LOG_DEBUG ("Class: " << lClassCode
00224                             << ", " << "Yield: " << lYld << ", "
00225                             << "Bid price: " << lBpvVal << ", "
00226                             << "Remaining capacity: " << lAvailabilityPool
00227                             << " Segment date: " << iFullSegmentDateKey);
00228         }
00229       }
00230     }
00231
00232     //
00233     ioTravelSolution.addClassYieldMap (lClassYieldMap);
00234     ioTravelSolution.addClassBpvMap (lClassBpvMap);
00235   }
00236
00237
00238   // ////////////////////////////////////////////////////////////////////
00239   bool InventoryHelper::sell (stdair::Inventory&
    ioInventory,
00240                               const std::string& iFullSegmentDateKey,
00241                               const stdair::ClassCode_T& iClassCode,
00242                               const stdair::PartySize_T& iPartySize) {
00243     bool hasSaleBeenSuccessful = false;
00244
00245     // DEBUG
00246     STDAIR_LOG_DEBUG ("Full key: '" << iFullSegmentDateKey
00247                       << "', " << iClassCode);
00248
00249     //
00250     stdair::BookingClass* lBookingClass_ptr =
00251       stdair::BomRetriever::retrieveBookingClassFromLongKey(ioInventory,
00252                                                             iFullSegmentDateKey
    ,
00253                                                             iClassCode);
00254
00255     // DEBUG
00256     const std::string hasFoundBookingClassStr =
00257       (lBookingClass_ptr != NULL)?"Yes":"No";
00258     STDAIR_LOG_DEBUG ("Found booking class? " << hasFoundBookingClassStr);
00259
00260     if (lBookingClass_ptr != NULL) {
00261       // Register the sale in the class.
00262       lBookingClass_ptr->sell (iPartySize);
00263
00264       //
00265       stdair::FareFamily& lFareFamily =
00266         stdair::BomManager::getParent<stdair::FareFamily> (*lBookingClass_ptr);
00267
00268       //
00269       stdair::SegmentCabin& lSegmentCabin =
00270         stdair::BomManager::getParent<stdair::SegmentCabin> (lFareFamily);
00271
00272       //
00273       stdair::SegmentDate& lSegmentDate =
00274         stdair::BomManager::getParent<stdair::SegmentDate,
00275                                       stdair::SegmentCabin> (lSegmentCabin);
00276
```

```
00277       //
00278       stdair::FlightDate& lFlightDate =
00279         stdair::BomManager::getParent<stdair::FlightDate,
00280                                       stdair::SegmentDate> (lSegmentDate);
00281
00282       // Update the commited space of the segment-cabins and the leg-cabins.
00283       SegmentCabinHelper::updateFromReservation
      (lFlightDate, lSegmentCabin,
00284                                                 iPartySize);
00285
00286       // STDAIR_LOG_NOTIFICATION (lFlightDate.getDepartureDate()
00287       //                          << ";" << iClassCode);
00288       hasSaleBeenSuccessful = true;
00289     }
00290
00291     return hasSaleBeenSuccessful;
00292   }
00293
00294   // ////////////////////////////////////////////////////////////////////
00295   bool InventoryHelper::cancel (stdair::Inventory&
      ioInventory,
00296                                 const std::string& iFullSegmentDateKey,
00297                                 const stdair::ClassCode_T& iClassCode,
00298                                 const stdair::PartySize_T& iPartySize) {
00299     bool hasCancellationBeenSuccessful = false;
00300
00301     // DEBUG
00302     STDAIR_LOG_DEBUG ("Full key: '" << iFullSegmentDateKey
00303                       << "', " << iClassCode);
00304
00305     //
00306     stdair::BookingClass* lBookingClass_ptr =
00307       stdair::BomRetriever::retrieveBookingClassFromLongKey(ioInventory,
00308                                                             iFullSegmentDateKey
      ,
00309                                                             iClassCode);
00310
00311     // DEBUG
00312     const std::string hasFoundBookingClassStr =
00313       (lBookingClass_ptr != NULL)?"Yes":"No";
00314     STDAIR_LOG_DEBUG ("Found booking class? " << hasFoundBookingClassStr);
00315
00316     if (lBookingClass_ptr != NULL) {
00317       // Register the cancellation in the class.
00318       lBookingClass_ptr->cancel (iPartySize);
00319
00320       //
00321       stdair::FareFamily& lFareFamily =
00322         stdair::BomManager::getParent<stdair::FareFamily> (*lBookingClass_ptr);
00323
00324       //
00325       stdair::SegmentCabin& lSegmentCabin =
00326         stdair::BomManager::getParent<stdair::SegmentCabin> (lFareFamily);
00327
00328       //
00329       stdair::SegmentDate& lSegmentDate =
00330         stdair::BomManager::getParent<stdair::SegmentDate,
00331                                       stdair::SegmentCabin> (lSegmentCabin);
00332
00333       //
00334       stdair::FlightDate& lFlightDate =
00335         stdair::BomManager::getParent<stdair::FlightDate,
00336                                       stdair::SegmentDate> (lSegmentDate);
00337
00338       // Update the commited space of the segment-cabins and the leg-cabins.
00339       SegmentCabinHelper::updateFromReservation
      (lFlightDate, lSegmentCabin,
00340                                                 -iPartySize);
00341
00342       // STDAIR_LOG_NOTIFICATION (lFlightDate.getDepartureDate()
00343       //                          << ";" << iClassCode);
00344       hasCancellationBeenSuccessful = true;
00345     }
00346
00347     return hasCancellationBeenSuccessful;
00348   }
00349
00350   // ////////////////////////////////////////////////////////////////////
00351   void InventoryHelper::takeSnapshots(const
      stdair::Inventory& iInventory,
00352                                       const stdair::DateTime_T& iSnapshotTime)
      {
00353     // Browse the guillotine block list and take the snapshots for
00354     // each guillotine.
00355     const stdair::GuillotineBlockList_T& lGuillotineBlockList =
00356       stdair::BomManager::getList<stdair::GuillotineBlock> (iInventory);
00357     for (stdair::GuillotineBlockList_T::const_iterator itGB =
```

```
00358           lGuillotineBlockList.begin();
00359         itGB != lGuillotineBlockList.end(); ++itGB) {
00360       stdair::GuillotineBlock* lGuillotineBlock_ptr = *itGB;
00361
00362       GuillotineBlockHelper::takeSnapshots(
      *lGuillotineBlock_ptr,iSnapshotTime);
00363     }
00364   }
00365 }
```

23.79 airinv/bom/InventoryHelper.hpp File Reference

```
#include <string>
#include <stdair/stdair_basic_types.hpp>
```

Classes

- class AIRINV::InventoryHelper

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.80 InventoryHelper.hpp

```
00001 #ifndef __AIRINV_BOM_INVENTORYHELPER_HPP
00002 #define __AIRINV_BOM_INVENTORYHELPER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_basic_types.hpp>
00011
00012 // Forward declarations
00013 namespace stdair {
00014   struct TravelSolutionStruct;
00015   class Inventory;
00016 }
00017
00018 namespace AIRINV {
00019
00022   class InventoryHelper {
00023   public:
00024     // ////////// Business Methods /////////
00027     static void fillFromRouting (const stdair::Inventory&);
00028
00030     static void calculateAvailability (const
      stdair::Inventory&,
00031                                        const std::string&,
00032                                        stdair::TravelSolutionStruct&);
00033
00035     static void getYieldAndBidPrice (const stdair::Inventory
      &,
00036                                        const std::string&,
00037                                        stdair::TravelSolutionStruct&);
00038
00040     static bool sell (stdair::Inventory&, const std::string&
      iSegmentDateKey,
00041                       const stdair::ClassCode_T&, const stdair::PartySize_T&);
00042
00044     static bool cancel (stdair::Inventory&, const std::string&
      iSegmentDateKey,
00045                         const stdair::ClassCode_T&, const stdair::PartySize_T&)
      ;
00046
00048     static void takeSnapshots (const stdair::Inventory&,
```

```
00049                                 const stdair::DateTime_T&);
00050   };
00051
00052 }
00053 #endif // __AIRINV_BOM_INVENTORYHELPER_HPP
```

23.81 airinv/bom/LegCabinHelper.cpp File Reference

```
#include <cassert>
#include <stdair/bom/LegCabin.hpp>
#include <airinv/bom/LegCabinHelper.hpp>
```

Namespaces

- namespace AIRINV

23.82 LegCabinHelper.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/LegCabin.hpp>
00008 // AIRINV
00009 #include <airinv/bom/LegCabinHelper.hpp>
00010
00011 namespace AIRINV {
00012
00013 }
```

23.83 airinv/bom/LegCabinHelper.hpp File Reference

Classes

- class AIRINV::LegCabinHelper

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.84 LegCabinHelper.hpp

```
00001 #ifndef __AIRINV_BOM_LEGCABINHELPER_HPP
00002 #define __AIRINV_BOM_LEGCABINHELPER_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007
00008 // Forward declarations
00009 namespace stdair {
00010   class LegCabin;
00011 }
00012
00013 namespace AIRINV {
00016   class LegCabinHelper {
00017
00018   };
00019
00020 }
00021 #endif // __AIRINV_BOM_LEGCABINHELPER_HPP
```

23.85 airinv/bom/LegCabinStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/bom/LegCabin.hpp>
#include <airinv/bom/LegCabinStruct.hpp>
```

Namespaces

- namespace AIRINV

23.86 LegCabinStruct.cpp

```
00001 // //////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/bom/LegCabin.hpp>
00009 // AirInv
00010 #include <airinv/bom/LegCabinStruct.hpp>
00011
00012 namespace AIRINV {
00013
00014   // //////////////////////////////////////////////////////////////////////
00015   const std::string LegCabinStruct::describe() const {
00016     std::ostringstream ostr;
00017     ostr << "         " << _cabinCode << ", " << _saleableCapacity
00018          << ", " << _adjustment  << ", " << _dcsRegrade
00019          << ", " << _au << ", " << _avPool
00020          << ", " << _upr << ", " << _nbOfBookings << ", " <<
      _nav
00021          << ", " << _gav << ", " << _acp << ", " << _etb
00022          << ", " << _staffNbOfBookings << ", " <<
      _wlNbOfBookings
00023          << ", " << _groupNbOfBookings
00024          << std::endl;
00025
00026     for (BucketStructList_T::const_iterator itBucket = _bucketList.
      begin();
00027          itBucket != _bucketList.end(); ++itBucket) {
00028       const BucketStruct& lBucket = *itBucket;
00029       ostr << lBucket.describe();
00030     }
00031     if (_bucketList.empty() == false) {
00032       ostr << std::endl;
00033     }
00034     return ostr.str();
00035   }
00036
00037   // //////////////////////////////////////////////////////////////////////
00038   void LegCabinStruct::fill (stdair::LegCabin& ioLegCabin)
       const {
00039     // Set the Capacity
00040     ioLegCabin.setCapacities (_saleableCapacity);
00041   }
00042
00043 }
```

23.87 airinv/bom/LegCabinStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/bom/BucketStruct.hpp>
```

Classes

- struct AIRINV::LegCabinStruct

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

Typedefs

- typedef std::vector
  < LegCabinStruct > AIRINV::LegCabinStructList_T

23.88 LegCabinStruct.hpp

```
00001 #ifndef __AIRINV_BOM_LEGCABINSTRUCT_HPP
00002 #define __AIRINV_BOM_LEGCABINSTRUCT_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/bom/BucketStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018   class LegCabin;
00019 }
00020
00021 namespace AIRINV {
00022
00024   struct LegCabinStruct : public stdair::StructAbstract {
00025     // Attributes
00026     stdair::CabinCode_T _cabinCode;
00027     stdair::CabinCapacity_T _saleableCapacity;
00028     stdair::CapacityAdjustment_T _adjustment;
00029     stdair::CapacityAdjustment_T _dcsRegrade;
00030     stdair::AuthorizationLevel_T _au;
00031     stdair::Availability_T _avPool;
00032     stdair::UPR_T _upr;
00033     stdair::NbOfBookings_T _nbOfBookings;
00034     stdair::Availability_T _nav;
00035     stdair::Availability_T _gav;
00036     stdair::OverbookingRate_T _acp;
00037     stdair::NbOfBookings_T _etb;
00038     stdair::NbOfBookings_T _staffNbOfBookings;
00039     stdair::NbOfBookings_T _wlNbOfBookings;
00040     stdair::NbOfBookings_T _groupNbOfBookings;
00041     BucketStructList_T _bucketList;
00042
00045     void fill (stdair::LegCabin&) const;
00046
00048     const std::string describe() const;
00049   };
00050
00052   typedef std::vector<LegCabinStruct> LegCabinStructList_T;
00053
00054 }
00055 #endif // __AIRINV_BOM_LEGCABINSTRUCT_HPP
```

23.89 airinv/bom/LegStruct.cpp File Reference

```
#include <cassert>
```

```
#include <sstream>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/bom/LegDate.hpp>
#include <airinv/bom/LegStruct.hpp>
```

Namespaces

- namespace AIRINV

23.90 LegStruct.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // STDAIR
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/bom/LegDate.hpp>
00010 // AIRINV
00011 #include <airinv/bom/LegStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015   // ////////////////////////////////////////////////////////////////////
00016   LegStruct::LegStruct ()
00017     : _boardingDate (stdair::DEFAULT_DATE), _offDate (stdair::DEFAULT_DATE) {
00018   }
00019
00020   // ////////////////////////////////////////////////////////////////////
00021   const std::string LegStruct::describe() const {
00022     std::ostringstream ostr;
00023     ostr << "    " << _boardingPoint << " / " << _boardingDate
      << " "
00024          << boost::posix_time::to_simple_string(_boardingTime)
00025          << " -- " << _offPoint << " / " << _offDate << " "
00026          << boost::posix_time::to_simple_string(_offTime)
00027          << " --> "
00028          << boost::posix_time::to_simple_string(_elapsed)
00029          << std::endl;
00030     for (LegCabinStructList_T::const_iterator itCabin = _cabinList.
     begin();
00031          itCabin != _cabinList.end(); itCabin++) {
00032       const LegCabinStruct& lCabin = *itCabin;
00033       ostr << lCabin.describe();
00034     }
00035     ostr << std::endl;
00036
00037     return ostr.str();
00038   }
00039
00040   // ////////////////////////////////////////////////////////////////////
00041   void LegStruct::fill (const stdair::Date_T& iRefDate,
00042                         stdair::LegDate& ioLegDate) const {
00043     // Set the Off Point
00044     ioLegDate.setOffPoint (_offPoint);
00045     // Set the Boarding Date
00046     ioLegDate.setBoardingDate (iRefDate + _boardingDateOffset
     );
00047     // Set the Boarding Time
00048     ioLegDate.setBoardingTime (_boardingTime);
00049     // Set the Off Date
00050     ioLegDate.setOffDate (iRefDate + _offDateOffset);
00051     // Set the Off Time
00052     ioLegDate.setOffTime (_offTime);
00053     // Set the Elapsed Time
00054     ioLegDate.setElapsedTime (_elapsed);
00055   }
00056
00057   // ////////////////////////////////////////////////////////////////////
00058   void LegStruct::fill (stdair::LegDate& ioLegDate) const {
00059     // Set the Off Point
00060     ioLegDate.setOffPoint (_offPoint);
00061     // Set the Boarding Date
00062     ioLegDate.setBoardingDate (_offDate);
00063     // Set the Boarding Time
00064     ioLegDate.setBoardingTime (_boardingTime);
```

```
00065     // Set the Off Date
00066     ioLegDate.setOffDate (_offDate);
00067     // Set the Off Time
00068     ioLegDate.setOffTime (_offTime);
00069     // Set the Elapsed Time
00070     ioLegDate.setElapsedTime (_elapsed);
00071   }
00072
00073 }
```

23.91 airinv/bom/LegStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/bom/LegCabinStruct.hpp>
```

Classes

- struct AIRINV::LegStruct

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

Typedefs

- typedef std::vector< LegStruct > AIRINV::LegStructList_T

23.92 LegStruct.hpp

```
00001 #ifndef __AIRINV_BOM_LEGSTRUCT_HPP
00002 #define __AIRINV_BOM_LEGSTRUCT_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // STDAIR
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AIRINV
00014 #include <airinv/bom/LegCabinStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018   class LegDate;
00019 }
00020
00021 namespace AIRINV {
00022
00024   struct LegStruct : public stdair::StructAbstract {
00025     // Attributes
00026     stdair::AirportCode_T _boardingPoint;
00027     stdair::DateOffset_T _boardingDateOffset;
00028     stdair::Date_T _boardingDate;
00029     stdair::Duration_T _boardingTime;
00030     stdair::AirportCode_T _offPoint;
00031     stdair::DateOffset_T _offDateOffset;
00032     stdair::Date_T _offDate;
00033     stdair::Duration_T _offTime;
00034     stdair::Duration_T _elapsed;
```

```
00035     LegCabinStructList_T _cabinList;
00036
00042     void fill (const stdair::Date_T& iRefDate, stdair::LegDate&) const;
00043
00045     void fill (stdair::LegDate&) const;
00046
00048     const std::string describe() const;
00049
00051     LegStruct();
00052   };
00053
00055   typedef std::vector<LegStruct> LegStructList_T;
00056
00057 }
00058 #endif // __AIRINV_BOM_LEGSTRUCT_HPP
```

23.93 airinv/bom/SegmentCabinHelper.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <airinv/bom/SegmentCabinHelper.hpp>
#include <airinv/bom/FlightDateHelper.hpp>
```

Namespaces

- namespace AIRINV

23.94 SegmentCabinHelper.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/FlightDate.hpp>
00010 #include <stdair/bom/LegCabin.hpp>
00011 #include <stdair/bom/SegmentCabin.hpp>
00012 #include <stdair/bom/FareFamily.hpp>
00013 #include <stdair/bom/BookingClass.hpp>
00014 // AirInv
00015 #include <airinv/bom/SegmentCabinHelper.hpp>
00016 #include <airinv/bom/FlightDateHelper.hpp>
00017
00018 namespace AIRINV {
00019
00020   // ////////////////////////////////////////////////////////////////////
00021   void SegmentCabinHelper::initialiseAU (
      stdair::SegmentCabin& iSegmentCabin) {
00022
00023     // Initialise the capacity and availability pool.
00024     const stdair::LegCabinList_T& lLCList =
00025       stdair::BomManager::getList<stdair::LegCabin> (iSegmentCabin);
00026
00027     stdair::CabinCapacity_T lCapacity =
00028       std::numeric_limits<stdair::CabinCapacity_T>::max();
00029     for (stdair::LegCabinList_T::const_iterator itLC = lLCList.begin();
00030          itLC != lLCList.end(); ++itLC) {
00031
00032       const stdair::LegCabin* lLC_ptr = *itLC;
00033       assert (lLC_ptr != NULL);
00034
00035       const stdair::CabinCapacity_T& lCabinCap = lLC_ptr->getOfferedCapacity();
00036       if (lCapacity > lCabinCap) {
```

```
00037         lCapacity = lCabinCap;
00038       }
00039     }
00040     iSegmentCabin.setCapacity (lCapacity);
00041     iSegmentCabin.setAvailabilityPool (lCapacity);
00042
00043     // Browse the list of booking classes and set the AU of each booking
00044     // class to the availability pool of the cabin.
00045     const stdair::BookingClassList_T& lBCList =
00046       stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00047     for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00048          itBC != lBCList.end(); ++itBC) {
00049       stdair::BookingClass* lBC_ptr = *itBC;
00050       assert (lBC_ptr != NULL);
00051       lBC_ptr->setAuthorizationLevel (lCapacity);
00052     }
00053   }
00054
00055   // ////////////////////////////////////////////////////////////////////
00056   void SegmentCabinHelper::
00057   updateFromReservation (const stdair::FlightDate&
    iFlightDate,
00058                          stdair::SegmentCabin& ioSegmentCabin,
00059                          const stdair::PartySize_T& iNbOfBookings){
00060     // Update the commited space of the segment-cabin.
00061     ioSegmentCabin.updateFromReservation (iNbOfBookings);
00062
00063     // Update the commited space of the member leg-cabins.
00064     const stdair::LegCabinList_T& lLegCabinList =
00065       stdair::BomManager::getList<stdair::LegCabin> (ioSegmentCabin);
00066     for (stdair::LegCabinList_T::const_iterator itLegCabin =
00067            lLegCabinList.begin();
00068          itLegCabin != lLegCabinList.end(); ++itLegCabin) {
00069       stdair::LegCabin* lLegCabin_ptr = *itLegCabin;
00070       assert (lLegCabin_ptr != NULL);
00071       lLegCabin_ptr->updateFromReservation (iNbOfBookings);
00072     }
00073
00074     // Update the availability pool of all the segment-cabin which belong to
     the
00075     // same flight-date.
00076     const stdair::CabinCode_T& lCabinCode = ioSegmentCabin.getCabinCode();
00077     FlightDateHelper::updateAvailablityPool
    (iFlightDate, lCabinCode);
00078   }
00079
00080   // ////////////////////////////////////////////////////////////////////
00081   void SegmentCabinHelper::
00082   buildPseudoBidPriceVector (stdair::SegmentCabin&
    ioSegmentCabin) {
00083     // Retrieve the segment-cabin capacity.
00084     const stdair::Availability_T& lAvlPool=ioSegmentCabin.getAvailabilityPool()
    ;
00085     const unsigned int lAvlPoolInt =
00086       static_cast<unsigned int> (lAvlPool);
00087     stdair::BidPriceVector_T lPseudoBidPriceVector (lAvlPoolInt, 0.0);
00088
00089     // Browse the leg-cabin list.
00090     const stdair::LegCabinList_T& lLCList =
00091       stdair::BomManager::getList<stdair::LegCabin> (ioSegmentCabin);
00092     for (stdair::LegCabinList_T::const_iterator itLC = lLCList.begin();
00093          itLC != lLCList.end(); ++itLC) {
00094       const stdair::LegCabin* lLC_ptr = *itLC;
00095       assert (lLC_ptr != NULL);
00096
00097       const stdair::BidPriceVector_T& lBPV = lLC_ptr->getBidPriceVector();
00098       stdair::BidPriceVector_T::const_reverse_iterator itBP = lBPV.rbegin();
00099       for (stdair::BidPriceVector_T::reverse_iterator itPBP =
00100              lPseudoBidPriceVector.rbegin();
00101            itPBP != lPseudoBidPriceVector.rend(); ++itPBP, ++itBP) {
00102         assert (itBP != lBPV.rend());
00103         stdair::BidPrice_T& lCurrentPBP = *itPBP;
00104         const stdair::BidPrice_T& lCurrentBP = *itBP;
00105         lCurrentPBP += lCurrentBP;
00106       }
00107     }
00108
00109     ioSegmentCabin.setBidPriceVector (lPseudoBidPriceVector);
00110
00111     // // DEBUG
00112     // std::ostringstream ostr;
00113     // ostr << "Pseudo BPV: ";
00114     // for (stdair::BidPriceVector_T::const_iterator itBP =
00115     //       lPseudoBidPriceVector.begin(); itBP !=
     lPseudoBidPriceVector.end();
00116     //      ++itBP) {
00117     //   const stdair::BidPrice_T& lCurrentBP = *itBP;
```

```
00118     //   ostr << lCurrentBP << " ";
00119     // }
00120     // //    STDAIR_LOG_DEBUG (ostr.str());
00121     // std::cout << ostr.str() << std::endl;
00122   }
00123
00124   // ////////////////////////////////////////////////////////////////////
00125   void SegmentCabinHelper::
00126   updateBookingControlsUsingPseudoBidPriceVector
      (const stdair::SegmentCabin& iSegmentCabin) {
00127     // Retrieve the pseudo bid price vector.
00128     const stdair::BidPriceVector_T& lPseudoBPV =
00129       iSegmentCabin.getBidPriceVector();
00130     const stdair::Availability_T& lAvlPool=iSegmentCabin.getAvailabilityPool();
00131
00132     // Update the cumulative booking limit for all booking classes.
00133     const stdair::BookingClassList_T& lBCList =
00134       stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00135     for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00136          itBC != lBCList.end(); ++itBC) {
00137       stdair::BookingClass* lBC_ptr = *itBC;
00138       assert (lBC_ptr != NULL);
00139
00140       lBC_ptr->setCumulatedBookingLimit (lAvlPool);
00141       const stdair::Yield_T& lYield = lBC_ptr->getYield();
00142       for (stdair::BidPriceVector_T::const_reverse_iterator itBP =
00143              lPseudoBPV.rbegin(); itBP != lPseudoBPV.rend(); ++itBP) {
00144         const stdair::BidPrice_T& lBP = *itBP;
00145         if (lYield < lBP) {
00146           stdair::BookingLimit_T lCumuBL = itBP - lPseudoBPV.rbegin();
00147           lBC_ptr->setCumulatedBookingLimit (lCumuBL);
00148           break;
00149         }
00150       }
00151     }
00152
00153     // Update the authorization levels from the booking limits
00154     updateAUs (iSegmentCabin);
00155   }
00156
00157   // ////////////////////////////////////////////////////////////////////
00158   void SegmentCabinHelper::updateAUs(const
     stdair::SegmentCabin& iSegmentCabin){
00159     // Browse the booking class list and compute the AU from the
00160     // cumulative booking counter and the cumulative booking limit.
00161     stdair::NbOfBookings_T lCumulativeBookingCounter = 0.0;
00162     const stdair::BookingClassList_T& lBCList =
00163       stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00164     for (stdair::BookingClassList_T::const_reverse_iterator itBC =
00165            lBCList.rbegin(); itBC != lBCList.rend(); ++itBC) {
00166       stdair::BookingClass* lBC_ptr = *itBC;
00167       assert (lBC_ptr != NULL);
00168
00169       const stdair::NbOfBookings_T& lNbOfBookings = lBC_ptr->getNbOfBookings();
00170       lCumulativeBookingCounter += lNbOfBookings;
00171
00172       const stdair::BookingLimit_T& lCumuBookingLimit =
00173         lBC_ptr->getCumulatedBookingLimit();
00174
00175       stdair::AuthorizationLevel_T lAU =
00176         lCumulativeBookingCounter + lCumuBookingLimit;
00177       lBC_ptr->setAuthorizationLevel (lAU);
00178
00179       // DEBUG
00180       // STDAIR_LOG_DEBUG ("Updating the AU for class: "
00181       //                   << lBC_ptr->describeKey()
00182       //                   << ", with BL: " << lCumuBookingLimit
00183       //                   << ", CumuBkg: " << lCumulativeBookingCounter
00184       //                   << ", AU: " << lAU);
00185     }
00186   }
00187
00188   // ////////////////////////////////////////////////////////////////////
00189   void SegmentCabinHelper::
00190   updateAvailabilities (const stdair::SegmentCabin&
     iSegmentCabin) {
00191     // Browse the booking class list and compute the avl from the
00192     // cumulative booking counter and the AU.
00193     stdair::NbOfBookings_T lCumulativeBookingCounter = 0.0;
00194     const stdair::BookingClassList_T& lBCList =
00195       stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00196     for (stdair::BookingClassList_T::const_reverse_iterator itBC =
00197            lBCList.rbegin(); itBC != lBCList.rend(); ++itBC) {
00198       stdair::BookingClass* lBC_ptr = *itBC;
00199       assert (lBC_ptr != NULL);
00200
00201       const stdair::NbOfBookings_T& lNbOfBookings = lBC_ptr->getNbOfBookings();
```

```
00202       lCumulativeBookingCounter += lNbOfBookings;
00203
00204       const stdair::AuthorizationLevel_T& lAU=lBC_ptr->getAuthorizationLevel();
00205
00206       const stdair::Availability_T lAvl = lAU - lCumulativeBookingCounter;
00207       lBC_ptr->setSegmentAvailability (lAvl);
00208     }
00209   }
00210 }
```

23.95 airinv/bom/SegmentCabinHelper.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
```

Classes

- class AIRINV::SegmentCabinHelper

  Class representing the actual business functions for an airline segment-cabin.

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.96 SegmentCabinHelper.hpp

```
00001 #ifndef __AIRINV_BOM_SEGMENTCABINHELPER_HPP
00002 #define __AIRINV_BOM_SEGMENTCABINHELPER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009
00010 // Forward declarations
00011 namespace stdair {
00012   class FlightDate;
00013   class SegmentCabin;
00014   class FareFamily;
00015 }
00016
00017 namespace AIRINV {
00018
00023   class SegmentCabinHelper {
00024   public:
00025     // ********** Business Methods *********
00029     static void updateFromReservation (const
      stdair::FlightDate&,
00030                                        stdair::SegmentCabin&,
00031                                        const stdair::PartySize_T&);
00032
00036     static void buildPseudoBidPriceVector (
      stdair::SegmentCabin&);
00037
00041     static void updateBookingControlsUsingPseudoBidPriceVector
       (const stdair::SegmentCabin&);
00042
00045     static void updateAUs (const stdair::SegmentCabin&);
00046
00049     static void updateAvailabilities (const
      stdair::SegmentCabin&);
00050
00054     static void initialiseAU (stdair::SegmentCabin&);
00055   };
00056
00057 }
00058 #endif // __AIRINV_BOM_SEGMENTCABINHELPER_HPP
```

23.97 airinv/bom/SegmentCabinStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/bom/SegmentCabin.hpp>
#include <airinv/bom/SegmentCabinStruct.hpp>
```

Namespaces

- namespace AIRINV

23.98 SegmentCabinStruct.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/bom/SegmentCabin.hpp>
00009 // AirInv
00010 #include <airinv/bom/SegmentCabinStruct.hpp>
00011
00012 namespace AIRINV {
00013
00014   // ////////////////////////////////////////////////////////////////////
00015   const std::string SegmentCabinStruct::describe()
       const {
00016     std::ostringstream ostr;
00017
00018     ostr << "        " << _cabinCode << ", " << _nbOfBookings
       << std::endl;
00019
00020     for (FareFamilyStructList_T::const_iterator itFF = _fareFamilies
      .begin();
00021          itFF != _fareFamilies.end(); ++itFF) {
00022       const FareFamilyStruct& lFF = *itFF;
00023       ostr << lFF.describe();
00024     }
00025     if (_fareFamilies.empty() == false) {
00026       ostr << std::endl;
00027     }
00028
00029     return ostr.str();
00030   }
00031
00032   // ////////////////////////////////////////////////////////////////////
00033   void SegmentCabinStruct::fill (stdair::SegmentCabin&
      ioSegmentCabin) const {
00034     // Set the total number of bookings
00035     // ioSegmentCabin.setNbOfBookings (_nbOfBookings);
00036   }
00037
00038 }
```

23.99 airinv/bom/SegmentCabinStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/bom/FareFamilyStruct.hpp>
```

Classes

- struct AIRINV::SegmentCabinStruct

Utility Structure for the parsing of SegmentCabin details.

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

Typedefs

- typedef std::vector
  < SegmentCabinStruct > AIRINV::SegmentCabinStructList_T

23.100 SegmentCabinStruct.hpp

```
00001 #ifndef __AIRINV_BOM_SEGMENTCABINSTRUCT_HPP
00002 #define __AIRINV_BOM_SEGMENTCABINSTRUCT_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/bom/FareFamilyStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018   class SegmentCabin;
00019 }
00020
00021 namespace AIRINV {
00022
00026   struct SegmentCabinStruct : public stdair::StructAbstract {
00027     // Attributes
00028     stdair::CabinCode_T _cabinCode;
00029     stdair::NbOfBookings_T _nbOfBookings;
00030     FareFamilyStruct _itFareFamily;
00031     FareFamilyStructList_T _fareFamilies;
00032
00037     void fill (stdair::SegmentCabin&) const;
00038
00042     const std::string describe() const;
00043   };
00044
00048   typedef std::vector<SegmentCabinStruct> SegmentCabinStructList_T
      ;
00049
00050 }
00051 #endif // __AIRINV_BOM_SEGMENTCABINSTRUCT_HPP
```

23.101 airinv/bom/SegmentDateHelper.cpp File Reference

```
#include <cassert>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/LegDate.hpp>
#include <airinv/bom/SegmentDateHelper.hpp>
#include <airinv/bom/SegmentCabinHelper.hpp>
```

Namespaces

- namespace AIRINV

23.102 SegmentDateHelper.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/basic/BasConst_General.hpp>
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/SegmentDate.hpp>
00010 #include <stdair/bom/SegmentCabin.hpp>
00011 #include <stdair/bom/LegDate.hpp>
00012 // AIRINV
00013 #include <airinv/bom/SegmentDateHelper.hpp>
00014 #include <airinv/bom/SegmentCabinHelper.hpp>
00015
00016 namespace AIRINV {
00017   // ////////////////////////////////////////////////////////////////////
00018   void SegmentDateHelper::fillFromRouting (
      stdair::SegmentDate& ioSegmentDate) {
00019     /*
00020      * If the segment is just marketed by this carrier,
00021      * retrieve the operating segment and call the fillFromRouting
00022      * method on it.
00023      */
00024     stdair::SegmentDate* lOperatingSegmentDate_ptr =
00025       ioSegmentDate.getOperatingSegmentDate ();
00026     if (lOperatingSegmentDate_ptr != NULL) {
00027       fillFromRouting (*lOperatingSegmentDate_ptr);
00028       return;
00029     }
00030     // Retrieve the first and the last legs of the routing.
00031     // Note that in the majority of the cases, as flights are mono-legs,
00032     // the first and last legs are thus the same.
00033     const stdair::LegDateList_T& lLegDateList =
00034       stdair::BomManager::getList<stdair::LegDate> (ioSegmentDate);
00035     stdair::LegDateList_T::const_iterator itFirstLeg = lLegDateList.begin();
00036     const stdair::LegDate* lFirstLeg_ptr = *itFirstLeg;
00037     assert (lFirstLeg_ptr != NULL);
00038     stdair::LegDateList_T::const_reverse_iterator itLastLeg =
00039       lLegDateList.rbegin();
00040     const stdair::LegDate* lLastLeg_ptr = *itLastLeg;
00041     assert (lLastLeg_ptr != NULL);
00042
00043     // Set the Boarding Date
00044     const stdair::Date_T& lBoardingDate = lFirstLeg_ptr->getBoardingDate();
00045     ioSegmentDate.setBoardingDate (lBoardingDate);
00046     // Set the Boarding Time
00047     const stdair::Duration_T& lBoardingTime = lFirstLeg_ptr->getBoardingTime();
00048     ioSegmentDate.setBoardingTime (lBoardingTime);
00049     // Set the Off Date
00050     const stdair::Date_T& lOffDate = lLastLeg_ptr->getOffDate();
00051     ioSegmentDate.setOffDate (lOffDate);
00052     // Set the Off Time
00053     const stdair::Duration_T& lOffTime = lLastLeg_ptr->getOffTime();
00054     ioSegmentDate.setOffTime (lOffTime);
00055     // Set the Elapsed Time for the whole path
00056     updateElapsedTimeFromRouting (ioSegmentDate);
00057
00058     // Initialise the AU for all classes.
00059     const stdair::SegmentCabinList_T& lSegmentCabinList =
00060       stdair::BomManager::getList<stdair::SegmentCabin> (ioSegmentDate);
00061     for (stdair::SegmentCabinList_T::const_iterator itSC =
00062           lSegmentCabinList.begin(); itSC != lSegmentCabinList.end(); ++itSC)
      {
00063       stdair::SegmentCabin* lSC_ptr = *itSC;
00064       assert (lSC_ptr != NULL);
00065
00066       // Initialise the AU for children booking classes.
00067       SegmentCabinHelper::initialiseAU (*
      lSC_ptr);
00068     }
00069   }
00070
00071   // ////////////////////////////////////////////////////////////////////
00072   void SegmentDateHelper::
00073   updateElapsedTimeFromRouting (
      stdair::SegmentDate& ioSegmentDate) {
```

```
00074
00075     const stdair::LegDateList_T& lLegDateList =
00076       stdair::BomManager::getList<stdair::LegDate> (ioSegmentDate);
00077
00078     stdair::LegDateList_T::const_iterator itLegDate = lLegDateList.begin();
00079     const stdair::LegDate* lCurrentLegDate_ptr = *itLegDate;
00080     assert (lCurrentLegDate_ptr != NULL);
00081
00082     // Retrieve the elapsed time of the first leg
00083     stdair::Duration_T lElapsedTime = lCurrentLegDate_ptr->getElapsedTime();
00084
00085     // Go to the next leg, if existing. If not existing, the following
00086     // loop will not be entered (as it means: currentLeg ==
      _legDateList.end()).
00087     ++itLegDate;
00088
00089     for (const stdair::LegDate* lPreviousLegDate_ptr = lCurrentLegDate_ptr;
00090          itLegDate != lLegDateList.end();
00091          ++itLegDate, lPreviousLegDate_ptr = lCurrentLegDate_ptr) {
00092       lCurrentLegDate_ptr = *itLegDate;
00093
00094       // As the boarding point of the current leg is the same as the off point
00095       // of the previous leg (by construction), there is no time difference.
00096       assert (lCurrentLegDate_ptr->getBoardingPoint()
00097               == lPreviousLegDate_ptr->getOffPoint());
00098       const stdair::Duration_T& lStopOverTime =
00099         lCurrentLegDate_ptr->getBoardingTime() - lPreviousLegDate_ptr->
    getOffTime();
00100       lElapsedTime += lStopOverTime;
00101
00102       // Add the elapsed time of the current leg
00103       const stdair::Duration_T& currentElapsedTime =
00104         lCurrentLegDate_ptr->getElapsedTime();
00105       lElapsedTime += currentElapsedTime;
00106     }
00107
00108     // Store the result
00109     ioSegmentDate.setElapsedTime (lElapsedTime);
00110     // From the elapsed time, update the distance
00111     updateDistanceFromElapsedTime (ioSegmentDate);
00112   }
00113
00114   // ////////////////////////////////////////////////////////////////////
00115   void SegmentDateHelper::
00116   updateDistanceFromElapsedTime (
    stdair::SegmentDate& ioSegmentDate) {
00117     const stdair::Duration_T& lElapsedTime = ioSegmentDate.getElapsedTime();
00118     const double lElapseInHours=static_cast<const double>(lElapsedTime.hours())
    ;
00119     const long int lDistance =
00120       static_cast<const long int>(stdair::DEFAULT_FLIGHT_SPEED*lElapseInHours);
00121     ioSegmentDate.setDistance (lDistance);
00122   }
00123
00124 }
```

23.103 airinv/bom/SegmentDateHelper.hpp File Reference

Classes

- class AIRINV::SegmentDateHelper

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.104 SegmentDateHelper.hpp

```
00001 #ifndef __AIRINV_BOM_SEGMENTDATEHELPER_HPP
00002 #define __AIRINV_BOM_SEGMENTDATEHELPER_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
```

```
00006 // ////////////////////////////////////////////////////////////////////
00007
00008 // Forward declarations
00009 namespace stdair {
00010   class SegmentDate;
00011 }
00012
00013 namespace AIRINV {
00016   class SegmentDateHelper {
00017   public:
00018     // ********** Business Methods *********
00021     static void fillFromRouting (stdair::SegmentDate&);
00022
00032     static void updateElapsedTimeFromRouting (
      stdair::SegmentDate&);
00033
00035     static void updateDistanceFromElapsedTime (
      stdair::SegmentDate&);
00036   };
00037
00038 }
00039 #endif // __AIRINV_BOM_SEGMENTDATEHELPER_HPP
```

23.105 airinv/bom/SegmentStruct.cpp File Reference

```
#include <cassert>
#include <stdair/bom/SegmentDate.hpp>
#include <airinv/bom/SegmentStruct.hpp>
```

Namespaces

- namespace AIRINV

23.106 SegmentStruct.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/SegmentDate.hpp>
00008 // AIRINV
00009 #include <airinv/bom/SegmentStruct.hpp>
00010
00011 namespace AIRINV {
00012
00013   // ////////////////////////////////////////////////////////////////////
00014   const std::string SegmentStruct::describe() const {
00015     std::ostringstream ostr;
00016
00017     ostr << "    " << _boardingPoint << " / "
00018          << boost::posix_time::to_simple_string(_boardingTime)
00019          << " -- " << _offPoint << " / "
00020          << boost::posix_time::to_simple_string(_offTime)
00021          << " --> "
00022          << boost::posix_time::to_simple_string(_elapsed)
00023          << std::endl;
00024
00025     for (SegmentCabinStructList_T::const_iterator itCabin =
00026            _cabinList.begin(); itCabin != _cabinList.end();
       itCabin++) {
00027       const SegmentCabinStruct& lCabin = *itCabin;
00028       ostr << lCabin.describe();
00029     }
00030     ostr << std::endl;
00031
00032     return ostr.str();
00033   }
00034
00035   // ////////////////////////////////////////////////////////////////////
00036   void SegmentStruct::fill (stdair::SegmentDate&
      ioSegmentDate) const {
00037     // Set the Boarding Date
00038     ioSegmentDate.setBoardingDate (_offDate);
```

```
00039     // Set the Boarding Time
00040     ioSegmentDate.setBoardingTime (_boardingTime);
00041     // Set the Off Date
00042     ioSegmentDate.setOffDate (_offDate);
00043     // Set the Off Time
00044     ioSegmentDate.setOffTime (_offTime);
00045     // Set the Elapsed Time
00046     ioSegmentDate.setElapsedTime (_elapsed);
00047   }
00048
00049 }
```

23.107 airinv/bom/SegmentStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/bom/SegmentCabinStruct.hpp>
```

Classes

- struct AIRINV::SegmentStruct

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

Typedefs

- typedef std::vector
  < SegmentStruct > AIRINV::SegmentStructList_T

23.108 SegmentStruct.hpp

```
00001 #ifndef __AIRINV_BOM_SEGMENTSTRUCT_HPP
00002 #define __AIRINV_BOM_SEGMENTSTRUCT_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // STDAIR
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AIRINV
00014 #include <airinv/bom/SegmentCabinStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018   class SegmentDate;
00019 }
00020
00021 namespace AIRINV {
00023   struct SegmentStruct : public stdair::StructAbstract {
00024     // Attributes
00025     stdair::AirportCode_T _boardingPoint;
00026     stdair::AirportCode_T _offPoint;
00027     stdair::Date_T _boardingDate;
00028     stdair::Duration_T _boardingTime;
00029     stdair::Date_T _offDate;
00030     stdair::Duration_T _offTime;
```

```
00031     stdair::Duration_T _elapsed;
00032     SegmentCabinStructList_T _cabinList;
00033
00036     void fill (stdair::SegmentDate&) const;
00037
00039     const std::string describe() const;
00040   };
00041
00043   typedef std::vector<SegmentStruct> SegmentStructList_T;
00044
00045 }
00046 #endif // __AIRINV_BOM_SEGMENTSTRUCT_HPP
```

23.109 airinv/command/InventoryBuilder.cpp File Reference

```
#include <cassert>
#include <boost/date_time/date_iterator.hpp>
#include <stdair/basic/BasConst_BookingClass.hpp>
#include <stdair/basic/BasConst_Yield.hpp>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <stdair/bom/LegDate.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <stdair/bom/Bucket.hpp>
#include <stdair/factory/FacBom.hpp>
#include <stdair/factory/FacBomManager.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/bom/FlightDateStruct.hpp>
#include <airinv/command/InventoryBuilder.hpp>
```

Namespaces

- namespace AIRINV

23.110 InventoryBuilder.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/date_time/date_iterator.hpp>
00008 // StdAir
00009 #include <stdair/basic/BasConst_BookingClass.hpp>
00010 #include <stdair/basic/BasConst_Yield.hpp>
00011 #include <stdair/basic/BasConst_Inventory.hpp>
00012 #include <stdair/bom/BomManager.hpp>
00013 #include <stdair/bom/BomRoot.hpp>
00014 #include <stdair/bom/Inventory.hpp>
00015 #include <stdair/bom/FlightDate.hpp>
00016 #include <stdair/bom/SegmentDate.hpp>
00017 #include <stdair/bom/SegmentCabin.hpp>
00018 #include <stdair/bom/FareFamily.hpp>
00019 #include <stdair/bom/BookingClass.hpp>
00020 #include <stdair/bom/LegDate.hpp>
00021 #include <stdair/bom/LegCabin.hpp>
00022 #include <stdair/bom/Bucket.hpp>
00023 #include <stdair/factory/FacBom.hpp>
```

```
00024 #include <stdair/factory/FacBomManager.hpp>
00025 #include <stdair/service/Logger.hpp>
00026 // AirInv
00027 #include <airinv/bom/FlightDateStruct.hpp>
00028 #include <airinv/command/InventoryBuilder.hpp
      >
00029
00030 namespace AIRINV {
00031
00032   // ////////////////////////////////////////////////////////////////////
00033   void InventoryBuilder::
00034   buildInventory (stdair::BomRoot& ioBomRoot,
00035                   const FlightDateStruct& iFlightDateStruct) {
00036     const stdair::AirlineCode_T& lAirlineCode = iFlightDateStruct._airlineCode;
00037
00038     // Instantiate an inventory object (if not exist)
00039     // for the given key (airline code)
00040     stdair::Inventory* lInventory_ptr = stdair::BomManager::
00041       getObjectPtr<stdair::Inventory> (ioBomRoot, lAirlineCode);
00042     if (lInventory_ptr == NULL) {
00043       stdair::InventoryKey lKey (lAirlineCode);
00044       lInventory_ptr =
00045         &stdair::FacBom<stdair::Inventory>::instance().create (lKey);
00046       stdair::FacBomManager::addToListAndMap (ioBomRoot, *lInventory_ptr);
00047       stdair::FacBomManager::linkWithParent (ioBomRoot, *lInventory_ptr);
00048     }
00049     assert (lInventory_ptr != NULL);
00050
00051     // Build the flight-date within the inventory.
00052     buildFlightDate (*lInventory_ptr, iFlightDateStruct);
00053   }
00054
00055   // ////////////////////////////////////////////////////////////////////
00056   void InventoryBuilder::
00057   buildFlightDate (stdair::Inventory& ioInventory,
00058                    const FlightDateStruct& iFlightDateStruct) {
00059     // Create the FlightDateKey
00060     const stdair::FlightDateKey lFlightDateKey (iFlightDateStruct._flightNumber
      ,
00061                                                 iFlightDateStruct._flightDate);
00062
00063     // Check that the flight-date object is not already existing. If a
00064     // flight-date object with the same key has already been created,
00065     // then just update it, ifnot, create a flight-date and update it.
00066     stdair::FlightDate* lFlightDate_ptr = stdair::BomManager::
00067       getObjectPtr<stdair::FlightDate> (ioInventory, lFlightDateKey.toString())
      ;
00068     if (lFlightDate_ptr == NULL) {
00069       // Instantiate a flighy-date object for the given key (flight number and
00070       // flight date)
00071       lFlightDate_ptr =
00072         &stdair::FacBom<stdair::FlightDate>::instance().create (lFlightDateKey)
      ;
00073       stdair::FacBomManager::addToListAndMap (ioInventory, *lFlightDate_ptr);
00074       stdair::FacBomManager::linkWithParent (ioInventory, *lFlightDate_ptr);
00075     }
00076     assert (lFlightDate_ptr != NULL);
00077
00078     // Update the BOM flight-date with the attributes of the flight-date
       struct.
00079
00080     // Browse the list of leg-date struct and segment-date struct and
00081     // create the corresponding BOM.
00082     for (LegStructList_T::const_iterator itLegDate =
00083            iFlightDateStruct._legList.begin();
00084          itLegDate != iFlightDateStruct._legList.end(); ++itLegDate) {
00085       const LegStruct& lCurrentLegDateStruct = *itLegDate;
00086       buildLegDate (*lFlightDate_ptr, lCurrentLegDateStruct);
00087     }
00088
00089     for (SegmentStructList_T::const_iterator itSegmentDate =
00090            iFlightDateStruct._segmentList.begin();
00091          itSegmentDate != iFlightDateStruct._segmentList.end();
00092          ++itSegmentDate) {
00093       const SegmentStruct& lCurrentSegmentDateStruct = *itSegmentDate;
00094       buildSegmentDate (*lFlightDate_ptr, lCurrentSegmentDateStruct);
00095     }
00096   }
00097
00098   // ////////////////////////////////////////////////////////////////////
00099   void InventoryBuilder::
00100   buildLegDate (stdair::FlightDate& ioFlightDate,
00101                 const LegStruct& iLegDateStruct) {
00102     // Check that the leg-date object is not already existing. If a
00103     // leg-date object with the same key has already been created,
00104     // then just update it, ifnot, create a leg-date and update it.
00105     stdair::LegDate* lLegDate_ptr = stdair::BomManager::
```

```
00106       getObjectPtr<stdair::LegDate>(ioFlightDate, iLegDateStruct._boardingPoint
      );
00107
00108     if (lLegDate_ptr == NULL) {
00109       // Instantiate a leg-date object for the given key (boarding point);
00110       stdair::LegDateKey lKey (iLegDateStruct._boardingPoint);
00111       lLegDate_ptr = &stdair::FacBom<stdair::LegDate>::instance().create (lKey)
      ;
00112       stdair::FacBomManager::addToListAndMap (ioFlightDate, *lLegDate_ptr);
00113       stdair::FacBomManager::linkWithParent (ioFlightDate, *lLegDate_ptr);
00114     }
00115     assert (lLegDate_ptr != NULL);
00116
00117     // Update the BOM leg-date with the attributes of the leg-date struct.
00118     iLegDateStruct.fill (*lLegDate_ptr);
00119
00120     // Browse the list of leg-cabin structs and create the corresponding BOM.
00121     for (LegCabinStructList_T::const_iterator itLegCabin =
00122            iLegDateStruct._cabinList.begin();
00123          itLegCabin != iLegDateStruct._cabinList.end(); ++itLegCabin) {
00124       const LegCabinStruct& lCurrentLegCabinStruct = *itLegCabin;
00125       buildLegCabin (*lLegDate_ptr, lCurrentLegCabinStruct);
00126     }
00127   }
00128
00129   // ////////////////////////////////////////////////////////////////////
00130   void InventoryBuilder::
00131   buildLegCabin (stdair::LegDate& ioLegDate,
00132                  const LegCabinStruct& iLegCabinStruct) {
00133     // Check that the leg-cabin object is not already existing. If a
00134     // leg-cabin object with the same key has already been created,
00135     // then just update it, ifnot, create a leg-cabin and update it.
00136     stdair::LegCabin* lLegCabin_ptr = stdair::BomManager::
00137       getObjectPtr<stdair::LegCabin> (ioLegDate, iLegCabinStruct._cabinCode);
00138     if (lLegCabin_ptr == NULL) {
00139       // Instantiate a leg-cabin object for the given key (cabin code);
00140       stdair::LegCabinKey lKey (iLegCabinStruct._cabinCode);
00141       lLegCabin_ptr = &stdair::FacBom<stdair::LegCabin>::instance().create(lKey
      );
00142       stdair::FacBomManager::addToListAndMap (ioLegDate, *lLegCabin_ptr);
00143       stdair::FacBomManager::linkWithParent (ioLegDate, *lLegCabin_ptr);
00144     }
00145     assert (lLegCabin_ptr != NULL);
00146
00147     // TODO: Update the BOM leg-cabin with the attributes of the
00148     // leg-cabin struct.
00149     iLegCabinStruct.fill (*lLegCabin_ptr);
00150
00151     // Browse the list of bucket structs and create the corresponding BOM.
00152     for (BucketStructList_T::const_iterator itBucket =
00153            iLegCabinStruct._bucketList.begin();
00154          itBucket != iLegCabinStruct._bucketList.end(); ++itBucket) {
00155       const BucketStruct& lCurrentBucketStruct = *itBucket;
00156       buildBucket (*lLegCabin_ptr, lCurrentBucketStruct);
00157     }
00158   }
00159
00160   // ////////////////////////////////////////////////////////////////////
00161   void InventoryBuilder::buildBucket (stdair::LegCabin& ioLegCabin,
00162                                       const BucketStruct& iBucketStruct) {
00163     // Create the BucketKey
00164     const stdair::BucketKey lBucketKey (iBucketStruct._seatIndex);
00165
00166     // Check that the bucket object is not already existing. If a
00167     // bucket object with the same key has already been created,
00168     // then just update it, ifnot, create a bucket and update it.
00169     stdair::Bucket* lBucket_ptr = stdair::BomManager::
00170       getObjectPtr<stdair::Bucket> (ioLegCabin, lBucketKey.toString());
00171     if (lBucket_ptr == NULL) {
00172       // Instantiate a bucket object for the given key (seat index);
00173       stdair::BucketKey lKey (iBucketStruct._seatIndex);
00174       lBucket_ptr = &stdair::FacBom<stdair::Bucket>::instance().create (lKey);
00175       stdair::FacBomManager::addToListAndMap (ioLegCabin, *lBucket_ptr);
00176       stdair::FacBomManager::linkWithParent (ioLegCabin, *lBucket_ptr);
00177     }
00178     assert (lBucket_ptr != NULL);
00179
00180     //
00181     iBucketStruct.fill (*lBucket_ptr);
00182   }
00183
00184   // ////////////////////////////////////////////////////////////////////
00185   void InventoryBuilder::
00186   buildSegmentDate (stdair::FlightDate& ioFlightDate,
00187                     const SegmentStruct& iSegmentDateStruct) {
00188     // Check that the segment-date object is not already existing. If a
00189     // segment-date object with the same key has already been created,
```

```
00190     // then just update it, ifnot, create a segment-date and update it.
00191     const stdair::SegmentDateKey
00192       lSegmentDateKey (iSegmentDateStruct._boardingPoint,
00193                        iSegmentDateStruct._offPoint);
00194     stdair::SegmentDate* lSegmentDate_ptr = stdair::BomManager::
00195       getObjectPtr<stdair::SegmentDate>(ioFlightDate,lSegmentDateKey.toString()
    );
00196     if (lSegmentDate_ptr == NULL) {
00197       // Instantiate a segment-date object for the given key (boarding
00198       // and off points);
00199       lSegmentDate_ptr =  &stdair::FacBom<stdair::SegmentDate>::
00200         instance().create (lSegmentDateKey);
00201       stdair::FacBomManager::addToListAndMap (ioFlightDate, *lSegmentDate_ptr);
00202       stdair::FacBomManager::linkWithParent (ioFlightDate, *lSegmentDate_ptr);
00203     }
00204     assert (lSegmentDate_ptr != NULL);
00205
00206     // Update the BOM segment-date with the attributes of the
00207     // segment-date struct.
00208     iSegmentDateStruct.fill (*lSegmentDate_ptr);
00209
00210     // Browse the list of segment-cabin struct and create the corresponding
     BOM.
00211     for (SegmentCabinStructList_T::const_iterator itSegmentCabin =
00212            iSegmentDateStruct._cabinList.begin();
00213          itSegmentCabin != iSegmentDateStruct._cabinList.end();
00214          ++itSegmentCabin) {
00215       const SegmentCabinStruct& lCurrentSegmentCabinStruct = *itSegmentCabin;
00216       buildSegmentCabin (*lSegmentDate_ptr, lCurrentSegmentCabinStruct);
00217     }
00218   }
00219
00220   // ////////////////////////////////////////////////////////////////////
00221   void InventoryBuilder::
00222   buildSegmentCabin (stdair::SegmentDate& ioSegmentDate,
00223                      const SegmentCabinStruct& iSegmentCabinStruct) {
00224     // Check that the segment-cabin object is not already existing. If a
00225     // segment-cabin object with the same key has already been created,
00226     // then just update it, ifnot, create a segment-cabin and update it.
00227     stdair::SegmentCabin* lSegmentCabin_ptr = stdair::BomManager::
00228       getObjectPtr<stdair::SegmentCabin> (ioSegmentDate,
00229                                           iSegmentCabinStruct._cabinCode);
00230     if (lSegmentCabin_ptr == NULL) {
00231       // Instantiate a segment-cabin object for the given key (cabin code);
00232       stdair::SegmentCabinKey lKey (iSegmentCabinStruct._cabinCode);
00233       lSegmentCabin_ptr =
00234         &stdair::FacBom<stdair::SegmentCabin>::instance().create (lKey);
00235
00236       // Link the segment-cabin to the segment-date
00237       stdair::FacBomManager::addToListAndMap (ioSegmentDate, *lSegmentCabin_ptr
    );
00238       stdair::FacBomManager::linkWithParent (ioSegmentDate, *lSegmentCabin_ptr)
    ;
00239     }
00240     assert (lSegmentCabin_ptr != NULL);
00241
00242     // TODO: Update the BOM segment-cabin with the attributes of the
00243     // segment-cabin struct.
00244     iSegmentCabinStruct.fill (*lSegmentCabin_ptr);
00245
00246     // Browse the list of fare family struct and create the corresponding BOM.
00247     for (FareFamilyStructList_T::const_iterator itFareFamily =
00248            iSegmentCabinStruct._fareFamilies.begin();
00249          itFareFamily != iSegmentCabinStruct._fareFamilies.end();
00250          ++itFareFamily) {
00251       const FareFamilyStruct& lCurrentFareFamilyStruct = *itFareFamily;
00252       buildFareFamily (*lSegmentCabin_ptr, lCurrentFareFamilyStruct);
00253     }
00254   }
00255
00256   // ////////////////////////////////////////////////////////////////////
00257   void InventoryBuilder::
00258   buildFareFamily (stdair::SegmentCabin& ioSegmentCabin,
00259                    const FareFamilyStruct& iFareFamilyStruct) {
00260
00261     // Check that the fare family object is not already existing. If a
00262     // fare family object with the same key has already been created,
00263     // then just update it. If not, create a fare family and update it.
00264     stdair::FareFamily* lFareFamily_ptr = stdair::BomManager::
00265       getObjectPtr<stdair::FareFamily> (ioSegmentCabin,
00266                                         iFareFamilyStruct._familyCode);
00267     if (lFareFamily_ptr == NULL) {
00268       // Instantiate a fare family object for the given key (fare family code);
00269       const stdair::FareFamilyKey lFFKey (iFareFamilyStruct._familyCode);
00270       lFareFamily_ptr =
00271         &stdair::FacBom<stdair::FareFamily>::instance().create (lFFKey);
00272
```

```
00273       // Link the fare family to the segment-cabin
00274       stdair::FacBomManager::addToListAndMap (ioSegmentCabin, *lFareFamily_ptr)
    ;
00275       stdair::FacBomManager::linkWithParent (ioSegmentCabin, *lFareFamily_ptr);
00276     }
00277     assert (lFareFamily_ptr != NULL);
00278
00279     // TODO: Upcabin the BOM fare family with the attributes of the
00280     // fare family struct.
00281     iFareFamilyStruct.fill (*lFareFamily_ptr);
00282
00283     // Browse the list of booking-class struct and create the corresponding
     BOM.
00284     for (BookingClassStructList_T::const_iterator itBookingClass =
00285            iFareFamilyStruct._classList.begin();
00286          itBookingClass != iFareFamilyStruct._classList.end();
00287          ++itBookingClass) {
00288       const BookingClassStruct& lCurrentBookingClassStruct = *itBookingClass;
00289       buildBookingClass (*lFareFamily_ptr, lCurrentBookingClassStruct);
00290     }
00291   }
00292
00293   // ////////////////////////////////////////////////////////////////////
00294   void InventoryBuilder::
00295   buildBookingClass (stdair::FareFamily& ioFareFamily,
00296                      const BookingClassStruct& iBookingClassStruct) {
00297
00298     // Check that the booking class object is not already existing. If a
00299     // booking-class object with the same key has already been created,
00300     // then just update it. If not, create a booking-class and update it.
00301     stdair::BookingClass* lBookingClass_ptr = stdair::BomManager::
00302       getObjectPtr<stdair::BookingClass> (ioFareFamily,
00303                                           iBookingClassStruct._classCode);
00304     if (lBookingClass_ptr == NULL) {
00305       // Instantiate a booking class object for the given key (class code);
00306       const stdair::BookingClassKey lClassKey (iBookingClassStruct._classCode);
00307       lBookingClass_ptr =
00308         &stdair::FacBom<stdair::BookingClass>::instance().create (lClassKey);
00309
00310       // Link the booking-class to the fare family
00311       stdair::FacBomManager::addToListAndMap (ioFareFamily, *lBookingClass_ptr)
    ;
00312       stdair::FacBomManager::linkWithParent (ioFareFamily, *lBookingClass_ptr);
00313
00314       // Link the booking-class to the segment-cabin
00315       stdair::SegmentCabin& lSegmentCabin =
00316         stdair::BomManager::getParent<stdair::SegmentCabin> (ioFareFamily);
00317       stdair::FacBomManager::addToListAndMap (lSegmentCabin, *lBookingClass_ptr
    );
00318
00319       // Link the booking-class to the segment-date
00320       stdair::SegmentDate& lSegmentDate =
00321         stdair::BomManager::getParent<stdair::SegmentDate> (lSegmentCabin);
00322       stdair::FacBomManager::addToListAndMap (lSegmentDate, *lBookingClass_ptr)
    ;
00323     }
00324     assert (lBookingClass_ptr != NULL);
00325
00326     // TODO: Upcabin the BOM booking-class with the attributes of the
00327     // booking-class struct.
00328     iBookingClassStruct.fill (*lBookingClass_ptr);
00329   }
00330
00331 }
```

23.111 airinv/command/InventoryBuilder.hpp File Reference

```
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

Classes

- class AIRINV::InventoryBuilder

  Class handling the generation / instantiation of the Inventory BOM.

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV
- namespace AIRINV::InventoryParserHelper

23.112 InventoryBuilder.hpp

```
00001 #ifndef __AIRINV_CMD_INVENTORYBUILDER_HPP
00002 #define __AIRINV_CMD_INVENTORYBUILDER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // StdAir
00008 #include <stdair/command/CmdAbstract.hpp>
00009 // AirInv
00010 #include <airinv/AIRINV_Types.hpp>
00011
00013 namespace stdair {
00014   class BomRoot;
00015   class Inventory;
00016   class FlightDate;
00017   class LegDate;
00018   class LegCabin;
00019   class Bucket;
00020   class SegmentDate;
00021   class SegmentCabin;
00022   class FareFamily;
00023 }
00024
00025 namespace AIRINV {
00026
00028   struct FlightDateStruct;
00029   struct LegStruct;
00030   struct LegCabinStruct;
00031   struct BucketStruct;
00032   struct SegmentStruct;
00033   struct SegmentCabinStruct;
00034   struct FareFamilyStruct;
00035   struct BookingClassStruct;
00036   namespace InventoryParserHelper {
00037     struct doEndFlightDate;
00038   }
00039
00043   class InventoryBuilder : public stdair::CmdAbstract {
00049     friend struct InventoryParserHelper::doEndFlightDate
      ;
00050
00051   private:
00056     static void buildInventory (stdair::BomRoot&, const FlightDateStruct
      &);
00057
00062     static void buildFlightDate (stdair::Inventory&, const FlightDateStruct
      &);
00063
00068     static void buildLegDate (stdair::FlightDate&, const LegStruct&);
00069
00074     static void buildLegCabin (stdair::LegDate&, const LegCabinStruct
      &);
00075
00080     static void buildBucket (stdair::LegCabin&, const BucketStruct&
      );
00081
00086     static void buildSegmentDate (stdair::FlightDate&, const SegmentStruct
      &);
00087
00092     static void buildSegmentCabin (stdair::SegmentDate&,
00093                                    const SegmentCabinStruct&)
      ;
00094
00099     static void buildFareFamily (stdair::SegmentCabin&,
00100                                  const FareFamilyStruct&);
00101
00106     static void buildBookingClass (stdair::FareFamily&,
00107                                    const BookingClassStruct&)
      ;
00108   };
00109
00110 }
00111 #endif // __AIRINV_CMD_INVENTORYBUILDER_HPP
```

23.113 airinv/command/InventoryGenerator.cpp File Reference

```
#include <cassert>
#include <boost/date_time/date_iterator.hpp>
#include <stdair/stdair_types.hpp>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <stdair/bom/LegDate.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <stdair/bom/Bucket.hpp>
#include <stdair/factory/FacBomManager.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/bom/FlightPeriodStruct.hpp>
#include <airinv/command/InventoryGenerator.hpp>
```

Namespaces

- namespace AIRINV

23.114 InventoryGenerator.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/date_time/date_iterator.hpp>
00008 // StdAir
00009 #include <stdair/stdair_types.hpp>
00010 #include <stdair/basic/BasConst_Inventory.hpp>
00011 #include <stdair/bom/BomManager.hpp>
00012 #include <stdair/bom/BomRoot.hpp>
00013 #include <stdair/bom/Inventory.hpp>
00014 #include <stdair/bom/FlightDate.hpp>
00015 #include <stdair/bom/SegmentDate.hpp>
00016 #include <stdair/bom/SegmentCabin.hpp>
00017 #include <stdair/bom/FareFamily.hpp>
00018 #include <stdair/bom/BookingClass.hpp>
00019 #include <stdair/bom/LegDate.hpp>
00020 #include <stdair/bom/LegCabin.hpp>
00021 #include <stdair/bom/Bucket.hpp>
00022 #include <stdair/factory/FacBomManager.hpp>
00023 #include <stdair/service/Logger.hpp>
00024 // AirInv
00025 #include <airinv/bom/FlightPeriodStruct.hpp>
00026 #include <airinv/command/InventoryGenerator.hpp
      >
00027
00028 namespace AIRINV {
00029
00030   // ////////////////////////////////////////////////////////////////////
00031   void InventoryGenerator::
00032   createFlightDate (stdair::BomRoot& ioBomRoot,
00033                     const FlightPeriodStruct& iFlightPeriod) {
00034     const stdair::AirlineCode_T& lAirlineCode = iFlightPeriod._airlineCode;
00035
00036     // Instantiate an inventory object (if not exist)
00037     // for the given key (airline code)
00038     stdair::Inventory* lInventory_ptr = stdair::BomManager::
00039       getObjectPtr<stdair::Inventory> (ioBomRoot, lAirlineCode);
00040     if (lInventory_ptr == NULL) {
00041       stdair::InventoryKey lKey (lAirlineCode);
```

```
00042       lInventory_ptr =
00043         &stdair::FacBom<stdair::Inventory>::instance().create (lKey);
00044       stdair::FacBomManager::addToListAndMap (ioBomRoot, *lInventory_ptr);
00045       stdair::FacBomManager::linkWithParent (ioBomRoot, *lInventory_ptr);
00046     }
00047     assert (lInventory_ptr != NULL);
00048
00049     // Generate all the dates corresponding to the period
00050     // and create the corresponding flight-dates.
00051     const stdair::DatePeriod_T lDateRange = iFlightPeriod._dateRange;
00052
00053     for (boost::gregorian::day_iterator itDate = lDateRange.begin();
00054          itDate != lDateRange.end(); ++itDate) {
00055       const stdair::Date_T& currentDate = *itDate;
00056
00057       // Retrieve, for the current day, the Day-Of-the-Week (thanks to Boost)
00058       const unsigned short currentDoW = currentDate.day_of_week().as_number();
00059
00060       // The FlightPeriod structure stores which Days (-Of-the-Week) are
00061       // active within the week. For each day (Mon., Tue., etc.), a boolean
00062       // states whether the Flight is active for that day.
00063       const stdair::DoWStruct& lDoWList = iFlightPeriod._dow;
00064       const bool isDoWActive = lDoWList.getStandardDayOfWeek (currentDoW);
00065
00066       if (isDoWActive == true) {
00067         createFlightDate (*lInventory_ptr, currentDate, iFlightPeriod);
00068       }
00069     }
00070   }
00071
00072   // ////////////////////////////////////////////////////////////////////
00073   void InventoryGenerator::
00074   createFlightDate (stdair::Inventory& ioInventory,
00075                     const stdair::Date_T& iFlightDate,
00076                     const FlightPeriodStruct& iFlightPeriod) {
00077     // Create the FlightDateKey
00078     const stdair::FlightNumber_T& lFlightNumber = iFlightPeriod._flightNumber;
00079     stdair::FlightDateKey lFlightDateKey (lFlightNumber, iFlightDate);
00080
00081     // DEBUG
00082     // STDAIR_LOG_DEBUG ("Creating flight-date: " <<
       lFlightDateKey.toString());
00083
00084     // Check that the flight-date object is not already existing. If a
00085     // FlightDate object with the same key has already been created,
00086     // it means that the schedule input file is invalid (two flight-periods
00087     // are overlapping).
00088     stdair::FlightDate* lFlightDate_ptr = stdair::BomManager::
00089       getObjectPtr<stdair::FlightDate> (ioInventory, lFlightDateKey.toString())
       ;
00090     if (lFlightDate_ptr != NULL) {
00091       std::ostringstream oMessage;
00092       oMessage << ioInventory.describeKey() << ", "
00093                << lFlightDate_ptr->describeKey();
00094       throw FlightDateDuplicationException (oMessage.str());
00095     }
00096
00097     // Instantiate a fligh-date object with the given key (flight number and
00098     // flight date)
00099     lFlightDate_ptr =
00100       &stdair::FacBom<stdair::FlightDate>::instance().create (lFlightDateKey);
00101     stdair::FacBomManager::addToListAndMap (ioInventory, *lFlightDate_ptr);
00102     stdair::FacBomManager::linkWithParent (ioInventory, *lFlightDate_ptr);
00103
00104     // Iterate on the leg-dates
00105     stdair::Duration_T currentOffTime (0, 0, 0);
00106     stdair::AirportCode_T previousOffPoint;
00107     const LegStructList_T& lLegList = iFlightPeriod._legList;
00108     for (LegStructList_T::const_iterator itLeg = lLegList.begin();
00109          itLeg != lLegList.end(); ++itLeg) {
00110       const LegStruct& lLeg = *itLeg;
00111
00112       // Create the leg-branch of the flight-date BOM
00113       stdair::LegDate& lLegDate =
00114         createLegDate (*lFlightDate_ptr, iFlightDate, lLeg);
00115
00116       // TODO: Check that the boarding date/time of the next leg is greated
00117       // than the off date/time of the current leg. Throw an exception
00118       // otherwise.
00119
00120       // TODO: specify, in the schedule input file specifications, that the
00121       // legs should be given in their natural order.
00122       // Then, replace the assertion by a thrown exception.
00123       //
00124       // Check that the legs are given in their natural order. If the schedule
00125       // input does not respect that assumption, the following assertion will
00126       // fail.
```

```
00127       if (itLeg != lLegList.begin()) {
00128         const stdair::AirportCode_T& currentBoardingPoint =
00129           lLegDate.getBoardingPoint();
00130         assert (currentBoardingPoint == previousOffPoint);
00131       }
00132
00133       // Set the local variable for the next iteration
00134       previousOffPoint = lLegDate.getOffPoint();
00135     }
00136
00137     // Iterate on the segment structures
00138     const SegmentStructList_T& lSegmentList = iFlightPeriod.
     _segmentList;
00139     for (SegmentStructList_T::const_iterator itSegment = lSegmentList.begin();
00140          itSegment != lSegmentList.end(); ++itSegment) {
00141       const SegmentStruct& lSegment = *itSegment;
00142
00143       createSegmentDate (*lFlightDate_ptr, lSegment);
00144     }
00145   }
00146
00147   // ////////////////////////////////////////////////////////////////////
00148   stdair::LegDate& InventoryGenerator::
00149   createLegDate (stdair::FlightDate& ioFlightDate,
00150                  const stdair::Date_T& iReferenceDate,
00151                  const LegStruct& iLeg) {
00152     // Create the leg-date corresponding to the boarding point.
00153     stdair::LegDateKey lKey (iLeg._boardingPoint);
00154     stdair::LegDate& lLegDate =
00155       stdair::FacBom<stdair::LegDate>::instance().create (lKey);
00156     stdair::FacBomManager::addToListAndMap (ioFlightDate, lLegDate);
00157     stdair::FacBomManager::linkWithParent (ioFlightDate, lLegDate);
00158
00159     // Set the leg-date attributes
00160     iLeg.fill (iReferenceDate, lLegDate);
00161
00162     // Iterate on the cabins
00163     const LegCabinStructList_T& lCabinList = iLeg.
     _cabinList;
00164     for (LegCabinStructList_T::const_iterator itCabin = lCabinList.begin();
00165          itCabin != lCabinList.end(); ++itCabin) {
00166       const LegCabinStruct& lCabin = *itCabin;
00167
00168       // Create the leg-cabin-branch of the leg-date
00169       createLegCabin (lLegDate, lCabin);
00170     }
00171
00172     return lLegDate;
00173   }
00174
00175   // ////////////////////////////////////////////////////////////////////
00176   void InventoryGenerator::
00177   createLegCabin (stdair::LegDate& ioLegDate,
00178                   const LegCabinStruct& iCabin) {
00179     // Instantiate an leg-cabin object with the corresponding cabin code
00180     const stdair::LegCabinKey lKey (iCabin._cabinCode);
00181     stdair::LegCabin& lLegCabin =
00182       stdair::FacBom<stdair::LegCabin>::instance().create (lKey);
00183     stdair::FacBomManager::addToListAndMap (ioLegDate, lLegCabin);
00184     stdair::FacBomManager::linkWithParent (ioLegDate, lLegCabin);
00185
00186     // Set the Leg-Cabin attributes
00187     iCabin.fill (lLegCabin);
00188
00189     // Iterate on the bucket
00190     const BucketStructList_T& lBucketList = iCabin.
     _bucketList;
00191     for (BucketStructList_T::const_iterator itBucket = lBucketList.begin();
00192          itBucket != lBucketList.end(); ++itBucket) {
00193       const BucketStruct& lBucket = *itBucket;
00194
00195       // Create the bucket of the leg-cabin
00196       createBucket (lLegCabin, lBucket);
00197     }
00198   }
00199
00200   // ////////////////////////////////////////////////////////////////////
00201   void InventoryGenerator::createBucket (stdair::LegCabin& ioLegCabin,
00202                                          const BucketStruct& iBucket) {
00203     // Instantiate a bucket object with the corresponding seat index
00204     const stdair::BucketKey lKey (iBucket._seatIndex);
00205     stdair::Bucket& lBucket =
00206       stdair::FacBom<stdair::Bucket>::instance().create (lKey);
00207     stdair::FacBomManager::addToListAndMap (ioLegCabin, lBucket);
00208     stdair::FacBomManager::linkWithParent (ioLegCabin, lBucket);
00209
00210     // Set the Bucket attributes
```

```
00211     iBucket.fill (lBucket);
00212   }
00213
00214   // ////////////////////////////////////////////////////////////////////
00215   void InventoryGenerator::
00216   createSegmentDate (stdair::FlightDate& ioFlightDate,
00217                      const SegmentStruct& iSegment) {
00218     // Set the segment-date primary key
00219     const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint;
00220     const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00221     stdair::SegmentDateKey lSegmentDateKey (lBoardingPoint, lOffPoint);
00222     // Instantiate an segment-date object with the key.
00223     stdair::SegmentDate& lSegmentDate =
00224       stdair::FacBom<stdair::SegmentDate>::instance().create (lSegmentDateKey);
00225     stdair::FacBomManager::addToListAndMap (ioFlightDate, lSegmentDate);
00226     stdair::FacBomManager::linkWithParent (ioFlightDate, lSegmentDate);
00227
00228     // Set the segment-date attributes
00229     iSegment.fill (lSegmentDate);
00230
00231     // Iterate on the Cabins
00232     const SegmentCabinStructList_T& lCabinList =
    iSegment._cabinList;
00233     for (SegmentCabinStructList_T::const_iterator itCabin =
00234            lCabinList.begin(); itCabin != lCabinList.end(); ++itCabin) {
00235       const SegmentCabinStruct& lCabin = *itCabin;
00236
00237       // Create the segment-cabin-branch of the segment-date BOM
00238       createSegmentCabin (lSegmentDate, lCabin);
00239     }
00240   }
00241
00242   // ////////////////////////////////////////////////////////////////////
00243   void InventoryGenerator::
00244   createSegmentCabin (stdair::SegmentDate& ioSegmentDate,
00245                       const SegmentCabinStruct& iCabin) {
00246
00247     // Instantiate an segment-cabin object with the corresponding cabin code
00248     stdair::SegmentCabinKey lKey (iCabin._cabinCode);
00249     stdair::SegmentCabin& lSegmentCabin =
00250       stdair::FacBom<stdair::SegmentCabin>::instance().create (lKey);
00251
00252     // Link the segment-cabin to its parent, the segment-date
00253     stdair::FacBomManager::addToListAndMap (ioSegmentDate, lSegmentCabin);
00254     stdair::FacBomManager::linkWithParent (ioSegmentDate, lSegmentCabin);
00255
00256     // Set the segment-cabin attributes
00257     iCabin.fill (lSegmentCabin);
00258
00259     // Create the list of fare families
00260     for (FareFamilyStructList_T::const_iterator itFareFamily =
00261            iCabin._fareFamilies.begin();
00262          itFareFamily != iCabin._fareFamilies.end(); itFareFamily++) {
00263       const FareFamilyStruct& lFareFamilyStruct = *itFareFamily;
00264
00265       //
00266       createFareFamily (lSegmentCabin, lFareFamilyStruct);
00267     }
00268   }
00269
00270   // ////////////////////////////////////////////////////////////////////
00271   void InventoryGenerator::
00272   createFareFamily (stdair::SegmentCabin& ioSegmentCabin,
00273                     const FareFamilyStruct& iFF) {
00274     // Instantiate an segment-cabin object with the corresponding cabin code
00275     stdair::FareFamilyKey lKey (iFF._familyCode);
00276     stdair::FareFamily& lFareFamily =
00277       stdair::FacBom<stdair::FareFamily>::instance().create (lKey);
00278
00279     // Link the fare family to its parent, the segment-cabin
00280     stdair::FacBomManager::addToListAndMap (ioSegmentCabin,
00281                                             lFareFamily);
00282     stdair::FacBomManager::linkWithParent (ioSegmentCabin,
00283                                            lFareFamily);
00284
00285     // Set the fare family attributes
00286     iFF.fill (lFareFamily);
00287
00288     // Iterate on the classes
00289     const stdair::ClassList_String_T& lClassList = iFF._classes;
00290     for (stdair::ClassList_String_T::const_iterator itClass =
00291            lClassList.begin(); itClass != lClassList.end(); ++itClass) {
00292       // Transform the single-character class code into a STL string
00293       std::ostringstream ostr;
00294       ostr << *itClass;
00295       const stdair::ClassCode_T lClassCode (ostr.str());
00296
```

```
00297       // Create the booking class branch of the segment-cabin BOM
00298       createClass (lFareFamily, lClassCode);
00299     }
00300   }
00301
00302   // ////////////////////////////////////////////////////////////////////
00303   void InventoryGenerator::createClass (stdair::FareFamily& ioFareFamily,
00304                                         const stdair::ClassCode_T& iClassCode)
      {
00305
00306     // Instantiate a booking class object with the given class code
00307     const stdair::BookingClassKey lClassKey (iClassCode);
00308     stdair::BookingClass& lClass =
00309       stdair::FacBom<stdair::BookingClass>::instance().create (lClassKey);
00310
00311     // Link the booking-class to the fare family
00312     stdair::FacBomManager::addToListAndMap (ioFareFamily, lClass);
00313     stdair::FacBomManager::linkWithParent (ioFareFamily, lClass);
00314
00315     // Link the booking-class to the segment-cabin
00316     stdair::SegmentCabin& lSegmentCabin =
00317       stdair::BomManager::getParent<stdair::SegmentCabin> (ioFareFamily);
00318     stdair::FacBomManager::addToListAndMap (lSegmentCabin, lClass);
00319
00320     // Link the booking-class to the segment-date
00321     stdair::SegmentDate& lSegmentDate =
00322       stdair::BomManager::getParent<stdair::SegmentDate> (lSegmentCabin);
00323     stdair::FacBomManager::addToListAndMap (lSegmentDate, lClass);
00324   }
00325 }
```

23.115 airinv/command/InventoryGenerator.hpp File Reference

```
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

Classes

- class AIRINV::InventoryGenerator

  Class handling the generation / instantiation of the Inventory BOM.

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV
- namespace AIRINV::ScheduleParserHelper

23.116 InventoryGenerator.hpp

```
00001 #ifndef __AIRINV_CMD_INVENTORYGENERATOR_HPP
00002 #define __AIRINV_CMD_INVENTORYGENERATOR_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // StdAir
00008 #include <stdair/command/CmdAbstract.hpp>
00009 // Airinv
00010 #include <airinv/AIRINV_Types.hpp>
00011
00013 namespace stdair {
00014   class BomRoot;
00015   class Inventory;
00016   class FlightDate;
00017   class LegDate;
00018   class LegCabin;
00019   class SegmentDate;
00020   class SegmentCabin;
00021   class FareFamily;
```

```
00022 }
00023
00024 namespace AIRINV {
00025
00026   // Forward declarations
00027   struct FlightPeriodStruct;
00028   struct LegStruct;
00029   struct SegmentStruct;
00030   struct LegCabinStruct;
00031   struct SegmentCabinStruct;
00032   struct FareFamilyStruct;
00033   struct BucketStruct;
00034   namespace ScheduleParserHelper {
00035     struct doEndFlight;
00036   }
00037
00042   class InventoryGenerator : public stdair::CmdAbstract {
00048     friend class FlightPeriodFileParser;
00049     friend class FFFlightPeriodFileParser;
00050     friend struct ScheduleParserHelper::doEndFlight
      ;
00051     friend class ScheduleParser;
00052
00053   private:
00058     static void createFlightDate (stdair::BomRoot&,
00059                                   const FlightPeriodStruct&);
00060
00064     static void createFlightDate (stdair::Inventory&,
00065                                   const stdair::Date_T&,
00066                                   const FlightPeriodStruct&);
00067
00071     static stdair::LegDate& createLegDate (stdair::FlightDate&,
00072                                            const stdair::Date_T&,
00073                                            const LegStruct&);
00074
00078     static void createLegCabin (stdair::LegDate&, const LegCabinStruct
      &);
00079
00083     static void createBucket (stdair::LegCabin&, const BucketStruct
      &);
00084
00088     static void createSegmentDate (stdair::FlightDate&,
00089                                    const SegmentStruct&);
00090
00094     static void createSegmentCabin (stdair::SegmentDate&,
00095                                     const SegmentCabinStruct&
      );
00096
00100     static void createFareFamily (stdair::SegmentCabin&,
00101                                   const FareFamilyStruct&);
00102
00106     static void createClass (stdair::FareFamily&,
00107                              const stdair::ClassCode_T&);
00108
00109   };
00110
00111 }
00112 #endif // __AIRINV_CMD_INVENTORYGENERATOR_HPP
```

23.117 airinv/command/InventoryManager.cpp File Reference

```
#include <exception>
```

```
#include <algorithm>
#include <boost/make_shared.hpp>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/basic/BasConst_BomDisplay.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomKeyManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/LegDate.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <stdair/bom/GuillotineBlock.hpp>
#include <stdair/bom/TravelSolutionStruct.hpp>
#include <stdair/bom/FareOptionStruct.hpp>
#include <stdair/bom/EventStruct.hpp>
#include <stdair/bom/EventQueue.hpp>
#include <stdair/bom/SnapshotStruct.hpp>
#include <stdair/bom/RMEventStruct.hpp>
#include <stdair/factory/FacBomManager.hpp>
#include <stdair/factory/FacBom.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/bom/BomRootHelper.hpp>
#include <airinv/bom/InventoryHelper.hpp>
#include <airinv/bom/FlightDateHelper.hpp>
#include <airinv/command/InventoryManager.hpp>
```

Namespaces

- namespace AIRINV

23.118 InventoryManager.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <exception>
00006 #include <algorithm> // To use min
00007 // Boost
00008 #include <boost/make_shared.hpp>
00009 // StdAir
00010 #include <stdair/basic/BasConst_Inventory.hpp>
00011 #include <stdair/basic/BasConst_BomDisplay.hpp>
00012 #include <stdair/bom/BomManager.hpp>
00013 #include <stdair/bom/BomKeyManager.hpp>
00014 #include <stdair/bom/BomRoot.hpp>
00015 #include <stdair/bom/Inventory.hpp>
00016 #include <stdair/bom/FlightDate.hpp>
00017 #include <stdair/bom/SegmentDate.hpp>
00018 #include <stdair/bom/SegmentCabin.hpp>
00019 #include <stdair/bom/LegDate.hpp>
00020 #include <stdair/bom/LegCabin.hpp>
00021 #include <stdair/bom/FareFamily.hpp>
00022 #include <stdair/bom/BookingClass.hpp>
00023 #include <stdair/bom/GuillotineBlock.hpp>
00024 #include <stdair/bom/TravelSolutionStruct.hpp>
00025 #include <stdair/bom/FareOptionStruct.hpp>
00026 #include <stdair/bom/EventStruct.hpp>
00027 #include <stdair/bom/EventQueue.hpp>
00028 #include <stdair/bom/SnapshotStruct.hpp>
```

```
00029 #include <stdair/bom/RMEventStruct.hpp>
00030 #include <stdair/factory/FacBomManager.hpp>
00031 #include <stdair/factory/FacBom.hpp>
00032 #include <stdair/service/Logger.hpp>
00033 #include <stdair/bom/FareFamily.hpp> // Contains the definition of
       FareFamilyList_T
00034 #include <stdair/bom/BookingClass.hpp> //
00035 // AirInv
00036 #include <airinv/AIRINV_Types.hpp>
00037 #include <airinv/bom/BomRootHelper.hpp>
00038 #include <airinv/bom/InventoryHelper.hpp>
00039 #include <airinv/bom/FlightDateHelper.hpp>
00040 #include <airinv/command/InventoryManager.hpp
      >
00041
00042 namespace AIRINV {
00043
00044   // ////////////////////////////////////////////////////////////////////
00045   void InventoryManager::
00046   calculateAvailability (const stdair::BomRoot& iBomRoot,
00047                          stdair::TravelSolutionStruct& ioTravelSolution,
00048                          const stdair::PartnershipTechnique&
      iPartnershipTechnique) {
00049
00050     const stdair::PartnershipTechnique::EN_PartnershipTechnique&
      lPartnershipTechnique =
00051       iPartnershipTechnique.getTechnique();
00052
00053     // Browse the list of segments and get the availability for the
00054     // children classes.
00055     const stdair::SegmentPath_T& lSegmentPath =
00056       ioTravelSolution.getSegmentPath();
00057     for (stdair::SegmentPath_T::const_iterator itSK = lSegmentPath.begin();
00058          itSK != lSegmentPath.end(); ++itSK) {
00059       const std::string& lSegmentKey = *itSK;
00060       const stdair::InventoryKey lInvKey =
00061         stdair::BomKeyManager::extractInventoryKey (lSegmentKey);
00062       stdair::Inventory& lInventory =
00063         stdair::BomManager::getObject<stdair::Inventory>(iBomRoot,
00064                                                          lInvKey.toString());
00065
00066       switch (lPartnershipTechnique) {
00067
00068       case stdair::PartnershipTechnique::NONE:{
00069         InventoryHelper::calculateAvailability
       (lInventory, lSegmentKey,
00070                                                 ioTravelSolution);
00071         break;
00072       }
00073       default:{
00074         InventoryHelper::getYieldAndBidPrice
       (lInventory, lSegmentKey,
00075                                              ioTravelSolution);
00076         break;
00077       }
00078       }
00079     }
00080
00081     switch (lPartnershipTechnique) {
00082     case stdair::PartnershipTechnique::NONE:{
00083       // Compute the availabitliy for each fare option using the AU's.
00084       calculateAvailabilityByAU (ioTravelSolution);
00085       break;
00086     }
00087     case stdair::PartnershipTechnique::RAE_DA:
00088     case stdair::PartnershipTechnique::RAE_YP:{
00089       // 1. Compute the availability for each fare option using RAE
00090       calculateAvailabilityByRAE (ioTravelSolution);
00091       break;
00092     }
00093     case stdair::PartnershipTechnique::IBP_DA:
00094     case stdair::PartnershipTechnique::IBP_YP:{
00095       // 2. Compute the availability for each fare option using protective IBP
00096       calculateAvailabilityByProtectiveIBP (ioTravelSolution);
00097       break;
00098     }
00099     case stdair::PartnershipTechnique::IBP_YP_U:
00100     case stdair::PartnershipTechnique::RMC:
00101     case stdair::PartnershipTechnique::A_RMC:{
00102       // 3. Compute the availability for each fare option using IBP
00103       calculateAvailabilityByIBP (ioTravelSolution);
00104       break;
00105     }
00106     default: {
00107       assert (false);
00108       break;
00109     }
```

```
00110     }
00111   }
00112
00113   // ////////////////////////////////////////////////////////////////////
00114   void InventoryManager::
00115   calculateAvailabilityByAU (stdair::TravelSolutionStruct& ioTravelSolution) {
00116
00117     // MODIF: segment path string for availability display
00118     std::ostringstream oStr;
00119     const stdair::SegmentPath_T& lSP = ioTravelSolution.getSegmentPath();
00120     for (stdair::SegmentPath_T::const_iterator itSP = lSP.begin();
00121          itSP != lSP.end(); itSP++) {
00122       oStr << *itSP << ";";
00123     }
00124
00125     // Browse the fare options
00126     stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef()
      ;
00127     for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00128          itFO != lFOList.end(); ++itFO) {
00129
00130       stdair::FareOptionStruct& lFO = *itFO;
00131
00132       // Check the availability
00133       const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00134
00135       const stdair::ClassAvailabilityMapHolder_T& lClassAvailabilityMapHolder =
00136         ioTravelSolution.getClassAvailabilityMapHolder();
00137
00138       // Initialise the flag stating whether the availability is enough
00139       stdair::Availability_T lAvl =
00140         std::numeric_limits<stdair::Availability_T>::max();
00141
00142       // Sanity check: the travel solution must contain two lists,
00143       // one for the booking class availabilities, the other for the
00144       // fare options.
00145       assert (lClassAvailabilityMapHolder.empty() == false
00146               && lClassPath.empty() == false);
00147
00148       // List of booking class availability maps (one map per segment)
00149       stdair::ClassAvailabilityMapHolder_T::const_iterator itCAMH =
00150         lClassAvailabilityMapHolder.begin();
00151
00152       // List of fare options
00153       stdair::ClassList_StringList_T::const_iterator itClassList =
00154         lClassPath.begin();
00155
00156       // Browse both lists at the same time, i.e., one element per segment
00157       for (; itCAMH != lClassAvailabilityMapHolder.end()
00158              && itClassList != lClassPath.end(); ++itCAMH, ++itClassList) {
00159
00160         // Retrieve the booking class list for the current segment
00161         const stdair::ClassList_String_T& lCurrentClassList = *itClassList;
00162         assert (lCurrentClassList.size() > 0);
00163
00164         // TODO: instead of just extracting the first booking class,
00165         //       perform a choice on the full list of classes.
00166         // Extract one booking class key (class code)
00167         stdair::ClassCode_T lFirstClass;
00168         lFirstClass.append (lCurrentClassList, 0, 1);
00169
00170         // Retrieve the booking class map for the current segment
00171         const stdair::ClassAvailabilityMap_T& lClassAvlMap = *itCAMH;
00172
00173         // Retrieve the availability of the chosen booking class
00174         const stdair::ClassAvailabilityMap_T::const_iterator itClassAvl =
00175           lClassAvlMap.find (lFirstClass);
00176
00177         if (itClassAvl == lClassAvlMap.end()) {
00178           // DEBUG
00179           STDAIR_LOG_DEBUG ("No availability has been set up for the class '"
00180                             << lFirstClass << "'. Travel solution: "
00181                             << ioTravelSolution.display());
00182         }
00183         assert (itClassAvl != lClassAvlMap.end());
00184
00185         const stdair::Availability_T& lCurrentAvl = itClassAvl->second;
00186         if (lAvl > lCurrentAvl) {
00187           lAvl = lCurrentAvl;
00188         }
00189       }
00190
00191       lFO.setAvailability (lAvl);
00192
00193       //MODIF: availability display
00194       STDAIR_LOG_DEBUG ("Fare option " << lFO.describe() << ", "
00195                         << "Availability " << lFO.getAvailability() << ", "
```

```
00196                         << "Segment Path " << oStr.str());
00197     }
00198   }
00199
00200   // \todo: the following code must be either re-written or removed.
00201   //        There is indeed a lot of code duplication.
00202   // ////////////////////////////////////////////////////////////////////
00203   void InventoryManager::
00204   calculateAvailabilityByRAE (stdair::TravelSolutionStruct& ioTravelSolution) {
00205
00206     std::ostringstream oStr;
00207     const stdair::SegmentPath_T& lSP = ioTravelSolution.getSegmentPath();
00208     for (stdair::SegmentPath_T::const_iterator itSP = lSP.begin();
00209          itSP != lSP.end(); itSP++) {
00210       oStr << *itSP << ";";
00211     }
00212
00213     //Retrieve bid price vector and yield maps
00214     const stdair::ClassYieldMapHolder_T& lClassYieldMapHolder =
00215       ioTravelSolution.getClassYieldMapHolder();
00216     const stdair::ClassBpvMapHolder_T& lClassBpvMapHolder =
00217       ioTravelSolution.getClassBpvMapHolder();
00218
00219     //Retrieve the list of fare options and browse it
00220     stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef()
    ;
00221     for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00222          itFO != lFOList.end(); ++itFO) {
00223
00224       stdair::FareOptionStruct& lFO = *itFO;
00225
00226       stdair::ClassYieldMapHolder_T::const_iterator itCYM =
00227         lClassYieldMapHolder.begin();
00228       stdair::ClassBpvMapHolder_T::const_iterator itCBPM =
00229         lClassBpvMapHolder.begin();
00230
00231       const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00232
00233
00234       // Sanity checks
00235       assert (lClassPath.size() == lClassYieldMapHolder.size());
00236       assert (lClassPath.size() == lClassBpvMapHolder.size());
00237
00238       // Browse class path, class-yield maps, class-(bid price vector) maps.
00239       // Each iteration corresponds to one segment.
00240
00241       std::ostringstream oCPStr;
00242       for (stdair::ClassList_StringList_T::const_iterator itCL =
00243              lClassPath.begin();
00244            itCL != lClassPath.end(); ++itCL, ++itCYM, ++itCBPM) {
00245
00246         // Class path determination
00247         if (itCL == lClassPath.begin()) {
00248           oCPStr << *itCL;
00249
00250         } else {
00251           oCPStr << "-" << *itCL;
00252         }
00253
00254         const stdair::ClassList_String_T& lCL = *itCL;
00255         stdair::ClassCode_T lCC;
00256         lCC.append (lCL, 0, 1);
00257
00258         const stdair::ClassYieldMap_T& lCYM = *itCYM;
00259         stdair::ClassYieldMap_T::const_iterator itCCCYM = lCYM.find (lCC);
00260         assert (itCCCYM != lCYM.end());
00261
00262         const stdair::ClassBpvMap_T& lCBPM = *itCBPM;
00263         stdair::ClassBpvMap_T::const_iterator itCCCBPM = lCBPM.find (lCC);
00264         assert (itCCCBPM != lCBPM.end());
00265
00266         const stdair::BidPriceVector_T* lBidPriceVector_ptr = itCCCBPM->second;
00267         assert (lBidPriceVector_ptr != NULL);
00268
00269         // Initialization of fare option availability
00270         if (itCL == lClassPath.begin()) {
00271           lFO.setAvailability (lBidPriceVector_ptr->size());
00272         }
00273
00274         // Availability update
00275         if (lFO.getAvailability() > 0) {
00276
00277           //Segment availability calculation
00278           stdair::BidPriceVector_T lReverseBPV (lBidPriceVector_ptr->size());
00279           std::reverse_copy (lBidPriceVector_ptr->begin(),
00280                              lBidPriceVector_ptr->end(),
00281                              lReverseBPV.begin());
```

```
00282
00283           const stdair::YieldValue_T& lYield = itCCCYM->second;
00284           stdair::BidPriceVector_T::const_iterator lBidPrice =
00285             std::upper_bound (lReverseBPV.begin(), lReverseBPV.end(), lYield);
00286
00287           const stdair::Availability_T lAvl = lBidPrice - lReverseBPV.begin();
00288
00289           // Availability update
00290           lFO.setAvailability (std::min (lFO.getAvailability(), lAvl));
00291         }
00292       }
00293
00294       // DEBUG
00295       STDAIR_LOG_DEBUG ("Fare option: " << lFO.describe() << ", "
00296                         << "Availability: " << lFO.getAvailability() << ", "
00297                         << "Segment Path: " << oStr.str() << ", ");
00298     }
00299   }
00300
00301   // \todo: the following code must be either re-written or removed.
00302   //        There is indeed a lot of code duplication.
00303   // ////////////////////////////////////////////////////////////////////
00304   void InventoryManager::
00305   calculateAvailabilityByIBP (stdair::TravelSolutionStruct& ioTravelSolution) {
00306     std::ostringstream oStr;
00307
00308     // Yield valuation coefficient for multi-segment travel solutions
00309     double alpha = 1.0;
00310
00311     const stdair::SegmentPath_T& lSP = ioTravelSolution.getSegmentPath();
00312     for (stdair::SegmentPath_T::const_iterator itSP = lSP.begin();
00313          itSP != lSP.end(); itSP++) {
00314       oStr << *itSP << ";";
00315     }
00316
00317     //Retrieve bid price vector and yield maps
00318     const stdair::ClassYieldMapHolder_T& lClassYieldMapHolder =
00319       ioTravelSolution.getClassYieldMapHolder();
00320     const stdair::ClassBpvMapHolder_T& lClassBpvMapHolder =
00321       ioTravelSolution.getClassBpvMapHolder();
00322
00323     // Retrieve the list of fare options and browse it
00324     stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef()
     ;
00325     for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00326          itFO != lFOList.end(); ++itFO) {
00327
00328       stdair::FareOptionStruct& lFO = *itFO;
00329
00330       stdair::ClassYieldMapHolder_T::const_iterator itCYM =
00331         lClassYieldMapHolder.begin();
00332       stdair::ClassBpvMapHolder_T::const_iterator itCBPM =
00333         lClassBpvMapHolder.begin();
00334
00335       const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00336
00337       // Sanity checks
00338       assert (lClassPath.size() == lClassYieldMapHolder.size());
00339       assert (lClassPath.size() == lClassBpvMapHolder.size());
00340
00341       // Yield is taken to be equal to fare (connecting flights)
00342
00343       // \todo: take yield instead
00344       stdair::YieldValue_T lTotalYield = lFO.getFare();
00345       // Bid price initialisation
00346       stdair::BidPrice_T lTotalBidPrice = 0;
00347
00348       // Browse class path, class-yield maps, class-(bid price vector) maps.
00349       // Each iteration corresponds to one segment.
00350
00351       std::ostringstream oCPStr;
00352       for (stdair::ClassList_StringList_T::const_iterator itCL =
00353              lClassPath.begin();
00354            itCL != lClassPath.end(); ++itCL, ++itCYM, ++itCBPM) {
00355
00356         // Class path determination
00357         if (itCL == lClassPath.begin()) {
00358           oCPStr << *itCL;
00359
00360         } else {
00361           oCPStr << "-" << *itCL;
00362         }
00363
00364         const stdair::ClassList_String_T& lCL = *itCL;
00365         stdair::ClassCode_T lCC;
00366         lCC.append (lCL, 0, 1);
00367
```

```
00368         const stdair::ClassYieldMap_T& lCYM = *itCYM;
00369         stdair::ClassYieldMap_T::const_iterator itCCCYM = lCYM.find (lCC);
00370         assert (itCCCYM != lCYM.end());
00371 
00372         const stdair::ClassBpvMap_T& lCBPM = *itCBPM;
00373         stdair::ClassBpvMap_T::const_iterator itCCCBPM = lCBPM.find (lCC);
00374         assert (itCCCBPM != lCBPM.end());
00375 
00376         const stdair::BidPriceVector_T* lBidPriceVector_ptr = itCCCBPM->second;
00377         assert (lBidPriceVector_ptr != NULL);
00378 
00379         //Initialization of fare option availability
00380         if (itCL == lClassPath.begin()) {
00381           lFO.setAvailability (lBidPriceVector_ptr->size());
00382         }
00383 
00384         // Availability update
00385         if (lFO.getAvailability() > 0) {
00386           //Segment availability calculation
00387           stdair::BidPriceVector_T lReverseBPV (lBidPriceVector_ptr->size());
00388           std::reverse_copy (lBidPriceVector_ptr->begin(),
00389                              lBidPriceVector_ptr->end(), lReverseBPV.begin());
00390 
00391           const stdair::YieldValue_T& lYield = itCCCYM->second;
00392           stdair::BidPriceVector_T::const_iterator lBidPrice =
00393             std::upper_bound (lReverseBPV.begin(), lReverseBPV.end(), lYield);
00394 
00395           const stdair::Availability_T lAvl = lBidPrice - lReverseBPV.begin();
00396 
00397           // Availability update
00398           lFO.setAvailability (std::min(lFO.getAvailability(), lAvl));
00399         }
00400 
00401         // Total bid price calculation
00402         if (lBidPriceVector_ptr->size() > 0) {
00403           lTotalBidPrice += lBidPriceVector_ptr->back();
00404 
00405         } else {
00406           lTotalBidPrice = std::numeric_limits<stdair::BidPrice_T>::max();
00407         }
00408 
00409         // Total yield calculation (has been replaced by total fare).
00410         //lTotalYield += lYield;
00411       }
00412       // Multi-segment bid price control
00413 
00414       if (lClassPath.size() > 1) {
00415         if (lFO.getAvailability() > 0) {
00416           const stdair::Availability_T lAvl =
00417             alpha * lTotalYield >= lTotalBidPrice;
00418           lFO.setAvailability (lAvl * lFO.getAvailability());
00419 
00420         } else {
00421           const stdair::Availability_T lAvl =
00422             alpha * lTotalYield >= lTotalBidPrice;
00423           lFO.setAvailability (lAvl);
00424         }
00425 
00426         // DEBUG
00427         STDAIR_LOG_DEBUG ("Class: " << oCPStr.str()
00428                           << ", " << "Yield: " << alpha*lTotalYield << ", "
00429                           << "Bid price: " << lTotalBidPrice << ", "
00430                           << "Remaining capacity: " << "Undefined" << " "
00431                           << "Segment date: " << oStr.str());
00432       }
00433 
00434       // DEBUG
00435       STDAIR_LOG_DEBUG ("Fare option " << lFO.describe() << ", "
00436                         << "Availability " << lFO.getAvailability() << ", "
00437                         << "Segment Path " << oStr.str() << ", ");
00438     }
00439   }
00440 
00441   // \todo: the following code must be either re-written or removed.
00442   //        There is indeed a lot of code duplication.
00443   // ////////////////////////////////////////////////////////////////////
00444   void InventoryManager::
00445   calculateAvailabilityByProtectiveIBP (stdair::TravelSolutionStruct&
      ioTravelSolution) {
00446     std::ostringstream oStr;
00447 
00448     // Yield valuation coefficient for multi-segment travel solutions
00449     double alpha = 1.0;
00450 
00451     const stdair::SegmentPath_T& lSP = ioTravelSolution.getSegmentPath();
00452     for (stdair::SegmentPath_T::const_iterator itSP = lSP.begin();
00453          itSP != lSP.end(); itSP++) {
```

```
00454       oStr << *itSP << ";";
00455     }
00456
00457     //Retrieve bid price vector and yield maps
00458     const stdair::ClassYieldMapHolder_T& lClassYieldMapHolder =
00459       ioTravelSolution.getClassYieldMapHolder();
00460     const stdair::ClassBpvMapHolder_T& lClassBpvMapHolder =
00461       ioTravelSolution.getClassBpvMapHolder();
00462
00463     //Retrieve the list of fare options and browse it
00464     stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef()
     ;
00465     for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00466          itFO != lFOList.end(); ++itFO) {
00467
00468       stdair::FareOptionStruct& lFO = *itFO;
00469
00470       stdair::ClassYieldMapHolder_T::const_iterator itCYM =
00471         lClassYieldMapHolder.begin();
00472       stdair::ClassBpvMapHolder_T::const_iterator itCBPM =
00473         lClassBpvMapHolder.begin();
00474
00475       const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00476
00477       // Sanity checks
00478       assert (lClassPath.size() == lClassYieldMapHolder.size());
00479       assert (lClassPath.size() == lClassBpvMapHolder.size());
00480
00481       // Yield is taken to be equal to fare (connecting flights)
00482       // TODO : take yield instead
00483       stdair::YieldValue_T lTotalYield = lFO.getFare();
00484       // Bid price initialisation
00485       stdair::BidPrice_T lTotalBidPrice = 0;
00486       // Maximal bid price initialisation
00487       stdair::BidPrice_T lMaxBidPrice = 0;
00488
00489       //Browse class path, class-yield maps, class-(bid price vector) maps.
00490       //Each iteration corresponds to one segment.
00491
00492       std::ostringstream oCPStr;
00493       for (stdair::ClassList_StringList_T::const_iterator itCL =
00494              lClassPath.begin();
00495            itCL != lClassPath.end(); ++itCL, ++itCYM, ++itCBPM) {
00496
00497         // Class path determination
00498         if (itCL == lClassPath.begin()) {
00499           oCPStr << *itCL;
00500
00501         } else {
00502           oCPStr << "-" << *itCL;
00503         }
00504
00505         const stdair::ClassList_String_T& lCL = *itCL;
00506         stdair::ClassCode_T lCC;
00507         lCC.append (lCL, 0, 1);
00508
00509         const stdair::ClassYieldMap_T& lCYM = *itCYM;
00510         stdair::ClassYieldMap_T::const_iterator itCCCYM = lCYM.find (lCC);
00511         assert (itCCCYM != lCYM.end());
00512
00513         const stdair::YieldValue_T& lYield = itCCCYM->second;
00514         const stdair::ClassBpvMap_T& lCBPM = *itCBPM;
00515         stdair::ClassBpvMap_T::const_iterator itCCCBPM = lCBPM.find (lCC);
00516         assert (itCCCBPM != lCBPM.end());
00517
00518         const stdair::BidPriceVector_T* lBidPriceVector_ptr = itCCCBPM->second;
00519         assert (lBidPriceVector_ptr != NULL);
00520
00521         // Initialization of fare option availability
00522         if (itCL == lClassPath.begin()) {
00523           lFO.setAvailability (lBidPriceVector_ptr->size());
00524         }
00525
00526         // Availability update
00527         if (lFO.getAvailability() > 0) {
00528
00529           //Segment availability calculation
00530           stdair::BidPriceVector_T lReverseBPV (lBidPriceVector_ptr->size());
00531           std::reverse_copy (lBidPriceVector_ptr->begin(),
00532                              lBidPriceVector_ptr->end(), lReverseBPV.begin());
00533
00534           stdair::BidPriceVector_T::const_iterator lBidPrice =
00535             std::upper_bound (lReverseBPV.begin(), lReverseBPV.end(), lYield);
00536
00537           const stdair::Availability_T lAvl = lBidPrice - lReverseBPV.begin();
00538
00539           // Availability update
```

```
00540           lFO.setAvailability (std::min(lFO.getAvailability(), lAvl));
00541
00542         }
00543
00544         // Total bid price calculation
00545         if (lBidPriceVector_ptr->size() > 0) {
00546           lTotalBidPrice += lBidPriceVector_ptr->back();
00547
00548           if (lMaxBidPrice < lBidPriceVector_ptr->back()) {
00549             lMaxBidPrice = lBidPriceVector_ptr->back();
00550           }
00551
00552         } else {
00553           lTotalBidPrice = std::numeric_limits<stdair::BidPrice_T>::max();
00554         }
00555
00556         // Total yield calculation (has been replaced by total fare).
00557         //lTotalYield += lYield;
00558       }
00559       // Multi-segment bid price control
00560
00561       // Protective IBP (maximin): guarantees the minimal yield for each
      airline
00562       // Proration factors are all equal to 1/{number of partners}.
00563
00564       lTotalBidPrice = std::max (lMaxBidPrice * lClassPath.size(),
00565                                  lTotalBidPrice);
00566
00567       if (lClassPath.size() > 1) {
00568         if (lFO.getAvailability() > 0) {
00569           const stdair::Availability_T lAvl =
00570             alpha * lTotalYield >= lTotalBidPrice;
00571           lFO.setAvailability (lAvl * lFO.getAvailability());
00572
00573         } else {
00574           const stdair::Availability_T lAvl =
00575             alpha * lTotalYield >= lTotalBidPrice;
00576           lFO.setAvailability (lAvl);
00577         }
00578
00579         // DEBUG
00580         STDAIR_LOG_DEBUG ("Class: " << oCPStr.str()
00581                           << ", " << "Yield: " << alpha*lTotalYield << ", "
00582                           << "Bid price: " << lTotalBidPrice << ", "
00583                           << "Remaining capacity: " << "Undefined" << " "
00584                           << "Segment date: " << oStr.str());
00585       }
00586
00587       // DEBUG
00588       STDAIR_LOG_DEBUG ("Fare option " << lFO.describe() << ", "
00589                         << "Availability " << lFO.getAvailability() << ", "
00590                         << "Segment Path " << oStr.str() << ", ");
00591     }
00592   }
00593
00594   //MODIF
00595   // ////////////////////////////////////////////////////////////////////
00596   void InventoryManager::setDefaultBidPriceVector
      (stdair::BomRoot& ioBomRoot) {
00597
00598     const stdair::InventoryList_T& lInvList =
00599       stdair::BomManager::getList<stdair::Inventory> (ioBomRoot);
00600     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
00601          itInv != lInvList.end(); ++itInv) {
00602       stdair::Inventory* lCurrentInv_ptr = *itInv;
00603       assert (lCurrentInv_ptr != NULL);
00604
00605       // Set the default bid price for own cabins.
00606       setDefaultBidPriceVector (*lCurrentInv_ptr);
00607
00608       // Check if the inventory contains images of partner inventories.
00609       // If so, set the default bid price for their cabins.
00610       if (stdair::BomManager::hasList<stdair::Inventory> (*lCurrentInv_ptr)) {
00611         const stdair::InventoryList_T& lPartnerInvList =
00612           stdair::BomManager::getList<stdair::Inventory> (*lCurrentInv_ptr);
00613
00614         for (stdair::InventoryList_T::const_iterator itPartnerInv =
00615                lPartnerInvList.begin();
00616              itPartnerInv != lPartnerInvList.end(); ++itPartnerInv) {
00617           stdair::Inventory* lCurrentPartnerInv_ptr = *itPartnerInv;
00618           assert (lCurrentPartnerInv_ptr != NULL);
00619
00620           setDefaultBidPriceVector (*
      lCurrentPartnerInv_ptr);
00621         }
00622       }
00623     }
```

```
00624   }
00625
00626   // ////////////////////////////////////////////////////////////////////
00627   void InventoryManager::
00628   setDefaultBidPriceVector (stdair::Inventory&
      ioInventory) {
00629
00630     const stdair::FlightDateList_T& lFlightDateList =
00631       stdair::BomManager::getList<stdair::FlightDate> (ioInventory);
00632     for (stdair::FlightDateList_T::const_iterator itFlightDate =
00633            lFlightDateList.begin();
00634          itFlightDate != lFlightDateList.end(); ++itFlightDate) {
00635       stdair::FlightDate* lCurrentFlightDate_ptr = *itFlightDate;
00636       assert (lCurrentFlightDate_ptr != NULL);
00637
00638       // Check if the flight date holds a list of leg dates.
00639       // If so retrieve it and initialise the bid price vectors of their
       cabins.
00640       if (stdair::BomManager::hasList<stdair::LegDate> (*lCurrentFlightDate_ptr
      )) {
00641         const stdair::LegDateList_T& lLegDateList =
00642           stdair::BomManager::getList<stdair::LegDate>
      (*lCurrentFlightDate_ptr);
00643         for (stdair::LegDateList_T::const_iterator itLegDate =
00644                lLegDateList.begin();
00645              itLegDate != lLegDateList.end(); ++itLegDate) {
00646           stdair::LegDate* lCurrentLegDate_ptr = *itLegDate;
00647           assert (lCurrentLegDate_ptr != NULL);
00648
00649           const stdair::LegCabinList_T& lLegCabinList =
00650             stdair::BomManager::getList<stdair::LegCabin>
      (*lCurrentLegDate_ptr);
00651           for (stdair::LegCabinList_T::const_iterator itLegCabin =
00652                  lLegCabinList.begin();
00653                itLegCabin != lLegCabinList.end(); ++itLegCabin) {
00654             stdair::LegCabin* lCurrentLegCabin_ptr = *itLegCabin;
00655             assert (lCurrentLegCabin_ptr != NULL);
00656
00657             const stdair::CabinCapacity_T& lCabinCapacity =
00658               lCurrentLegCabin_ptr->getPhysicalCapacity();
00659             lCurrentLegCabin_ptr->emptyBidPriceVector();
00660
00661             stdair::BidPriceVector_T& lBPV =
00662               lCurrentLegCabin_ptr->getBidPriceVector();
00663
00664             //for (stdair::CabinCapacity_T k = 0;k!=lCabinCapacity;k++)
       {lBPV.push_back(400 + 300/sqrt(k+1));}
00665             for (stdair::CabinCapacity_T k = 0; k != lCabinCapacity; k++) {
00666               lBPV.push_back (400);
00667             }
00668
00669             lCurrentLegCabin_ptr->setPreviousBidPrice (lBPV.back());
00670             lCurrentLegCabin_ptr->setCurrentBidPrice (lBPV.back());
00671           }
00672         }
00673       }
00674     }
00675   }
00676
00677   // ////////////////////////////////////////////////////////////////////
00678   bool InventoryManager::sell (stdair::Inventory& ioInventory,
00679                                const std::string& iSegmentDateKey,
00680                                const stdair::ClassCode_T& iClassCode,
00681                                const stdair::PartySize_T& iPartySize) {
00682
00683     // Make the sale within the inventory.
00684     return InventoryHelper::sell (ioInventory,
      iSegmentDateKey,
00685                                   iClassCode, iPartySize);
00686   }
00687
00688   // ////////////////////////////////////////////////////////////////////
00689   bool InventoryManager::cancel (stdair::Inventory& ioInventory,
00690                                  const std::string& iSegmentDateKey,
00691                                  const stdair::ClassCode_T& iClassCode,
00692                                  const stdair::PartySize_T& iPartySize) {
00693
00694     // Make the sale within the inventory.
00695     return InventoryHelper::cancel (ioInventory,
      iSegmentDateKey,
00696                                     iClassCode, iPartySize);
00697   }
00698
00699   // ////////////////////////////////////////////////////////////////////
00700   void InventoryManager::
00701   updateBookingControls (stdair::FlightDate& ioFlightDate) {
00702
```

```
00703     // Forward the call to FlightDateHelper.
00704     FlightDateHelper::updateBookingControls
      (ioFlightDate);
00705   }
00706
00707   // ////////////////////////////////////////////////////////////////////
00708   void InventoryManager::takeSnapshots(const stdair::Inventory& iInventory,
00709                                        const stdair::DateTime_T& iSnapshotTime)
      {
00710
00711     // Make the snapshots within the inventory
00712     InventoryHelper::takeSnapshots (iInventory,
      iSnapshotTime);
00713   }
00714
00715   // ////////////////////////////////////////////////////////////////////
00716   void InventoryManager::
00717   createDirectAccesses (const stdair::BomRoot& iBomRoot)
      {
00718
00719     // Browse the list of inventories and create direct accesses
00720     // within each inventory.
00721     const stdair::InventoryList_T& lInvList =
00722       stdair::BomManager::getList<stdair::Inventory> (iBomRoot);
00723     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
00724          itInv != lInvList.end(); ++itInv) {
00725       stdair::Inventory* lCurrentInv_ptr = *itInv;
00726       assert (lCurrentInv_ptr != NULL);
00727
00728       createDirectAccesses (*lCurrentInv_ptr);
00729     }
00730
00731     // Fill some attributes of segment-date with the routing legs.
00732     BomRootHelper::fillFromRouting (iBomRoot);
00733   }
00734
00735   // ////////////////////////////////////////////////////////////////////
00736   void InventoryManager::
00737   createDirectAccesses (stdair::Inventory& ioInventory) {
00738
00739     // Browse the list of flight-dates and create direct accesses
00740     // within each flight-date.
00741     const stdair::FlightDateList_T& lFlightDateList =
00742       stdair::BomManager::getList<stdair::FlightDate> (ioInventory);
00743     for (stdair::FlightDateList_T::const_iterator itFlightDate =
00744            lFlightDateList.begin();
00745          itFlightDate != lFlightDateList.end(); ++itFlightDate) {
00746       stdair::FlightDate* lCurrentFlightDate_ptr = *itFlightDate;
00747       assert (lCurrentFlightDate_ptr != NULL);
00748
00749       createDirectAccesses (*lCurrentFlightDate_ptr);
00750     }
00751   }
00752
00753   // ////////////////////////////////////////////////////////////////////
00754   void InventoryManager::
00755   createDirectAccesses (stdair::FlightDate& ioFlightDate)
      {
00756
00757     // Browse the list of segment-dates and create direct accesses
00758     // within each segment-date.
00759     const stdair::SegmentDateList_T& lSegmentDateList =
00760       stdair::BomManager::getList<stdair::SegmentDate> (ioFlightDate);
00761     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00762            lSegmentDateList.begin();
00763          itSegmentDate != lSegmentDateList.end(); ++itSegmentDate) {
00764
00765       stdair::SegmentDate* lCurrentSegmentDate_ptr = *itSegmentDate;
00766       assert (lCurrentSegmentDate_ptr != NULL);
00767
00768       /*
00769        * If the segment is just marketed by this carrier,
00770        * retrieve the operating segment and call the createDirectAcces
00771        * method on its parent (flight date).
00772        */
00773       const stdair::SegmentDate* lOperatingSegmentDate_ptr =
00774         lCurrentSegmentDate_ptr->getOperatingSegmentDate ();
00775       if (lOperatingSegmentDate_ptr != NULL) {
00776         // Then get the (parent) flight date and create direct access.
00777         stdair::FlightDate* lOperatingFlightDate_ptr =
00778           stdair::BomManager::getParentPtr<stdair::FlightDate>
      (*lOperatingSegmentDate_ptr);
00779         assert (lOperatingFlightDate_ptr != NULL);
00780         createDirectAccesses (*lOperatingFlightDate_ptr);
00781       } else {
00782
00783         const stdair::AirportCode_T& lBoardingPoint =
```

```
00784           lCurrentSegmentDate_ptr->getBoardingPoint();
00785
00786         stdair::AirportCode_T currentBoardingPoint = lBoardingPoint;
00787         const stdair::AirportCode_T& lOffPoint =
00788           lCurrentSegmentDate_ptr->getOffPoint();
00789
00790         // Add a sanity check so as to ensure that the loop stops. If
00791         // there are more than MAXIMAL_NUMBER_OF_LEGS legs, there is
00792         // an issue somewhere in the code (not in the parser, as the
00793         // segments are derived from the legs thanks to the
00794         // FlightPeriodStruct::buildSegments() method).
00795         unsigned short i = 1;
00796         while (currentBoardingPoint != lOffPoint
00797                && i <= stdair::MAXIMAL_NUMBER_OF_LEGS_IN_FLIGHT) {
00798           // Retrieve the (unique) LegDate getting that Boarding Point
00799           stdair::LegDate& lLegDate = stdair::BomManager::
00800             getObject<stdair::LegDate> (ioFlightDate, currentBoardingPoint);
00801
00802           // Link the SegmentDate and LegDate together
00803           stdair::FacBomManager::addToListAndMap (*lCurrentSegmentDate_ptr,
00804                                                   lLegDate);
00805           stdair::FacBomManager::addToListAndMap (lLegDate,
00806                                                   *lCurrentSegmentDate_ptr);
00807
00808           // Prepare the next iteration
00809           currentBoardingPoint = lLegDate.getOffPoint();
00810           ++i;
00811         }
00812         assert (i <= stdair::MAXIMAL_NUMBER_OF_LEGS_IN_FLIGHT);
00813
00814         // Create the routing for the leg- and segment-cabins.
00815         // At the same time, set the SegmentDate attributes derived from
00816         // its routing legs (e.g., boarding and off dates).
00817         createDirectAccesses (*lCurrentSegmentDate_ptr);
00818       }
00819     }
00820   }
00821
00822   // ////////////////////////////////////////////////////////////////////
00823   void InventoryManager::
00824   createDirectAccesses (stdair::SegmentDate&
      ioSegmentDate) {
00825
00826     // Browse the list of segment-cabins and create direct accesses
00827     // within each segment-cabin.
00828     const stdair::SegmentCabinList_T& lSegmentCabinList =
00829       stdair::BomManager::getList<stdair::SegmentCabin> (ioSegmentDate);
00830     for (stdair::SegmentCabinList_T::const_iterator itSegmentCabin =
00831            lSegmentCabinList.begin();
00832          itSegmentCabin != lSegmentCabinList.end(); ++itSegmentCabin) {
00833
00834       //
00835       stdair::SegmentCabin* lCurrentSegmentCabin_ptr = *itSegmentCabin;
00836       assert (lCurrentSegmentCabin_ptr != NULL);
00837
00838       //
00839       const stdair::CabinCode_T& lCabinCode =
00840           lCurrentSegmentCabin_ptr->getCabinCode();
00841
00842       // Iterate on the routing legs
00843       const stdair::LegDateList_T& lLegDateList =
00844         stdair::BomManager::getList<stdair::LegDate> (ioSegmentDate);
00845       for (stdair::LegDateList_T::const_iterator itLegDate =
00846              lLegDateList.begin();
00847            itLegDate != lLegDateList.end(); ++itLegDate) {
00848
00849         const stdair::LegDate* lCurrentLegDate_ptr = *itLegDate;
00850         assert (lCurrentLegDate_ptr != NULL);
00851
00852         // Retrieve the LegCabin getting the same class of service
00853         // (cabin code) as the SegmentCabin.
00854         stdair::LegCabin& lLegCabin = stdair::BomManager::
00855           getObject<stdair::LegCabin> (*lCurrentLegDate_ptr, lCabinCode);
00856
00867         stdair::FacBomManager::addToListAndMap (*lCurrentSegmentCabin_ptr,
00868                                                 lLegCabin,
00869                                                 lLegCabin.getFullerKey());
00870
00881         stdair::FacBomManager::
00882           addToListAndMap (lLegCabin, *lCurrentSegmentCabin_ptr,
00883                            lCurrentSegmentCabin_ptr->getFullerKey());
00884       }
00885     }
00886   }
00887
00888   // ////////////////////////////////////////////////////////////////////
00889   void InventoryManager::
```

```
00890   buildSimilarSegmentCabinSets (const
      stdair::BomRoot& iBomRoot) {
00891     // Browse the list of inventories and create direct accesses
00892     // within each inventory.
00893     const stdair::InventoryList_T& lInvList =
00894       stdair::BomManager::getList<stdair::Inventory> (iBomRoot);
00895     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
00896          itInv != lInvList.end(); ++itInv) {
00897       stdair::Inventory* lCurrentInv_ptr = *itInv;
00898       assert (lCurrentInv_ptr != NULL);
00899
00900       buildSimilarSegmentCabinSets (*
      lCurrentInv_ptr);
00901     }
00902   }
00903
00904   // ////////////////////////////////////////////////////////////////////
00905   void InventoryManager::
00906   buildSimilarSegmentCabinSets (stdair::Inventory
      & ioInventory) {
00907     // For instance, we consider two flight-dates are
00908     // similar if they have the same flight number and the same
00909     // day-of-the-week departure.
00910
00911     // Browse the segment-cabin list and build the sets of segment-cabin
00912     // which have the same flight number and origin-destination
00913     SimilarSegmentCabinSetMap_T lSSCSM;
00914
00915     // Browsing the flight-date list
00916     const stdair::FlightDateList_T& lFlightDateList =
00917       stdair::BomManager::getList<stdair::FlightDate> (ioInventory);
00918     for (stdair::FlightDateList_T::const_iterator itFD= lFlightDateList.begin()
      ;
00919          itFD != lFlightDateList.end(); ++itFD) {
00920       const stdair::FlightDate* lFD_ptr = *itFD;
00921       assert (lFD_ptr != NULL);
00922       const stdair::FlightNumber_T& lFlightNumber = lFD_ptr->getFlightNumber();
00923
00924       // Browsing the segment-date list and retrieve the departure
00925       // date, the origine and the destination of the segment
00926       const stdair::SegmentDateList_T& lSegmentDateList =
00927         stdair::BomManager::getList<stdair::SegmentDate> (*lFD_ptr);
00928       for (stdair::SegmentDateList_T::const_iterator itSD =
00929              lSegmentDateList.begin(); itSD != lSegmentDateList.end(); ++itSD)
      {
00930         const stdair::SegmentDate* lSD_ptr = *itSD;
00931         assert (lSD_ptr != NULL);
00932
00933         const stdair::Date_T& lDepartureDate = lSD_ptr->getBoardingDate();
00934         const stdair::AirportCode_T& lOrigin = lSD_ptr->getBoardingPoint();
00935         const stdair::AirportCode_T& lDestination = lSD_ptr->getOffPoint();
00936
00937         // Browsing the segment-cabin list and retrieve the cabin code and
00938         // build the corresponding key map.
00939         const stdair::SegmentCabinList_T& lSegmentCabinList =
00940           stdair::BomManager::getList<stdair::SegmentCabin> (*lSD_ptr);
00941         for (stdair::SegmentCabinList_T::const_iterator itSC =
00942                lSegmentCabinList.begin();
00943              itSC != lSegmentCabinList.end(); ++itSC) {
00944           stdair::SegmentCabin* lSC_ptr = *itSC;
00945           assert (lSC_ptr != NULL);
00946
00947           std::ostringstream oStr;
00948           oStr << lFlightNumber << lDepartureDate.day_of_week()
00949                << lOrigin << lDestination << lSC_ptr->getCabinCode();
00950           const std::string lMapKey = oStr.str();
00951
00952           // Add the segment cabin to the similar segment cabin set map.
00953           SimilarSegmentCabinSetMap_T::iterator itSSCS = lSSCSM.find (lMapKey);
00954           if (itSSCS == lSSCSM.end()) {
00955             DepartureDateSegmentCabinMap_T
      lDDSCMap;
00956             lDDSCMap.insert (DepartureDateSegmentCabinMap_T
      ::
00957                              value_type (lDepartureDate, lSC_ptr));
00958             lSSCSM.insert (SimilarSegmentCabinSetMap_T
      ::
00959                            value_type (lMapKey, lDDSCMap));
00960           } else {
00961             DepartureDateSegmentCabinMap_T&
      lDDSCMap = itSSCS->second;
00962             lDDSCMap.insert (DepartureDateSegmentCabinMap_T
      ::
00963                              value_type (lDepartureDate, lSC_ptr));
00964           }
00965         }
00966       }
```

```
00967     }
00968
00969     // Initialise the guillotine blocks.
00970     stdair::GuillotineNumber_T lGuillotineNumber = 1;
00971     for (SimilarSegmentCabinSetMap_T::const_iterator itSSCS = lSSCSM.begin();
00972          itSSCS != lSSCSM.end(); ++itSSCS, ++lGuillotineNumber) {
00973       const DepartureDateSegmentCabinMap_T&
      lDDSCMap = itSSCS->second;
00974
00975       buildGuillotineBlock (ioInventory, lGuillotineNumber,
       lDDSCMap);
00976     }
00977   }
00978
00979   // ////////////////////////////////////////////////////////////////////
00980   void InventoryManager::
00981   buildGuillotineBlock (stdair::Inventory& ioInventory,
00982                         const stdair::GuillotineNumber_T& iGuillotineNumber,
00983                         const DepartureDateSegmentCabinMap_T
      & iDDSCMap) {
00984     // Build an empty guillotine block.
00985     const stdair::GuillotineBlockKey lKey (iGuillotineNumber);
00986     stdair::GuillotineBlock& lGuillotineBlock =
00987       stdair::FacBom<stdair::GuillotineBlock>::instance().create (lKey);
00988     stdair::FacBomManager::addToListAndMap (ioInventory, lGuillotineBlock);
00989
00990     // Build the value type index map.
00991     DepartureDateSegmentCabinMap_T::const_iterator itDDSC = iDDSCMap.begin();
00992     assert (itDDSC != iDDSCMap.end());
00993     const stdair::SegmentCabin* lSegmentCabin_ptr = itDDSC->second;
00994
00995     // Browse the booking class list and build the value type for the classes
00996     // as well as for the cabin (Q-equivalent).
00997     stdair::ValueTypeIndexMap_T lValueTypeIndexMap;
00998     stdair::BlockIndex_T lBlockIndex = 0;
00999     std::ostringstream lSCMapKey;
01000     lSCMapKey << stdair::DEFAULT_SEGMENT_CABIN_VALUE_TYPE
01001               << lSegmentCabin_ptr->describeKey();
01002     lValueTypeIndexMap.insert (stdair::ValueTypeIndexMap_T::
01003                                value_type (lSCMapKey.str(), lBlockIndex));
01004     ++lBlockIndex;
01005
01006     // Browse the booking class list
01007     const stdair::BookingClassList_T& lBCList =
01008       stdair::BomManager::getList<stdair::BookingClass>(*lSegmentCabin_ptr);
01009     for (stdair::BookingClassList_T::const_iterator itBC= lBCList.begin();
01010          itBC != lBCList.end(); ++itBC) {
01011       const stdair::BookingClass* lBookingClass_ptr = *itBC;
01012       assert (lBookingClass_ptr != NULL);
01013       lValueTypeIndexMap.
01014         insert (stdair::ValueTypeIndexMap_T::
01015                 value_type(lBookingClass_ptr->describeKey(),lBlockIndex));
01016       ++lBlockIndex;
01017     }
01018
01019     // Build the segment-cabin index map
01020     stdair::SegmentCabinIndexMap_T lSegmentCabinIndexMap;
01021     stdair::BlockNumber_T lBlockNumber = 0;
01022     for (; itDDSC != iDDSCMap.end(); ++itDDSC, ++lBlockNumber) {
01023       stdair::SegmentCabin* lCurrentSC_ptr = itDDSC->second;
01024       assert (lCurrentSC_ptr != NULL);
01025       lSegmentCabinIndexMap.
01026         insert (stdair::SegmentCabinIndexMap_T::value_type (lCurrentSC_ptr,
01027                                                             lBlockNumber));
01028
01029       // Added the guillotine to the segment-cabin.
01030       lCurrentSC_ptr->setGuillotineBlock (lGuillotineBlock);
01031     }
01032
01033     // Initialise the guillotine block.
01034     lGuillotineBlock.initSnapshotBlocks(lSegmentCabinIndexMap,
01035                                         lValueTypeIndexMap);
01036   }
01037
01038   // ////////////////////////////////////////////////////////////////////
01039   void InventoryManager::initSnapshotEvents (const stdair::Date_T& iStartDate,
01040                                              const stdair::Date_T& iEndDate,
01041                                              stdair::EventQueue& ioQueue) {
01042     const stdair::Duration_T lTimeZero (0, 0, 0);
01043     const stdair::Duration_T lOneDayDuration (24, 0, 0);
01044     const stdair::DateTime_T lBeginSnapshotTime (iStartDate, lTimeZero);
01045     const stdair::DateTime_T lEndSnapshotTime (iEndDate, lTimeZero);
01046
01047     // TODO: remove the defaut airline code.
01048     stdair::NbOfEvents_T lNbOfSnapshots = 0.0;
01049     for (stdair::DateTime_T lSnapshotTime = lBeginSnapshotTime;
01050          lSnapshotTime < lEndSnapshotTime; lSnapshotTime += lOneDayDuration) {
```

```
01051       // Create the snapshot event structure
01052       stdair::SnapshotPtr_T lSnapshotStruct =
01053         boost::make_shared<stdair::SnapshotStruct>(stdair::DEFAULT_AIRLINE_CODE
      ,
01054                                                    lSnapshotTime);
01055       // Create the event structure
01056       stdair::EventStruct lEventStruct (stdair::EventType::SNAPSHOT,
01057                                         lSnapshotStruct);
01058
01066     ioQueue.addEvent (lEventStruct);
01067     ++lNbOfSnapshots;
01068     }
01069
01070     ioQueue.addStatus (stdair::EventType::SNAPSHOT, lNbOfSnapshots);
01071   }
01072
01073   // ////////////////////////////////////////////////////////////////////
01074   void InventoryManager::
01075   initRMEvents (const stdair::Inventory& iInventory,
01076                 stdair::RMEventList_T& ioRMEventList,
01077                 const stdair::Date_T& iStartDate,
01078                 const stdair::Date_T& iEndDate) {
01079     const stdair::Duration_T lTimeZero (0, 0, 0);
01080     const stdair::Duration_T lTime (0, 0, 10);
01081     const stdair::Duration_T lOneDayDuration (24, 0, 0);
01082     const stdair::DateTime_T lEarliestEventTime (iStartDate, lTimeZero);
01083     const stdair::DateTime_T lLatestEventTime (iEndDate, lTimeZero);
01084
01085     const stdair::AirlineCode_T& lAirlineCode = iInventory.getAirlineCode();
01086
01087     // Browse the list of flight-dates and initialise the RM events for
01088     // each flight-date.
01089     const stdair::FlightDateList_T& lFDList =
01090       stdair::BomManager::getList<stdair::FlightDate> (iInventory);
01091     for (stdair::FlightDateList_T::const_iterator itFD = lFDList.begin();
01092          itFD != lFDList.end(); ++itFD) {
01093       const stdair::FlightDate* lFD_ptr = *itFD;
01094       assert (lFD_ptr != NULL);
01095
01096       // Retrive the departure date and initialise the RM events with
01097       // the data collection points of the inventory.
01098       const stdair::Date_T& lDepartureDate = lFD_ptr->getDepartureDate();
01099       const stdair::DateTime_T lDepatureDateTime (lDepartureDate, lTime);
01100       for (stdair::DCPList_T::const_iterator itDCP =
01101              stdair::DEFAULT_DCP_LIST.begin();
01102            itDCP != stdair::DEFAULT_DCP_LIST.end(); ++itDCP) {
01103         const stdair::DCP_T& lDCP = *itDCP;
01104
01105         // Create the event time and check if it is in the validate interval
01106         const stdair::DateTime_T lEventTime =
01107           lDepatureDateTime - lOneDayDuration * lDCP;
01108         if (lEventTime >= lEarliestEventTime && lEventTime <= lLatestEventTime)
      {
01109           const stdair::KeyDescription_T lKeyDes = lFD_ptr->describeKey();
01110           stdair::RMEventStruct lRMEvent (lAirlineCode, lKeyDes, lEventTime);
01111           ioRMEventList.push_back (lRMEvent);
01112         }
01113       }
01114     }
01115   }
01116
01117   // ////////////////////////////////////////////////////////////////////
01118   void InventoryManager::
01119   addRMEventsToEventQueue (stdair::EventQueue& ioQueue,
01120                            stdair::RMEventList_T& ioRMEventList) {
01121     // Browse the RM event list and add them to the queue.
01122     for (stdair::RMEventList_T::iterator itRMEvent = ioRMEventList.begin();
01123          itRMEvent != ioRMEventList.end(); ++itRMEvent) {
01124       stdair::RMEventStruct& lRMEvent = *itRMEvent;
01125       stdair::RMEventPtr_T lRMEventPtr =
01126         boost::make_shared<stdair::RMEventStruct> (lRMEvent);
01127       stdair::EventStruct lEventStruct (stdair::EventType::RM, lRMEventPtr);
01128       ioQueue.addEvent (lEventStruct);
01129     }
01130
01131     // Update the status of RM events within the event queue.
01132     ioQueue.updateStatus (stdair::EventType::RM, ioRMEventList.size());
01133   }
01134 }
```

23.119 airinv/command/InventoryManager.hpp File Reference

```
#include <string>
```

```
#include <stdair/stdair_basic_types.hpp>
#include <stdair/bom/RMEventTypes.hpp>
#include <stdair/basic/PartnershipTechnique.hpp>
```

Classes

- class AIRINV::InventoryManager

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

Typedefs

- typedef std::map< const stdair::Date_T, stdair::SegmentCabin * > AIRINV::DepartureDateSegmentCabinMap_T
- typedef std::map< const std::string, DepartureDateSegmentCabinMap_T > AIRINV::SimilarSegmentCabinSetMap_T

23.120 InventoryManager.hpp

```
00001 #ifndef __AIRINV_CMD_INVENTORYMANAGER_HPP
00002 #define __AIRINV_CMD_INVENTORYMANAGER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // STDAIR
00010 #include <stdair/stdair_basic_types.hpp>
00011 #include <stdair/bom/RMEventTypes.hpp>
00012 #include <stdair/basic/PartnershipTechnique.hpp>
00013
00014 // Forward declarations
00015 namespace stdair {
00016   class BomRoot;
00017   class Inventory;
00018   class FlightDate;
00019   class SegmentDate;
00020   class SegmentCabin;
00021   class EventQueue;
00022   struct TravelSolutionStruct;
00023 }
00024
00025 namespace AIRINV {
00026
00027   // ///////////////// Type definitions ////////////////
00028   typedef std::map<const stdair::Date_T,
00029                    stdair::SegmentCabin*> DepartureDateSegmentCabinMap_T
      ;
00030   typedef std::map<const std::string,
00031                    DepartureDateSegmentCabinMap_T
      > SimilarSegmentCabinSetMap_T;
00032
00034   class InventoryManager {
00035     friend class AIRINV_Master_Service;
00036     friend class AIRINV_Service;
00037
00038   private:
00040     static void initSnapshotEvents (const stdair::Date_T&,
00041                                     const stdair::Date_T&,
00042                                     stdair::EventQueue&);
00043
00045     static void initRMEvents (const stdair::Inventory&, stdair::RMEventList_T&,
```

```
00046                                const stdair::Date_T&, const stdair::Date_T&);
00047
00049     static void addRMEventsToEventQueue (stdair::EventQueue&,
00050                                          stdair::RMEventList_T&);
00051
00053     static void calculateAvailability (const stdair::BomRoot&,
00054                                        stdair::TravelSolutionStruct&,
00055                                        const stdair::PartnershipTechnique&);
00056
00058     static void calculateAvailabilityByAU (stdair::TravelSolutionStruct&);
00059
00061     static void calculateAvailabilityByRAE (stdair::TravelSolutionStruct&);
00062
00067     static void calculateAvailabilityByIBP (stdair::TravelSolutionStruct&);
00068
00075     static void calculateAvailabilityByProtectiveIBP (
      stdair::TravelSolutionStruct&);
00076
00078     static bool sell (stdair::Inventory&, const std::string& iSegmentDateKey,
00079                       const stdair::ClassCode_T&, const stdair::PartySize_T&);
00080
00082     static bool cancel (stdair::Inventory&, const std::string& iSegmentDateKey,
00083                         const stdair::ClassCode_T&, const stdair::PartySize_T&)
      ;
00084
00086     static void takeSnapshots (const stdair::Inventory&,
00087                                const stdair::DateTime_T&);
00088
00090     static void updateBookingControls (stdair::FlightDate&);
00091
00092   public:
00095     static void createDirectAccesses (const stdair::BomRoot
      &);
00096     static void createDirectAccesses (stdair::Inventory&);
00097     static void createDirectAccesses (stdair::FlightDate&);
00098     static void createDirectAccesses (stdair::SegmentDate&)
      ;
00099
00100
00103     static void buildSimilarSegmentCabinSets (const
       stdair::BomRoot&);
00104     static void buildSimilarSegmentCabinSets (
      stdair::Inventory&);
00105     static void buildGuillotineBlock (stdair::Inventory&,
00106                                       const stdair::GuillotineNumber_T&,
00107                                       const DepartureDateSegmentCabinMap_T
      &);
00108
00109
00111     static void setDefaultBidPriceVector (
      stdair::BomRoot&);
00112     static void setDefaultBidPriceVector (
      stdair::Inventory&);
00113
00114   private:
00116     InventoryManager() {}
00117     InventoryManager(const InventoryManager&) {
      }
00119     ~InventoryManager() {}
00120   };
00121
00122 }
00123 #endif // __AIRINV_CMD_INVENTORYMANAGER_HPP
```

23.121 airinv/command/InventoryParser.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/InventoryParserHelper.hpp>
#include <airinv/command/InventoryParser.hpp>
#include <airinv/command/InventoryManager.hpp>
```

Namespaces

- namespace AIRINV

23.122 InventoryParser.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasFileMgr.hpp>
00009 #include <stdair/bom/BomRoot.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // Airinv
00012 #include <airinv/command/InventoryParserHelper.hpp
      >
00013 #include <airinv/command/InventoryParser.hpp>
00014 #include <airinv/command/InventoryManager.hpp
      >
00015
00016 namespace AIRINV {
00017
00018   // ////////////////////////////////////////////////////////////////////
00019   void InventoryParser::
00020   buildInventory (const stdair::Filename_T& iInventoryFilename,
00021                   stdair::BomRoot& ioBomRoot) {
00022
00023     // Check that the file path given as input corresponds to an actual file
00024     const bool doesExistAndIsReadable =
00025       stdair::BasFileMgr::doesExistAndIsReadable (iInventoryFilename);
00026     if (doesExistAndIsReadable == false) {
00027       std::ostringstream oMessage;
00028       oMessage << "The inventory input file, '" << iInventoryFilename
00029                << "', can not be retrieved on the file-system";
00030       STDAIR_LOG_ERROR (oMessage.str());
00031       throw InventoryInputFileNotFoundException
       (oMessage.str());
00032     }
00033
00034     // Initialise the inventory file parser.
00035     InventoryFileParser lInventoryParser (ioBomRoot,
      iInventoryFilename);
00036
00037     // Parse the CSV-formatted inventory input file, and generate the
00038     // corresponding Inventory-related objects.
00039     lInventoryParser.buildInventory();
00040
00041     // Complete the BomRoot BOM building: create the routings for all
00042     // the inventories.
00043     InventoryManager::createDirectAccesses
       (ioBomRoot);
00044   }
00045
00046 }
```

23.123 airinv/command/InventoryParser.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
#include <stdair/command/CmdAbstract.hpp>
```

Classes

- class AIRINV::InventoryParser

  Class wrapping the parser entry point.

Namespaces

- namespace stdair

Forward declarations.

- namespace AIRINV

23.124 InventoryParser.hpp

```
00001 #ifndef __AIRINV_CMD_INVENTORYPARSER_HPP
00002 #define __AIRINV_CMD_INVENTORYPARSER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/command/CmdAbstract.hpp>
00010
00012 namespace stdair {
00013   class BomRoot;
00014 }
00015
00016 namespace AIRINV {
00017
00021   class InventoryParser : public stdair::CmdAbstract {
00022   public:
00032     static void buildInventory (const stdair::Filename_T&
      iInventoryFilename,
00033                                 stdair::BomRoot&);
00034   };
00035 }
00036 #endif // __AIRINV_CMD_INVENTORYPARSER_HPP
```

23.125 airinv/command/InventoryParserHelper.cpp File Reference

```
#include <cassert>
#include <stdair/service/Logger.hpp>
#include <stdair/stdair_exceptions.hpp>
#include <airinv/command/InventoryBuilder.hpp>
#include <airinv/command/InventoryParserHelper.hpp>
```

Namespaces

- namespace AIRINV
- namespace AIRINV::InventoryParserHelper

Functions

- repeat_p_t AIRINV::InventoryParserHelper::airline_code_p (chset_t("0-9A-Z").derived(), 2, 3)
- bounded1_4_p_t AIRINV::InventoryParserHelper::flight_number_p (uint1_4_p.derived(), 0u, 9999u)
- bounded2_p_t AIRINV::InventoryParserHelper::year_p (uint2_p.derived(), 0u, 99u)
- bounded2_p_t AIRINV::InventoryParserHelper::month_p (uint2_p.derived(), 1u, 12u)
- bounded2_p_t AIRINV::InventoryParserHelper::day_p (uint2_p.derived(), 1u, 31u)
- repeat_p_t AIRINV::InventoryParserHelper::dow_p (chset_t("0-1").derived().derived(), 7, 7)
- repeat_p_t AIRINV::InventoryParserHelper::airport_p (chset_t("0-9A-Z").derived(), 3, 3)
- bounded1_2_p_t AIRINV::InventoryParserHelper::hours_p (uint1_2_p.derived(), 0u, 24u)
- bounded2_p_t AIRINV::InventoryParserHelper::minutes_p (uint2_p.derived(), 0u, 59u)
- bounded2_p_t AIRINV::InventoryParserHelper::seconds_p (uint2_p.derived(), 0u, 59u)
- chset_t AIRINV::InventoryParserHelper::cabin_code_p ("A-Z")
- chset_t AIRINV::InventoryParserHelper::class_code_p ("A-Z")
- chset_t AIRINV::InventoryParserHelper::passenger_type_p ("A-Z")
- repeat_p_t AIRINV::InventoryParserHelper::class_code_list_p (chset_t("A-Z").derived(), 1, 26)
- bounded1_3_p_t AIRINV::InventoryParserHelper::stay_duration_p (uint1_3_p.derived(), 0u, 999u)

Variables

- int1_p_t AIRINV::InventoryParserHelper::int1_p
- uint2_p_t AIRINV::InventoryParserHelper::uint2_p
- uint1_2_p_t AIRINV::InventoryParserHelper::uint1_2_p
- uint1_3_p_t AIRINV::InventoryParserHelper::uint1_3_p
- uint4_p_t AIRINV::InventoryParserHelper::uint4_p
- uint1_4_p_t AIRINV::InventoryParserHelper::uint1_4_p
- int1_p_t AIRINV::InventoryParserHelper::family_code_p

23.126 InventoryParserHelper.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/service/Logger.hpp>
00008 #include <stdair/stdair_exceptions.hpp>
00009 // Airinv
00010 #include <airinv/command/InventoryBuilder.hpp
      >
00011 //#define BOOST_SPIRIT_DEBUG
00012 #include <airinv/command/InventoryParserHelper.hpp
      >
00013
00014 //
00015 namespace bsc = boost::spirit::classic;
00016
00017 namespace AIRINV {
00018
00019   namespace InventoryParserHelper {
00020
00021     // ////////////////////////////////////////////////////////////////
00022     //  Semantic actions
00023     // ////////////////////////////////////////////////////////////////
00024
00025     ParserSemanticAction::
00026     ParserSemanticAction (FlightDateStruct
      & ioFlightDate)
00027       : _flightDate (ioFlightDate) {
00028     }
00029
00030     // ////////////////////////////////////////////////////////////////
00031     storeSnapshotDate::
00032     storeSnapshotDate (FlightDateStruct&
      ioFlightDate)
00033       : ParserSemanticAction (ioFlightDate) {
00034     }
00035
00036     // ////////////////////////////////////////////////////////////////
00037     void storeSnapshotDate::operator() (
      iterator_t iStr,
00038                                         iterator_t iStrEnd) const {
00039       _flightDate._flightDate = _flightDate.
      getDate();
00040     }
00041
00042     // ////////////////////////////////////////////////////////////////
00043     storeAirlineCode::
00044     storeAirlineCode (FlightDateStruct&
      ioFlightDate)
00045       : ParserSemanticAction (ioFlightDate) {
00046     }
00047
00048     // ////////////////////////////////////////////////////////////////
00049     void storeAirlineCode::operator() (iterator_t
       iStr,
00050                                        iterator_t iStrEnd) const {
00051       const stdair::AirlineCode_T lAirlineCode (iStr, iStrEnd);
00052       _flightDate._airlineCode = lAirlineCode;
00053
00054       // As that's the beginning of a new flight, all the list must be reset
00055       // 1. Leg branch of the tree
00056       _flightDate._legList.clear();
00057       _flightDate._itLeg._cabinList.clear();
00058       _flightDate._itLegCabin._bucketList.
      clear();
00059       _flightDate._itBucket._yieldRangeUpperValue
```

```
 = 0.0;
00060
00061       // 2. Segment branch of the tree
00062       _flightDate._segmentList.clear();
00063       _flightDate._itSegment._cabinList.clear();
00064       _flightDate._itSegmentCabin._itFareFamily
    ._classList.clear();
00065       _flightDate._itSegmentCabin._fareFamilies
    .clear();
00066       _flightDate._itBookingClass._classCode
 = "";
00067     }
00068
00069     // ////////////////////////////////////////////////////////////////
00070     storeFlightNumber::storeFlightNumber (
    FlightDateStruct& ioFlightDate)
00071       : ParserSemanticAction (ioFlightDate) {
00072     }
00073
00074     // ////////////////////////////////////////////////////////////////
00075     void storeFlightNumber::operator() (unsigned
    int iNumber) const {
00076       _flightDate._flightNumber = iNumber;
00077     }
00078
00079     // ////////////////////////////////////////////////////////////////
00080     storeFlightDate::storeFlightDate (
    FlightDateStruct& ioFlightDate)
00081       : ParserSemanticAction (ioFlightDate) {
00082     }
00083
00084     // ////////////////////////////////////////////////////////////////
00085     void storeFlightDate::operator() (iterator_t
 iStr,
00086                                       iterator_t iStrEnd) const {
00087       _flightDate._flightDate = _flightDate.
    getDate();
00088     }
00089
00090     // ////////////////////////////////////////////////////////////////
00091     storeFlightTypeCode::storeFlightTypeCode
 (FlightDateStruct& ioFlightDate)
00092       : ParserSemanticAction (ioFlightDate) {
00093     }
00094
00095     // ////////////////////////////////////////////////////////////////
00096     void storeFlightTypeCode::operator() (
    iterator_t iStr,
00097                                         iterator_t iStrEnd) const {
00098       const std::string lFlightTypeCodeStr (iStr, iStrEnd);
00099       const FlightTypeCode lFlightTypeCode (lFlightTypeCodeStr);
00100       _flightDate._flightTypeCode = lFlightTypeCode.
    getCode();
00101       //STDAIR_LOG_DEBUG ("FlightType code: " << lFlightTypeCode);
00102     }
00103
00104     // ////////////////////////////////////////////////////////////////
00105     storeFlightVisibilityCode::
00106     storeFlightVisibilityCode (FlightDateStruct
    & ioFlightDate)
00107       : ParserSemanticAction (ioFlightDate) {
00108     }
00109
00110     // ////////////////////////////////////////////////////////////////
00111     void storeFlightVisibilityCode::operator()
    (iterator_t iStr,
00112                                                 iterator_t iStrEnd)
 const {
00113       const std::string lFlightVisibilityCodeStr (iStr, iStrEnd);
00114       const FlightVisibilityCode lFlightVisibilityCode(
    lFlightVisibilityCodeStr);
00115       _flightDate._flightVisibilityCode =
    lFlightVisibilityCode.getCode();
00116       //STDAIR_LOG_DEBUG ("FlightVisibility code: " << lFlightVisibilityCode);
00117     }
00118
00119     // ////////////////////////////////////////////////////////////////
00120     storeLegBoardingPoint::
00121     storeLegBoardingPoint (FlightDateStruct
    & ioFlightDate)
00122       : ParserSemanticAction (ioFlightDate) {
00123     }
00124
00125     // ////////////////////////////////////////////////////////////////
00126     void storeLegBoardingPoint::operator() (
    iterator_t iStr,
00127                                           iterator_t iStrEnd) const
```

```
      {
00128       stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00129
00130       // ////////////////////
00131       // If this is not the first leg-date of the flight-date,
00132       // the already parsed leg-date must be added to the flight-date.
00133       if (_flightDate._itLeg._cabinList.empty() ==
      false) {
00134         _flightDate._itLegCabin._bucketList.
      push_back (_flightDate._itBucket);
00135         _flightDate._itLeg._cabinList.push_back (
      _flightDate._itLegCabin);
00136         _flightDate._legList.push_back (_flightDate
      ._itLeg);
00137       }
00138
00139       // As that's the beginning of a new leg-date,
00140       // (re-)initialise the leg-cabin branch of the tree
00141       _flightDate._itLeg._cabinList.clear();
00142       _flightDate._itLegCabin._cabinCode = "";
00143       _flightDate._itLegCabin._bucketList.
      clear();
00144       _flightDate._itBucket._yieldRangeUpperValue
       = 0.0;
00145
00146
00147       // ////////////////////
00148       // Set the (new) boarding point
00149       _flightDate._itLeg._boardingPoint =
      lBoardingPoint;
00150
00151       // Add the airport code if it is not already stored in the airport lists
00152       _flightDate.addAirport (lBoardingPoint);
00153     }
00154
00155     // ////////////////////////////////////////////////////////////////////
00156     storeLegOffPoint::
00157     storeLegOffPoint (FlightDateStruct&
      ioFlightDate)
00158       : ParserSemanticAction (ioFlightDate) {
00159     }
00160
00161     // ////////////////////////////////////////////////////////////////////
00162     void storeLegOffPoint::operator() (iterator_t
       iStr,
00163                                        iterator_t iStrEnd) const {
00164       stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
00165       _flightDate._itLeg._offPoint = lOffPoint;
00166
00167       // Add the airport code if it is not already stored in the airport lists
00168       _flightDate.addAirport (lOffPoint);
00169     }
00170
00171     // ////////////////////////////////////////////////////////////////////
00172     storeBoardingDate::storeBoardingDate (
      FlightDateStruct& ioFlightDate)
00173       : ParserSemanticAction (ioFlightDate) {
00174     }
00175
00176     // ////////////////////////////////////////////////////////////////////
00177     void storeBoardingDate::operator() (
      iterator_t iStr,
00178                                         iterator_t iStrEnd) const {
00179       _flightDate._itLeg._boardingDate =
      _flightDate.getDate();
00180     }
00181
00182     // ////////////////////////////////////////////////////////////////////
00183     storeBoardingTime::storeBoardingTime (
      FlightDateStruct& ioFlightDate)
00184       : ParserSemanticAction (ioFlightDate) {
00185     }
00186
00187     // ////////////////////////////////////////////////////////////////////
00188     void storeBoardingTime::operator() (
      iterator_t iStr,
00189                                         iterator_t iStrEnd) const {
00190       _flightDate._itLeg._boardingTime =
      _flightDate.getTime();
00191
00192       // Reset the number of seconds
00193       _flightDate._itSeconds = 0;
00194
00195       // Reset the date off-set
00196       _flightDate._dateOffSet = 0;
00197     }
00198
```

```
00199     // ////////////////////////////////////////////////////////////////////
00200     storeOffDate::storeOffDate (FlightDateStruct
      & ioFlightDate)
00201       : ParserSemanticAction (ioFlightDate) {
00202     }
00203
00204     // ////////////////////////////////////////////////////////////////////
00205     void storeOffDate::operator() (iterator_t
       iStr, iterator_t iStrEnd) const {
00206       _flightDate._itLeg._offDate = _flightDate
      .getDate();
00207     }
00208
00209     // ////////////////////////////////////////////////////////////////////
00210     storeOffTime::storeOffTime (FlightDateStruct
      & ioFlightDate)
00211       : ParserSemanticAction (ioFlightDate) {
00212     }
00213
00214     // ////////////////////////////////////////////////////////////////////
00215     void storeOffTime::operator() (iterator_t
       iStr, iterator_t iStrEnd) const {
00216       _flightDate._itLeg._offTime = _flightDate
      .getTime();
00217
00218       // Reset the number of seconds
00219       _flightDate._itSeconds = 0;
00220     }
00221
00222     // ////////////////////////////////////////////////////////////////////
00223     storeLegCabinCode::storeLegCabinCode (
      FlightDateStruct& ioFlightDate)
00224       : ParserSemanticAction (ioFlightDate) {
00225     }
00226
00227     // ////////////////////////////////////////////////////////////////////
00228     void storeLegCabinCode::operator() (char
      iChar) const {
00229
00230       // ////////////////////
00231       // If this is not the first leg-cabin of the leg-date,
00232       // the already parsed leg-cabin must be added to the leg-date.
00233       if (_flightDate._itLegCabin._cabinCode !=
       "") {
00234         if (_flightDate._itLegCabin._bucketList
      .empty() == false) {
00235           _flightDate._itLegCabin._bucketList.
      push_back (_flightDate._itBucket);
00236         }
00237         _flightDate._itLeg._cabinList.push_back (
      _flightDate._itLegCabin);
00238       }
00239
00240       // (Re-)initialise the leg-cabin branch of the tree
00241       _flightDate._itLegCabin._bucketList.
      clear();
00242       _flightDate._itBucket._yieldRangeUpperValue
       = 0.0;
00243
00244
00245       // ////////////////////
00246       _flightDate._itLegCabin._cabinCode =
      iChar;
00247       //std::cout << "Cabin code: " << iChar << std::endl;
00248     }
00249
00250     // ////////////////////////////////////////////////////////////////////
00251     storeSaleableCapacity::
00252     storeSaleableCapacity (FlightDateStruct
      & ioFlightDate)
00253       : ParserSemanticAction (ioFlightDate) {
00254     }
00255
00256     // ////////////////////////////////////////////////////////////////////
00257     void storeSaleableCapacity::operator() (
      double iReal) const {
00258       _flightDate._itLegCabin._saleableCapacity
       = iReal;
00259       //std::cout << "Saleable capacity: " << iReal << std::endl;
00260     }
00261
00262     // ////////////////////////////////////////////////////////////////////
00263     storeAU::storeAU (FlightDateStruct&
      ioFlightDate)
00264       : ParserSemanticAction (ioFlightDate) {
00265     }
00266
```

```
00267     // ////////////////////////////////////////////////////////////////////
00268     void storeAU::operator() (double iReal) const {
00269       _flightDate._itLegCabin._au = iReal;
00270       //std::cout << "AU: " << iReal << std::endl;
00271     }
00272
00273     // ////////////////////////////////////////////////////////////////////
00274     storeUPR::storeUPR (FlightDateStruct&
      ioFlightDate)
00275       : ParserSemanticAction (ioFlightDate) {
00276     }
00277
00278     // ////////////////////////////////////////////////////////////////////
00279     void storeUPR::operator() (double iReal) const {
00280       _flightDate._itLegCabin._upr = iReal;
00281       //std::cout << "UPR: " << iReal << std::endl;
00282     }
00283
00284     // ////////////////////////////////////////////////////////////////////
00285     storeBookingCounter::storeBookingCounter
       (FlightDateStruct& ioFlightDate)
00286       : ParserSemanticAction (ioFlightDate) {
00287     }
00288
00289     // ////////////////////////////////////////////////////////////////////
00290     void storeBookingCounter::operator() (
      double iReal) const {
00291       _flightDate._itLegCabin._nbOfBookings
      = iReal;
00292       //std::cout << "Nb of bookings: " << iReal << std::endl;
00293     }
00294
00295     // ////////////////////////////////////////////////////////////////////
00296     storeNAV::storeNAV (FlightDateStruct&
      ioFlightDate)
00297       : ParserSemanticAction (ioFlightDate) {
00298     }
00299
00300     // ////////////////////////////////////////////////////////////////////
00301     void storeNAV::operator() (double iReal) const {
00302       _flightDate._itLegCabin._nav = iReal;
00303       //std::cout << "NAV: " << iReal << std::endl;
00304     }
00305
00306     // ////////////////////////////////////////////////////////////////////
00307     storeGAV::storeGAV (FlightDateStruct&
      ioFlightDate)
00308       : ParserSemanticAction (ioFlightDate) {
00309     }
00310
00311     // ////////////////////////////////////////////////////////////////////
00312     void storeGAV::operator() (double iReal) const {
00313       _flightDate._itLegCabin._gav = iReal;
00314       //std::cout << "GAV: " << iReal << std::endl;
00315     }
00316
00317     // ////////////////////////////////////////////////////////////////////
00318     storeACP::storeACP (FlightDateStruct&
      ioFlightDate)
00319       : ParserSemanticAction (ioFlightDate) {
00320     }
00321
00322     // ////////////////////////////////////////////////////////////////////
00323     void storeACP::operator() (double iReal) const {
00324       _flightDate._itLegCabin._acp = iReal;
00325       //std::cout << "ACP: " << iReal << std::endl;
00326     }
00327
00328     // ////////////////////////////////////////////////////////////////////
00329     storeETB::storeETB (FlightDateStruct&
      ioFlightDate)
00330       : ParserSemanticAction (ioFlightDate) {
00331     }
00332
00333     // ////////////////////////////////////////////////////////////////////
00334     void storeETB::operator() (double iReal) const {
00335       _flightDate._itLegCabin._etb = iReal;
00336       //std::cout << "ETB: " << iReal << std::endl;
00337     }
00338
00339     // ////////////////////////////////////////////////////////////////////
00340     storeYieldUpperRange::storeYieldUpperRange
      (FlightDateStruct& ioFlightDate)
00341       : ParserSemanticAction (ioFlightDate) {
00342     }
00343
00344     // ////////////////////////////////////////////////////////////////////
```

```
00345     void storeYieldUpperRange::operator() (
      double iReal) const {
00346       // If this is not the first bucket of the leg-cabin,
00347       // the already parsed bucket must be added to the leg-cabin.
00348       if (_flightDate._itBucket._yieldRangeUpperValue
       != 0.0) {
00349         _flightDate._itLegCabin._bucketList.
      push_back (_flightDate._itBucket);
00350       }
00351
00352
00353       // ////////////////////
00354       _flightDate._itBucket._yieldRangeUpperValue
       = iReal;
00355       //std::cout << "Yield Upper Range Value: " << iReal << std::endl;
00356     }
00357
00358     // ////////////////////////////////////////////////////////////////
00359     storeBucketAvaibality::
00360     storeBucketAvaibality (FlightDateStruct
      & ioFlightDate)
00361       : ParserSemanticAction (ioFlightDate) {
00362     }
00363
00364     // ////////////////////////////////////////////////////////////////
00365     void storeBucketAvaibality::operator() (
      double iReal) const {
00366       _flightDate._itBucket._availability =
      iReal;
00367       //std::cout << "Availability: " << iReal << std::endl;
00368     }
00369
00370     // ////////////////////////////////////////////////////////////////
00371     storeSeatIndex::storeSeatIndex (
      FlightDateStruct& ioFlightDate)
00372       : ParserSemanticAction (ioFlightDate) {
00373     }
00374
00375     // ////////////////////////////////////////////////////////////////
00376     void storeSeatIndex::operator() (double iReal)
       const {
00377       _flightDate._itBucket._seatIndex = iReal;
00378       //std::cout << "Seat Index: " << iReal << std::endl;
00379     }
00380
00381     // ////////////////////////////////////////////////////////////////
00382     storeSegmentBoardingPoint::
00383     storeSegmentBoardingPoint (FlightDateStruct
      & ioFlightDate)
00384       : ParserSemanticAction (ioFlightDate) {
00385     }
00386
00387     // ////////////////////////////////////////////////////////////////
00388     void storeSegmentBoardingPoint::operator()
      (iterator_t iStr,
00389                                                 iterator_t iStrEnd)
       const {
00390       stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00391
00392       // ////////////////////
00393       // When the first segment-date is read, it means that the leg section
00394       // is over. The parsed leg can therefore be added to the list.
00395       if (_flightDate._itLeg._cabinList.empty() ==
      false) {
00396         _flightDate._itLegCabin._bucketList.
      push_back (_flightDate._itBucket);
00397         _flightDate._itLeg._cabinList.push_back (
      _flightDate._itLegCabin);
00398         _flightDate._legList.push_back (_flightDate
      ._itLeg);
00399
00400         // (Re-)initialise the leg-date branch of the tree
00401         _flightDate._itLeg._cabinList.clear();
00402         _flightDate._itLegCabin._cabinCode = ""
      ;
00403         _flightDate._itLeg._cabinList.clear();
00404         _flightDate._itLegCabin._bucketList.
      clear();
00405       }
00406
00407
00408       // ////////////////////
00409       // If this is not the first segment-date of the flight-date,
00410       // the already parsed segment-date must be added to the flight-date.
00411       if (_flightDate._itSegment._cabinList.
      empty() == false) {
00412         _flightDate._itSegmentCabin._itFareFamily
```

```
._classList.push_back (_flightDate._itBookingClass
);
00413         _flightDate._itSegmentCabin._fareFamilies
.push_back (_flightDate._itSegmentCabin._itFareFamily
);
00414         _flightDate._itSegment._cabinList.
push_back (_flightDate._itSegmentCabin);
00415         _flightDate._segmentList.push_back (_flightDate
._itSegment);
00416       }
00417
00418       // As that's the beginning of a new segment-date,
00419       // (re-)initialise the segment-cabin branch of the tree
00420       _flightDate._itSegment._cabinList.clear();
00421       _flightDate._itSegmentCabin._itFareFamily
._classList.clear();
00422       _flightDate._itSegmentCabin._fareFamilies
.clear();
00423       _flightDate._itBookingClass._classCode
 = "";
00424
00425
00426       // ////////////////////
00427       _flightDate._itSegment._boardingPoint
= lBoardingPoint;
00428       //std::cout << "Board point: " << lBoardingPoint << std::endl;
00429     }
00430
00431     // ////////////////////////////////////////////////////////////////
00432     storeSegmentOffPoint::storeSegmentOffPoint
 (FlightDateStruct& ioFlightDate)
00433       : ParserSemanticAction (ioFlightDate) {
00434     }
00435
00436     // ////////////////////////////////////////////////////////////////
00437     void storeSegmentOffPoint::operator() (
iterator_t iStr,
00438                                            iterator_t iStrEnd) const
{
00439       stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
00440       _flightDate._itSegment._offPoint =
lOffPoint;
00441       //std::cout << "Off point: " << lOffPoint << std::endl;
00442     }
00443
00444     // ////////////////////////////////////////////////////////////////
00445     storeSegmentCabinCode::
00446     storeSegmentCabinCode (FlightDateStruct
& ioFlightDate)
00447       : ParserSemanticAction (ioFlightDate) {
00448     }
00449
00450     // ////////////////////////////////////////////////////////////////
00451     void storeSegmentCabinCode::operator() (
char iChar) const {
00452
00453       // Reset the list of fare families, as it is a new segment-cabin
00454       _flightDate._itSegmentCabin._fareFamilies
.clear();
00455
00456       // ////////////////////
00457       // If this is not the first segment-cabin of the segment-date,
00458       // the already parsed segment-cabin must be added to the segment-date.
00459       if (_flightDate._itSegmentCabin._itFareFamily
._classList.empty() == false){
00460         _flightDate._itSegmentCabin._itFareFamily
._classList.
00461           push_back (_flightDate._itBookingClass);
00462         _flightDate._itSegmentCabin._fareFamilies
.
00463           push_back (_flightDate._itSegmentCabin.
_itFareFamily);
00464         _flightDate._itSegment._cabinList.
00465           push_back (_flightDate._itSegmentCabin);
00466       }
00467
00468       // (Re-)initialise the booking-class branch of the tree
00469       _flightDate._itSegmentCabin._fareFamilies
.clear();
00470       _flightDate._itSegmentCabin._itFareFamily
._classList.clear();
00471       _flightDate._itBookingClass._classCode
 = "";
00472
00473
00474       // ////////////////////
00475       _flightDate._itSegmentCabin._cabinCode
```

```
      = iChar;
00476       //std::cout << "Segment-cabin code: " << iChar << std::endl;
00477     }
00478
00479     // ////////////////////////////////////////////////////////////////////
00480     storeSegmentCabinBookingCounter::
00481     storeSegmentCabinBookingCounter (
      FlightDateStruct& ioFlightDate)
00482       : ParserSemanticAction (ioFlightDate) {
00483     }
00484
00485     // ////////////////////////////////////////////////////////////////////
00486     void storeSegmentCabinBookingCounter::operator()
      (double iReal) const {
00487       _flightDate._itSegmentCabin._nbOfBookings
      = iReal;
00488       //std::cout << "Nb of bookings: " << iReal << std::endl;
00489     }
00490
00491     // ////////////////////////////////////////////////////////////////////
00492     storeClassCode::storeClassCode (
      FlightDateStruct& ioFlightDate)
00493       : ParserSemanticAction (ioFlightDate) {
00494     }
00495
00496     // ////////////////////////////////////////////////////////////////////
00497     void storeClassCode::operator() (char iChar)
      const {
00498       // If this is not the first booking-class of the segment-cabin,
00499       // the already parsed booking-class must be added to the segment-cabin.
00500       if (_flightDate._itBookingClass._classCode
      != "") {
00501         _flightDate._itSegmentCabin._itFareFamily
      ._classList.
00502           push_back (_flightDate._itBookingClass);
00503       }
00504
00505       // ////////////////////
00506       _flightDate._itBookingClass._classCode
      = iChar;
00507       //std::cout << "Booking class code: " << iChar << std::endl;
00508     }
00509
00510     // ////////////////////////////////////////////////////////////////////
00511     storeSubclassCode::storeSubclassCode (
      FlightDateStruct& ioFlightDate)
00512       : ParserSemanticAction (ioFlightDate) {
00513     }
00514
00515     // ////////////////////////////////////////////////////////////////////
00516     void storeSubclassCode::operator() (unsigned
      int iNumber) const {
00517       _flightDate._itBookingClass._subclassCode
      = iNumber;
00518       //std::cout << "Sub-class code: " << iNumber << std::endl;
00519     }
00520
00521     // ////////////////////////////////////////////////////////////////////
00522     storeParentClassCode::
00523     storeParentClassCode (FlightDateStruct
      & ioFlightDate)
00524       : ParserSemanticAction (ioFlightDate) {
00525     }
00526
00527     // ////////////////////////////////////////////////////////////////////
00528     void storeParentClassCode::operator() (
      char iChar) const {
00529       _flightDate._itBookingClass._parentClassCode
      = iChar;
00530       //std::cout << "Parent booking class code: " << iChar << std::endl;
00531     }
00532
00533     // ////////////////////////////////////////////////////////////////////
00534     storeParentSubclassCode::
00535     storeParentSubclassCode (FlightDateStruct
      & ioFlightDate)
00536       : ParserSemanticAction (ioFlightDate) {
00537     }
00538
00539     // ////////////////////////////////////////////////////////////////////
00540     void storeParentSubclassCode::operator()
      (unsigned int iNumber) const {
00541       _flightDate._itBookingClass._parentSubclassCode
      = iNumber;
00542       //std::cout << "Parent sub-class code: " << iNumber << std::endl;
00543     }
00544
```

```
00545     // ////////////////////////////////////////////////////////////////////
00546     storeCumulatedProtection::
00547     storeCumulatedProtection (FlightDateStruct
      & ioFlightDate)
00548       : ParserSemanticAction (ioFlightDate) {
00549     }
00550
00551     // ////////////////////////////////////////////////////////////////////
00552     void storeCumulatedProtection::operator()
      (double iReal) const {
00553       _flightDate._itBookingClass.
      _cumulatedProtection = iReal;
00554       //std::cout << "Cumulated protection: " << iReal << std::endl;
00555     }
00556
00557     // ////////////////////////////////////////////////////////////////////
00558     storeProtection::storeProtection (
      FlightDateStruct& ioFlightDate)
00559       : ParserSemanticAction (ioFlightDate) {
00560     }
00561
00562     // ////////////////////////////////////////////////////////////////////
00563     void storeProtection::operator() (double iReal)
       const {
00564       _flightDate._itBookingClass._protection
       = iReal;
00565       //std::cout << "Protection: " << iReal << std::endl;
00566     }
00567
00568     // ////////////////////////////////////////////////////////////////////
00569     storeNego::storeNego (FlightDateStruct&
       ioFlightDate)
00570       : ParserSemanticAction (ioFlightDate) {
00571     }
00572
00573     // ////////////////////////////////////////////////////////////////////
00574     void storeNego::operator() (double iReal) const {
00575       _flightDate._itBookingClass._nego = iReal;

00576       //std::cout << "Negotiated allotment: " << iReal << std::endl;
00577     }
00578
00579     // ////////////////////////////////////////////////////////////////////
00580     storeNoShow::storeNoShow (FlightDateStruct
      & ioFlightDate)
00581       : ParserSemanticAction (ioFlightDate) {
00582     }
00583
00584     // ////////////////////////////////////////////////////////////////////
00585     void storeNoShow::operator() (double iReal) const {
00586       _flightDate._itBookingClass._noShowPercentage
       = iReal;
00587       //std::cout << "No-Show percentage: " << iReal << std::endl;
00588     }
00589
00590     // ////////////////////////////////////////////////////////////////////
00591     storeOverbooking::storeOverbooking (
      FlightDateStruct& ioFlightDate)
00592       : ParserSemanticAction (ioFlightDate) {
00593     }
00594
00595     // ////////////////////////////////////////////////////////////////////
00596     void storeOverbooking::operator() (double
      iReal) const {
00597       _flightDate._itBookingClass.
      _overbookingPercentage = iReal;
00598       //std::cout << "Overbooking percentage: " << iReal << std::endl;
00599     }
00600
00601     // ////////////////////////////////////////////////////////////////////
00602     storeNbOfBkgs::storeNbOfBkgs (FlightDateStruct
      & ioFlightDate)
00603       : ParserSemanticAction (ioFlightDate) {
00604     }
00605
00606     // ////////////////////////////////////////////////////////////////////
00607     void storeNbOfBkgs::operator() (double iReal)
       const {
00608       _flightDate._itBookingClass._nbOfBookings
       = iReal;
00609       //std::cout << "Nb of bookings: " << iReal << std::endl;
00610     }
00611
00612     // ////////////////////////////////////////////////////////////////////
00613     storeNbOfGroupBkgs::storeNbOfGroupBkgs
       (FlightDateStruct& ioFlightDate)
00614       : ParserSemanticAction (ioFlightDate) {
```

```
00615     }
00616
00617     // ////////////////////////////////////////////////////////////////////
00618     void storeNbOfGroupBkgs::operator() (double
      iReal) const {
00619       _flightDate._itBookingClass._nbOfGroupBookings
       = iReal;
00620       //std::cout << "Nb of group bookings: " << iReal << std::endl;
00621     }
00622
00623     // ////////////////////////////////////////////////////////////////////
00624     storeNbOfPendingGroupBkgs::
00625     storeNbOfPendingGroupBkgs (FlightDateStruct
      & ioFlightDate)
00626       : ParserSemanticAction (ioFlightDate) {
00627     }
00628
00629     // ////////////////////////////////////////////////////////////////////
00630     void storeNbOfPendingGroupBkgs::operator()
      (double iReal) const {
00631       _flightDate._itBookingClass.
      _nbOfPendingGroupBookings = iReal;
00632       //std::cout << "Nb of pending group bookings: " << iReal << std::endl;
00633     }
00634
00635     // ////////////////////////////////////////////////////////////////////
00636     storeNbOfStaffBkgs::storeNbOfStaffBkgs
       (FlightDateStruct& ioFlightDate)
00637       : ParserSemanticAction (ioFlightDate) {
00638     }
00639
00640     // ////////////////////////////////////////////////////////////////////
00641     void storeNbOfStaffBkgs::operator() (double
      iReal) const {
00642       _flightDate._itBookingClass._nbOfStaffBookings
       = iReal;
00643       //std::cout << "Nb of staff bookings: " << iReal << std::endl;
00644     }
00645
00646     // ////////////////////////////////////////////////////////////////////
00647     storeNbOfWLBkgs::storeNbOfWLBkgs (
      FlightDateStruct& ioFlightDate)
00648       : ParserSemanticAction (ioFlightDate) {
00649     }
00650
00651     // ////////////////////////////////////////////////////////////////////
00652     void storeNbOfWLBkgs::operator() (double iReal)
       const {
00653       _flightDate._itBookingClass._nbOfWLBookings
       = iReal;
00654       //std::cout << "Nb of wait-list bookings: " << iReal << std::endl;
00655     }
00656
00657     // ////////////////////////////////////////////////////////////////////
00658     storeClassETB::storeClassETB (FlightDateStruct
      & ioFlightDate)
00659       : ParserSemanticAction (ioFlightDate) {
00660     }
00661
00662     // ////////////////////////////////////////////////////////////////////
00663     void storeClassETB::operator() (double iReal)
       const {
00664       _flightDate._itBookingClass._etb = iReal;
00665       //std::cout << "Class-level ETB: " << iReal << std::endl;
00666     }
00667
00668     // ////////////////////////////////////////////////////////////////////
00669     storeClassAvailability::
00670     storeClassAvailability (FlightDateStruct
      & ioFlightDate)
00671       : ParserSemanticAction (ioFlightDate) {
00672     }
00673
00674     // ////////////////////////////////////////////////////////////////////
00675     void storeClassAvailability::operator()
      (double iReal) const {
00676       _flightDate._itBookingClass.
      _netClassAvailability = iReal;
00677       //std::cout << "Net class availability: " << iReal << std::endl;
00678     }
00679
00680     // ////////////////////////////////////////////////////////////////////
00681     storeSegmentAvailability::
00682     storeSegmentAvailability (FlightDateStruct
      & ioFlightDate)
00683       : ParserSemanticAction (ioFlightDate) {
00684     }
```

```
00685
00686     // ////////////////////////////////////////////////////////////////////
00687     void storeSegmentAvailability::operator()
      (double iReal) const {
00688       _flightDate._itBookingClass.
      _segmentAvailability = iReal;
00689       //std::cout << "Segment availability: " << iReal << std::endl;
00690     }
00691
00692     // ////////////////////////////////////////////////////////////////////
00693     storeRevenueAvailability::
00694     storeRevenueAvailability (FlightDateStruct
      & ioFlightDate)
00695       : ParserSemanticAction (ioFlightDate) {
00696     }
00697
00698     // ////////////////////////////////////////////////////////////////////
00699     void storeRevenueAvailability::operator()
      (double iReal) const {
00700       _flightDate._itBookingClass.
      _netRevenueAvailability = iReal;
00701       //std::cout << "Net revenue availability: " << iReal << std::endl;
00702     }
00703
00704     // ////////////////////////////////////////////////////////////////////
00705     storeFamilyCode::storeFamilyCode (
      FlightDateStruct& ioFlightDate)
00706       : ParserSemanticAction (ioFlightDate) {
00707     }
00708
00709     // ////////////////////////////////////////////////////////////////////
00710     void storeFamilyCode::operator() (int iCode)
       const {
00711       std::ostringstream ostr;
00712       ostr << iCode;
00713       _flightDate._itSegmentCabin._itFareFamily
      ._familyCode = ostr.str();
00714     }
00715
00716     // ////////////////////////////////////////////////////////////////////
00717     storeFClasses::storeFClasses (FlightDateStruct
      & ioFlightDate)
00718       : ParserSemanticAction (ioFlightDate) {
00719     }
00720
00721     // ////////////////////////////////////////////////////////////////////
00722     void storeFClasses::operator() (iterator_t
       iStr,
00723                                     iterator_t iStrEnd) const {
00724       std::string lClasses (iStr, iStrEnd);
00725       _flightDate._itSegmentCabin._itFareFamily
      ._classes = lClasses;
00726
00727       // The list of classes is the last (according to the arrival order
00728       // within the schedule input file) detail of the segment cabin. Hence,
00729       // when a list of classes is parsed, it means that the full segment
00730       // cabin details have already been parsed as well: the segment cabin
00731       // can thus be added to the segment.
00732       _flightDate._itSegmentCabin._itFareFamily
      ._classList.
00733         push_back (_flightDate._itBookingClass);
00734       _flightDate._itSegmentCabin._fareFamilies
      .
00735         push_back (_flightDate._itSegmentCabin.
      _itFareFamily);
00736       _flightDate._itSegment._cabinList.
      push_back (_flightDate._itSegmentCabin);
00737
00738       // As that's the beginning of a new segment-cabin,
00739       // (re-)initialise the segment-cabin branch of the tree
00740       _flightDate._itSegmentCabin._itFareFamily
      ._classList.clear();
00741       _flightDate._itSegmentCabin._fareFamilies
      .clear();
00742       _flightDate._itBookingClass._classCode
       = "";
00743     }
00744
00745     // ////////////////////////////////////////////////////////////////////
00746     doEndFlightDate::doEndFlightDate (
      stdair::BomRoot& ioBomRoot,
00747                                       FlightDateStruct&
      ioFlightDate,
00748                                       unsigned int& ioNbOfFlights)
00749       : ParserSemanticAction (ioFlightDate), _bomRoot (
      ioBomRoot),
00750         _nbOfFlights (ioNbOfFlights) {
```

```
00751     }
00752
00753     // ////////////////////////////////////////////////////////////////
00754     // void doEndFlightDate::operator() (char iChar) const {
00755     void doEndFlightDate::operator() (iterator_t
       iStr,
00756                                       iterator_t iStrEnd) const {
00757
00758       // ////////////////////
00759       // The segment-date section is now over. It means that the
00760       // already parsed segment-date must be added to the flight-date.
00761       if (_flightDate._itSegment._cabinList.
      empty() == false) {
00762         _flightDate._segmentList.push_back (_flightDate
      ._itSegment);
00763       }
00764
00765       // As that's the beginning of a new flight-date,
00766       // (re-)initialise the segment-cabin branch of the tree
00767       _flightDate._itSegment._cabinList.clear();
00768
00769
00770       // ////////////////////
00771       //if (_nbOfFlights % 1000 == 0) {
00772         // DEBUG: Display the result
00773         //STDAIR_LOG_DEBUG ("FlightDate #" << _nbOfFlights
00774         //                  << ": " << _flightDate.describe());
00775         //}
00776
00777       // Build the FlightDate BOM objects
00778       InventoryBuilder::buildInventory (_bomRoot, _flightDate
      );
00779
00780       //
00781       ++_nbOfFlights;
00782     }
00783
00784
00785     // ////////////////////////////////////////////////////////////////////
00786     //
00787     //  Utility Parsers
00788     //
00789     // ////////////////////////////////////////////////////////////////////
00791     int1_p_t int1_p;
00792
00794     uint2_p_t uint2_p;
00795
00797     uint1_2_p_t uint1_2_p;
00798
00800     uint1_3_p_t uint1_3_p;
00801
00803     uint4_p_t uint4_p;
00804
00806     uint1_4_p_t uint1_4_p;
00807
00809     repeat_p_t airline_code_p (chset_t("0-9A-Z")
      .derived(), 2, 3);
00810
00812     bounded1_4_p_t flight_number_p (uint1_4_p
      .derived(), 0u, 9999u);
00813
00815     bounded2_p_t year_p (uint2_p.derived(), 0u, 99u);
00816
00818     bounded2_p_t month_p (uint2_p.derived(), 1u, 12u)
      ;
00819
00821     bounded2_p_t day_p (uint2_p.derived(), 1u, 31u);
00822
00824     repeat_p_t dow_p (chset_t("0-1").derived().derived(),
       7, 7);
00825
00827     repeat_p_t airport_p (chset_t("0-9A-Z").derived()
      , 3, 3);
00828
00830     bounded1_2_p_t hours_p (uint1_2_p.derived(),
      0u, 24u);
00831
00833     bounded2_p_t minutes_p (uint2_p.derived(), 0u,
      59u);
00834
00836     bounded2_p_t seconds_p (uint2_p.derived(), 0u,
      59u);
00837
00839     chset_t cabin_code_p ("A-Z");
00840
00842     chset_t class_code_p ("A-Z");
00843
```

```
00845     chset_t passenger_type_p ("A-Z");
00846
00848     int1_p_t family_code_p;
00849
00851     repeat_p_t class_code_list_p (chset_t("
      A-Z").derived(), 1, 26);
00852
00854     bounded1_3_p_t stay_duration_p (uint1_3_p
      .derived(), 0u, 999u);
00855
00856
00857     // ////////////////////////////////////////////////////////////////
00858     //  (Boost Spirit) Grammar Definition
00859     // ////////////////////////////////////////////////////////////////
00860
00861     // ////////////////////////////////////////////////////////////////
00862     InventoryParser::InventoryParser (
      stdair::BomRoot& ioBomRoot,
00863                                       FlightDateStruct&
      ioFlightDate,
00864                                       unsigned int& ioNbOfFlights)
00865       : _bomRoot (ioBomRoot), _flightDate (ioFlightDate),
00866         _nbOfFlights (ioNbOfFlights) {
00867     }
00868
00869     // ////////////////////////////////////////////////////////////////
00870     template<typename ScannerT>
00871     InventoryParser::definition<ScannerT>::
00872     definition (InventoryParser const& self) {
00873
00874       flight_date_list = *( not_to_be_parsed | flight_date )
00875         ;
00876
00877       not_to_be_parsed =
00878         bsc::lexeme_d[ bsc::comment_p("//") | bsc::comment_p("/*", "*/")
00879                        | bsc::space_p ]
00880         ;
00881
00882       flight_date = flight_key
00883         >> leg_list
00884         >> segment_list
00885         >> flight_date_end[doEndFlightDate (self._bomRoot, self.
      _flightDate,
00886                                             self._nbOfFlights)]
00887         ;
00888
00889       flight_date_end = bsc::ch_p(';')
00890         ;
00891
00892       flight_key = date[storeSnapshotDate(self._flightDate)]
00893         >> '/' >> airline_code
00894         >> '/' >> flight_number
00895         >> '/' >> date[storeFlightDate(self._flightDate)]
00896         >> '/' >> flight_type_code[storeFlightTypeCode(self.
      _flightDate)]
00897         >> !( '/' >> flight_visibility_code[storeFlightVisibilityCode
      (self._flightDate)])
00898         ;
00899
00900       airline_code =
00901         bsc::lexeme_d[(airline_code_p)[storeAirlineCode
      (self._flightDate)]]
00902         ;
00903
00904       flight_number =
00905         bsc::lexeme_d[(flight_number_p)[storeFlightNumber
      (self._flightDate)]]
00906         ;
00907
00908       date =
00909         bsc::lexeme_d[(day_p)[bsc::assign_a(self._flightDate._itDay)]
00910                       >> (month_p)[bsc::assign_a(self._flightDate.
      _itMonth)]
00911                       >> (year_p)[bsc::assign_a(self._flightDate._itYear)
      ]]
00912         ;
00913
00914       flight_type_code =
00915         ( bsc::chseq_p("INT") | bsc::chseq_p("DOM") | bsc::chseq_p("GRD") )
00916         ;
00917
00918       flight_visibility_code =
00919         ( bsc::chseq_p("HID") | bsc::chseq_p("PSD") )
00920         ;
00921
00922       leg_list = +( '/' >> leg )
00923         ;
```

```
00924
00925       leg = leg_key >> ';' >> leg_details >> leg_cabin_list
00926         ;
00927
00928       leg_key = (airport_p)[storeLegBoardingPoint
      (self._flightDate)]
00929         >> ';' >> (airport_p)[storeLegOffPoint(self.
      _flightDate)]
00930         ;
00931
00932       leg_details = date[storeBoardingDate(self._flightDate)]
00933         >> ';' >> time[storeBoardingTime(self._flightDate)]
00934         >> ';' >> date[storeOffDate(self._flightDate)]
00935         >> ';' >> time[storeOffTime(self._flightDate)]
00936         ;
00937
00938       leg_cabin_list = +( ';' >> leg_cabin_details >> !bucket_list )
00939         ;
00940
00941       leg_cabin_details = (cabin_code_p)[storeLegCabinCode
      (self._flightDate)]
00942         >> ',' >> (bsc::ureal_p)[storeSaleableCapacity(
      self._flightDate)]
00943         >> ',' >> (bsc::real_p)[storeAU(self._flightDate)]
00944         >> ',' >> (bsc::real_p)[storeUPR(self._flightDate)]
00945         >> ',' >> (bsc::real_p)[storeBookingCounter(self.
      _flightDate)]
00946         >> ',' >> (bsc::real_p)[storeNAV(self._flightDate)]
00947         >> ',' >> (bsc::real_p)[storeGAV(self._flightDate)]
00948         >> ',' >> (bsc::ureal_p)[storeACP(self._flightDate)]
00949         >> ',' >> (bsc::real_p)[storeETB(self._flightDate)]
00950         ;
00951
00952       time =
00953         bsc::lexeme_d[
00954             (hours_p)[bsc::assign_a(self._flightDate._itHours)]
00955          >> (minutes_p)[bsc::assign_a(self._flightDate._itMinutes)]
00956          >> !((seconds_p)[bsc::assign_a(self._flightDate._itSeconds)])
00957                                             ]
00958         ;
00959
00960       bucket_list = +( ',' >> bucket_details )
00961         ;
00962
00963       bucket_details =
00964         (bsc::ureal_p)[storeYieldUpperRange(self.
      _flightDate)]
00965         >> ':' >> (bsc::real_p)[storeBucketAvaibality(self
      ._flightDate)]
00966         >> ':' >> (uint1_3_p)[storeSeatIndex(self.
      _flightDate)];
00967
00968       segment_list = +( '/' >> segment )
00969         ;
00970
00971       segment = segment_key >> segment_cabin_list
00972         ;
00973
00974       segment_key = (airport_p)[storeSegmentBoardingPoint
      (self._flightDate)]
00975         >> ';' >> (airport_p)[storeSegmentOffPoint
      (self._flightDate)]
00976         ;
00977
00978       segment_cabin_list =
00979         +( ';' >> segment_cabin_key >> ','
00980            >> segment_cabin_details >> class_list >> family_cabin_list )
00981         ;
00982
00983       family_cabin_list =
00984         +( ';' >> family_cabin_details)
00985         ;
00986
00987       segment_cabin_key =
00988         (cabin_code_p)[storeSegmentCabinCode(
      self._flightDate)]
00989         ;
00990
00991       segment_cabin_details =
00992         (bsc::ureal_p)[storeSegmentCabinBookingCounter
      (self._flightDate)]
00993         ;
00994
00995       class_list = +( ',' >> class_key >> '|' >> class_details )
00996         ;
00997
00998       class_key = (class_code_p)[storeClassCode(self.
```

```
      _flightDate)]
00999         ;
01000
01001       parent_subclass_code =
01002         (class_code_p)[storeParentClassCode(
      self._flightDate)]
01003         >> (uint1_2_p)[storeParentSubclassCode(
      self._flightDate)]
01004         ;
01005
01006       class_protection =
01007         (bsc::ureal_p)[storeProtection(self._flightDate)]
01008         ;
01009
01010       class_nego =
01011         (bsc::ureal_p)[storeNego(self._flightDate)]
01012         ;
01013
01014       class_details = (uint1_2_p)[storeSubclassCode(
      self._flightDate)]
01015         >> ':' >> (bsc::ureal_p)[storeCumulatedProtection
      (self._flightDate)]
01016         >> ':' >> !( parent_subclass_code )
01017         >> ':' >> !( class_protection )
01018         >> ':' >> (bsc::ureal_p)[storeNoShow(self._flightDate)]
01019         >> ':' >> (bsc::ureal_p)[storeOverbooking(self.
      _flightDate)]
01020         >> ':' >> (bsc::ureal_p)[storeNbOfBkgs(self._flightDate)]
01021         >> ':' >> (bsc::ureal_p)[storeNbOfGroupBkgs(self.
      _flightDate)]
01022         >> ':' >> (bsc::ureal_p)[storeNbOfPendingGroupBkgs
      (self._flightDate)]
01023         >> ':' >> (bsc::ureal_p)[storeNbOfStaffBkgs(self.
      _flightDate)]
01024         >> ':' >> (bsc::ureal_p)[storeNbOfWLBkgs(self.
      _flightDate)]
01025         >> ':' >> (bsc::ureal_p)[storeClassETB(self._flightDate)]
01026         >> ':' >> !( class_nego )
01027         >> ':' >> (bsc::real_p)[storeClassAvailability(
      self._flightDate)]
01028         >> ':' >> (bsc::real_p)[storeSegmentAvailability
      (self._flightDate)]
01029         >> ':' >> (bsc::real_p)[storeRevenueAvailability
      (self._flightDate)]
01030         ;
01031
01032       family_cabin_details =
01033         (family_code_p)[storeFamilyCode(self.
      _flightDate)]
01034         >> ';'
01035         >> (class_code_list_p)[storeFClasses(self
      ._flightDate)]
01036         ;
01037
01038       // BOOST_SPIRIT_DEBUG_NODE (InventoryParser);
01039       BOOST_SPIRIT_DEBUG_NODE (flight_date_list);
01040       BOOST_SPIRIT_DEBUG_NODE (not_to_be_parsed);
01041       BOOST_SPIRIT_DEBUG_NODE (flight_date);
01042       BOOST_SPIRIT_DEBUG_NODE (flight_date_end);
01043       BOOST_SPIRIT_DEBUG_NODE (flight_key);
01044       BOOST_SPIRIT_DEBUG_NODE (airline_code);
01045       BOOST_SPIRIT_DEBUG_NODE (flight_number);
01046       BOOST_SPIRIT_DEBUG_NODE (flight_type_code);
01047       BOOST_SPIRIT_DEBUG_NODE (flight_visibility_code);
01048       BOOST_SPIRIT_DEBUG_NODE (date);
01049       BOOST_SPIRIT_DEBUG_NODE (leg_list);
01050       BOOST_SPIRIT_DEBUG_NODE (leg);
01051       BOOST_SPIRIT_DEBUG_NODE (leg_key);
01052       BOOST_SPIRIT_DEBUG_NODE (leg_details);
01053       BOOST_SPIRIT_DEBUG_NODE (leg_cabin_list);
01054       BOOST_SPIRIT_DEBUG_NODE (leg_cabin_details);
01055       BOOST_SPIRIT_DEBUG_NODE (bucket_list);
01056       BOOST_SPIRIT_DEBUG_NODE (bucket_details);
01057       BOOST_SPIRIT_DEBUG_NODE (time);
01058       BOOST_SPIRIT_DEBUG_NODE (segment_list);
01059       BOOST_SPIRIT_DEBUG_NODE (segment);
01060       BOOST_SPIRIT_DEBUG_NODE (segment_key);
01061       BOOST_SPIRIT_DEBUG_NODE (full_segment_cabin_details);
01062       BOOST_SPIRIT_DEBUG_NODE (segment_cabin_list);
01063       BOOST_SPIRIT_DEBUG_NODE (segment_cabin_key);
01064       BOOST_SPIRIT_DEBUG_NODE (segment_cabin_details);
01065       BOOST_SPIRIT_DEBUG_NODE (class_list);
01066       BOOST_SPIRIT_DEBUG_NODE (class_key);
01067       BOOST_SPIRIT_DEBUG_NODE (parent_subclass_code);
01068       BOOST_SPIRIT_DEBUG_NODE (class_protection);
01069       BOOST_SPIRIT_DEBUG_NODE (class_nego);
01070       BOOST_SPIRIT_DEBUG_NODE (class_details);
```

```
01071       BOOST_SPIRIT_DEBUG_NODE (family_cabin_list);
01072       BOOST_SPIRIT_DEBUG_NODE (family_cabin_details);
01073     }
01074
01075     // ////////////////////////////////////////////////////////////////
01076     template<typename ScannerT>
01077     bsc::rule<ScannerT> const&
01078     InventoryParser::definition<ScannerT>::start
      () const {
01079       return flight_date_list;
01080     }
01081   }
01082
01083
01085   //
01086   //  Entry class for the file parser
01087   //
01089
01090   // ////////////////////////////////////////////////////////////////////
01091   InventoryFileParser::
01092   InventoryFileParser (stdair::BomRoot& ioBomRoot, const
      std::string& iFilename)
01093     : _filename (iFilename), _bomRoot (ioBomRoot),
01094       _nbOfFlights (0) {
01095     init();
01096   }
01097
01098   // ////////////////////////////////////////////////////////////////////
01099   void InventoryFileParser::init() {
01100     // Open the file
01101     _startIterator = iterator_t (_filename);
01102
01103     // Check the filename exists and can be open
01104     if (!_startIterator) {
01105       std::ostringstream oMessage;
01106       oMessage << "The file " << _filename << " can not be open.";
01107       STDAIR_LOG_ERROR (oMessage.str());
01108       throw InventoryInputFileNotFoundException
       (oMessage.str());
01109     }
01110
01111     // Create an EOF iterator
01112     _endIterator = _startIterator.make_end();
01113   }
01114
01115   // ////////////////////////////////////////////////////////////////////
01116   bool InventoryFileParser::buildInventory (
      ) {
01117     bool oResult = false;
01118
01119     STDAIR_LOG_DEBUG ("Parsing inventory input file: " << _filename);
01120
01121     // Initialise the parser (grammar) with the helper/staging structure.
01122     InventoryParserHelper::InventoryParser
       lInventoryParser (_bomRoot,
01123                                                        _flightDate,
01124                                                        _nbOfFlights);
01125
01126     // Launch the parsing of the file and, thanks to the doEndFlightDate
01127     // call-back structure, the building of the whole Inventory BOM
01128     // (i.e., including Inventory, FlightDate, LegDate, SegmentDate, etc.)
01129     bsc::parse_info<iterator_t> info = bsc::parse (_startIterator, _endIterator
      ,
01130                                                    lInventoryParser,
01131                                                    bsc::space_p - bsc::eol_p);
01132
01133     // Retrieves whether or not the parsing was successful
01134     oResult = info.hit;
01135
01136     const std::string hasBeenFullyReadStr = (info.full == true)?"":"not ";
01137     if (oResult == true) {
01138       STDAIR_LOG_DEBUG ("Parsing of inventory input file: " << _filename
01139                         << " succeeded: read " << info.length
01140                         << " characters. The input file has "
01141                         << hasBeenFullyReadStr
01142                         << "been fully read. Stop point: " << info.stop);
01143
01144     } else {
01145       STDAIR_LOG_ERROR ("Parsing of inventory input file: " << _filename
01146                         << " failed: read " << info.length
01147                         << " characters. The input file has "
01148                         << hasBeenFullyReadStr
01149                         << "been fully read. Stop point: " << info.stop);
01150       throw InventoryFileParsingFailedException
      ("Parsing of inventory input file"
01151                                                ": " + _filename + " failed");
01152     }
```

```
01153
01154     return oResult;
01155   }
01156
01157 }
```

23.127 airinv/command/InventoryParserHelper.hpp File Reference

```
#include <string>
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/basic/BasParserTypes.hpp>
#include <airinv/bom/FlightDateStruct.hpp>
```

Classes

- struct AIRINV::InventoryParserHelper::ParserSemanticAction
- struct AIRINV::InventoryParserHelper::storeSnapshotDate
- struct AIRINV::InventoryParserHelper::storeAirlineCode
- struct AIRINV::InventoryParserHelper::storeFlightNumber
- struct AIRINV::InventoryParserHelper::storeFlightDate
- struct AIRINV::InventoryParserHelper::storeFlightTypeCode
- struct AIRINV::InventoryParserHelper::storeFlightVisibilityCode
- struct AIRINV::InventoryParserHelper::storeLegBoardingPoint
- struct AIRINV::InventoryParserHelper::storeLegOffPoint
- struct AIRINV::InventoryParserHelper::storeBoardingDate
- struct AIRINV::InventoryParserHelper::storeBoardingTime
- struct AIRINV::InventoryParserHelper::storeOffDate
- struct AIRINV::InventoryParserHelper::storeOffTime
- struct AIRINV::InventoryParserHelper::storeLegCabinCode
- struct AIRINV::InventoryParserHelper::storeSaleableCapacity
- struct AIRINV::InventoryParserHelper::storeAU
- struct AIRINV::InventoryParserHelper::storeUPR
- struct AIRINV::InventoryParserHelper::storeBookingCounter
- struct AIRINV::InventoryParserHelper::storeNAV
- struct AIRINV::InventoryParserHelper::storeGAV
- struct AIRINV::InventoryParserHelper::storeACP
- struct AIRINV::InventoryParserHelper::storeETB
- struct AIRINV::InventoryParserHelper::storeYieldUpperRange
- struct AIRINV::InventoryParserHelper::storeBucketAvaibality
- struct AIRINV::InventoryParserHelper::storeSeatIndex
- struct AIRINV::InventoryParserHelper::storeSegmentBoardingPoint
- struct AIRINV::InventoryParserHelper::storeSegmentOffPoint
- struct AIRINV::InventoryParserHelper::storeSegmentCabinCode
- struct AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter
- struct AIRINV::InventoryParserHelper::storeClassCode
- struct AIRINV::InventoryParserHelper::storeSubclassCode
- struct AIRINV::InventoryParserHelper::storeParentClassCode
- struct AIRINV::InventoryParserHelper::storeParentSubclassCode
- struct AIRINV::InventoryParserHelper::storeCumulatedProtection
- struct AIRINV::InventoryParserHelper::storeProtection
- struct AIRINV::InventoryParserHelper::storeNego
- struct AIRINV::InventoryParserHelper::storeNoShow
- struct AIRINV::InventoryParserHelper::storeOverbooking

- struct AIRINV::InventoryParserHelper::storeNbOfBkgs
- struct AIRINV::InventoryParserHelper::storeNbOfGroupBkgs
- struct AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs
- struct AIRINV::InventoryParserHelper::storeNbOfStaffBkgs
- struct AIRINV::InventoryParserHelper::storeNbOfWLBkgs
- struct AIRINV::InventoryParserHelper::storeClassETB
- struct AIRINV::InventoryParserHelper::storeClassAvailability
- struct AIRINV::InventoryParserHelper::storeSegmentAvailability
- struct AIRINV::InventoryParserHelper::storeRevenueAvailability
- struct AIRINV::InventoryParserHelper::storeFamilyCode
- struct AIRINV::InventoryParserHelper::storeFClasses
- struct AIRINV::InventoryParserHelper::doEndFlightDate
- struct AIRINV::InventoryParserHelper::InventoryParser
- struct AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >
- class AIRINV::InventoryFileParser

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV
- namespace AIRINV::InventoryParserHelper

23.128 InventoryParserHelper.hpp

```
00001 #ifndef __AIRINV_CMD_INVENTORYPARSERHELPER_HPP
00002 #define __AIRINV_CMD_INVENTORYPARSERHELPER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/command/CmdAbstract.hpp>
00011 // Airinv
00012 #include <airinv/AIRINV_Types.hpp>
00013 #include <airinv/basic/BasParserTypes.hpp>
00014 #include <airinv/bom/FlightDateStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018   class BomRoot;
00019 }
00020
00021 namespace AIRINV {
00022
00023   namespace InventoryParserHelper {
00024
00025     // //////////////////////////////////////////////////////////////////
00026     //  Semantic actions
00027     // //////////////////////////////////////////////////////////////////
00029     struct ParserSemanticAction {
00031       ParserSemanticAction (FlightDateStruct
      &);
00033       FlightDateStruct& _flightDate;
00034     };
00035
00037     struct storeSnapshotDate : public ParserSemanticAction
      {
00039       storeSnapshotDate (FlightDateStruct&);
00041       void operator() (iterator_t iStr, iterator_t
      iStrEnd) const;
00042     };
00043
00045     struct storeAirlineCode : public ParserSemanticAction
      {
00047       storeAirlineCode (FlightDateStruct&);
00049       void operator() (iterator_t iStr, iterator_t
      iStrEnd) const;
00050     };
```

```
00051
00053     struct storeFlightNumber : public ParserSemanticAction
      {
00055       storeFlightNumber (FlightDateStruct&);
00057       void operator() (unsigned int iNumber) const;
00058     };
00059
00061     struct storeFlightDate : public ParserSemanticAction
      {
00063       storeFlightDate (FlightDateStruct&);
00065       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00066     };
00067
00069     struct storeFlightTypeCode : public ParserSemanticAction
      {
00071       storeFlightTypeCode (FlightDateStruct&
      );
00073       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00074     };
00075
00077     struct storeFlightVisibilityCode : public
      ParserSemanticAction {
00079       storeFlightVisibilityCode (FlightDateStruct
      &);
00081       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00082     };
00083
00085     struct storeLegBoardingPoint : public
      ParserSemanticAction {
00087       storeLegBoardingPoint (FlightDateStruct
      &);
00089       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00090     };
00091
00093     struct storeLegOffPoint : public ParserSemanticAction
      {
00095       storeLegOffPoint (FlightDateStruct&);
00097       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00098     };
00099
00101     struct storeBoardingDate : public ParserSemanticAction
      {
00103       storeBoardingDate (FlightDateStruct&);
00105       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00106     };
00107
00109     struct storeBoardingTime : public ParserSemanticAction
      {
00111       storeBoardingTime (FlightDateStruct&);
00113       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00114     };
00115
00117     struct storeOffDate : public ParserSemanticAction
      {
00119       storeOffDate (FlightDateStruct&);
00121       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00122     };
00123
00125     struct storeOffTime : public ParserSemanticAction
      {
00127       storeOffTime (FlightDateStruct&);
00129       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00130     };
00131
00133     struct storeLegCabinCode : public ParserSemanticAction
      {
00135       storeLegCabinCode (FlightDateStruct&);
00137       void operator() (char iChar) const;
00138     };
00139
00141     struct storeSaleableCapacity : public
      ParserSemanticAction {
00143       storeSaleableCapacity (FlightDateStruct
      &);
00145       void operator() (double iReal) const;
00146     };
00147
00149     struct storeAU : public ParserSemanticAction {
```

```
00151       storeAU (FlightDateStruct&);
00153       void operator() (double iReal) const;
00154     };
00155
00157     struct storeUPR : public ParserSemanticAction {
00159       storeUPR (FlightDateStruct&);
00161       void operator() (double iReal) const;
00162     };
00163
00165     struct storeBookingCounter : public ParserSemanticAction
       {
00167       storeBookingCounter (FlightDateStruct&
      );
00169       void operator() (double iReal) const;
00170     };
00171
00173     struct storeNAV : public ParserSemanticAction {
00175       storeNAV (FlightDateStruct&);
00177       void operator() (double iReal) const;
00178     };
00179
00181     struct storeGAV : public ParserSemanticAction {
00183       storeGAV (FlightDateStruct&);
00185       void operator() (double iReal) const;
00186     };
00187
00189     struct storeACP : public ParserSemanticAction {
00191       storeACP (FlightDateStruct&);
00193       void operator() (double iReal) const;
00194     };
00195
00197     struct storeETB : public ParserSemanticAction {
00199       storeETB (FlightDateStruct&);
00201       void operator() (double iReal) const;
00202     };
00203
00205     struct storeYieldUpperRange : public
      ParserSemanticAction {
00207       storeYieldUpperRange (FlightDateStruct
      &);
00209       void operator() (double iReal) const;
00210     };
00211
00213     struct storeBucketAvaibality : public
      ParserSemanticAction {
00215       storeBucketAvaibality (FlightDateStruct
      &);
00217       void operator() (double iReal) const;
00218     };
00219
00221     struct storeSeatIndex : public ParserSemanticAction
       {
00223       storeSeatIndex (FlightDateStruct&);
00225       void operator() (double iReal) const;
00226     };
00227
00229     struct storeSegmentBoardingPoint : public
      ParserSemanticAction {
00231       storeSegmentBoardingPoint (FlightDateStruct
      &);
00233       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00234     };
00235
00237     struct storeSegmentOffPoint : public
      ParserSemanticAction {
00239       storeSegmentOffPoint (FlightDateStruct
      &);
00241       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00242     };
00243
00245     struct storeSegmentCabinCode : public
      ParserSemanticAction {
00247       storeSegmentCabinCode (FlightDateStruct
      &);
00249       void operator() (char iChar) const;
00250     };
00251
00253     struct storeSegmentCabinBookingCounter :
      public ParserSemanticAction {
00255       storeSegmentCabinBookingCounter (
      FlightDateStruct&);
00257       void operator() (double iReal) const;
00258     };
00259
00261     struct storeClassCode : public ParserSemanticAction
```

```
      {
00263       storeClassCode (FlightDateStruct&);
00265       void operator() (char iChar) const;
00266     };
00267
00269     struct storeSubclassCode : public ParserSemanticAction
      {
00271       storeSubclassCode (FlightDateStruct&);
00273       void operator() (unsigned int iNumber) const;
00274     };
00275
00277     struct storeParentClassCode : public
      ParserSemanticAction {
00279       storeParentClassCode (FlightDateStruct
      &);
00281       void operator() (char iChar) const;
00282     };
00283
00285     struct storeParentSubclassCode : public
      ParserSemanticAction {
00287       storeParentSubclassCode (FlightDateStruct
      &);
00289       void operator() (unsigned int iNumber) const;
00290     };
00291
00293     struct storeCumulatedProtection : public
      ParserSemanticAction {
00295       storeCumulatedProtection (FlightDateStruct
      &);
00297       void operator() (double iReal) const;
00298     };
00299
00301     struct storeProtection : public ParserSemanticAction
      {
00303       storeProtection (FlightDateStruct&);
00305       void operator() (double iReal) const;
00306     };
00307
00309     struct storeNego : public ParserSemanticAction
      {
00311       storeNego (FlightDateStruct&);
00313       void operator() (double iReal) const;
00314     };
00315
00317     struct storeNoShow : public ParserSemanticAction
      {
00319       storeNoShow (FlightDateStruct&);
00321       void operator() (double iReal) const;
00322     };
00323
00325     struct storeOverbooking : public ParserSemanticAction
      {
00327       storeOverbooking (FlightDateStruct&);
00329       void operator() (double iReal) const;
00330     };
00331
00333     struct storeNbOfBkgs : public ParserSemanticAction
      {
00335       storeNbOfBkgs (FlightDateStruct&);
00337       void operator() (double iReal) const;
00338     };
00339
00341     struct storeNbOfGroupBkgs : public ParserSemanticAction
      {
00343       storeNbOfGroupBkgs (FlightDateStruct&);
00345       void operator() (double iReal) const;
00346     };
00347
00349     struct storeNbOfPendingGroupBkgs : public
      ParserSemanticAction {
00351       storeNbOfPendingGroupBkgs (FlightDateStruct
      &);
00353       void operator() (double iReal) const;
00354     };
00355
00357     struct storeNbOfStaffBkgs : public ParserSemanticAction
      {
00359       storeNbOfStaffBkgs (FlightDateStruct&);
00361       void operator() (double iReal) const;
00362     };
00363
00366     struct storeNbOfWLBkgs : public ParserSemanticAction
      {
00368       storeNbOfWLBkgs (FlightDateStruct&);
00370       void operator() (double iReal) const;
00371     };
00372
```

```
00374     struct storeClassETB : public ParserSemanticAction
      {
00376       storeClassETB (FlightDateStruct&);
00378       void operator() (double iReal) const;
00379     };
00380
00383     struct storeClassAvailability : public
      ParserSemanticAction {
00385       storeClassAvailability (FlightDateStruct
      &);
00387       void operator() (double iReal) const;
00388     };
00389
00392     struct storeSegmentAvailability : public
      ParserSemanticAction {
00394       storeSegmentAvailability (FlightDateStruct
      &);
00396       void operator() (double iReal) const;
00397     };
00398
00401     struct storeRevenueAvailability : public
      ParserSemanticAction {
00403       storeRevenueAvailability (FlightDateStruct
      &);
00405       void operator() (double iReal) const;
00406     };
00407
00409     struct storeFamilyCode : public ParserSemanticAction
      {
00411       storeFamilyCode (FlightDateStruct&);
00413       void operator() (int iCode) const;
00414     };
00415
00417     struct storeFClasses : public ParserSemanticAction
      {
00419       storeFClasses (FlightDateStruct&);
00421       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00422     };
00423
00425     struct doEndFlightDate : public ParserSemanticAction
      {
00427       doEndFlightDate (stdair::BomRoot&, FlightDateStruct
      &,
00428                        unsigned int&);
00430       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00432       stdair::BomRoot& _bomRoot;
00433       unsigned int& _nbOfFlights;
00434     };
00435
00436
00438     //
00439     //  (Boost Spirit) Grammar Definition
00440     //
00442
00454     struct InventoryParser :
00455       public boost::spirit::classic::grammar<InventoryParser> {
00456
00457       InventoryParser (stdair::BomRoot&, FlightDateStruct
      &, unsigned int&);
00458
00459       template <typename ScannerT>
00460       struct definition {
00461         definition (InventoryParser const& self);
00462
00463         // Instantiation of rules
00464         boost::spirit::classic::rule<ScannerT> flight_date_list
      ,
00465           not_to_be_parsed,
00466           flight_date, flight_date_end, flight_key
      , airline_code, flight_number,
00467           flight_type_code, flight_visibility_code
      ,
00468           date, leg_list, leg, leg_key, leg_details
      ,
00469           leg_cabin_list, leg_cabin_details,
00470           bucket_list, bucket_details,
00471           time, segment_list, segment, segment_key
      , full_segment_cabin_details,
00472           segment_cabin_list, segment_cabin_key
      , segment_cabin_details,
00473           class_list, class_key, parent_subclass_code
      ,
00474           class_protection, class_nego, class_details
      ,
00475           family_cabin_list, family_cabin_details
```

```
    ;
00476
00478         boost::spirit::classic::rule<ScannerT> const& start() const;
00479       };
00480
00481       // Parser Context
00482       stdair::BomRoot& _bomRoot;
00483       FlightDateStruct& _flightDate;
00484       unsigned int& _nbOfFlights;
00485     };
00486
00487   }
00488
00489
00491   //
00492   //  Entry class for the file parser
00493   //
00495
00500   class InventoryFileParser : public stdair::CmdAbstract {
00501   public:
00503     InventoryFileParser (stdair::BomRoot&,
00504                          const stdair::Filename_T& iInventoryInputFilename);
00505
00507     bool buildInventory ();
00508
00509   private:
00511     void init();
00512
00513   private:
00514     // Attributes
00516     stdair::Filename_T _filename;
00517
00519     iterator_t _startIterator;
00520
00522     iterator_t _endIterator;
00523
00525     stdair::BomRoot& _bomRoot;
00526
00528     FlightDateStruct _flightDate;
00529
00531     unsigned int _nbOfFlights;
00532   };
00533
00534 }
00535 #endif // __AIRINV_CMD_INVENTORYPARSERHELPER_HPP
```

23.129 airinv/command/ScheduleParser.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/ScheduleParserHelper.hpp>
#include <airinv/command/ScheduleParser.hpp>
#include <airinv/command/InventoryManager.hpp>
```

Namespaces

- namespace AIRINV

23.130 ScheduleParser.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasFileMgr.hpp>
00009 #include <stdair/bom/BomRoot.hpp>
00010 #include <stdair/service/Logger.hpp>
```

```
00011 // Airinv
00012 #include <airinv/command/ScheduleParserHelper.hpp
      >
00013 #include <airinv/command/ScheduleParser.hpp>
00014 #include <airinv/command/InventoryManager.hpp
      >
00015
00016 namespace AIRINV {
00017
00018   // ////////////////////////////////////////////////////////////////////
00019   void ScheduleParser::
00020   generateInventories (const stdair::Filename_T&
      iScheduleFilename,
00021                        stdair::BomRoot& ioBomRoot) {
00022
00023     // Check that the file path given as input corresponds to an actual file
00024     bool doesExistAndIsReadable =
00025       stdair::BasFileMgr::doesExistAndIsReadable (iScheduleFilename);
00026     if (doesExistAndIsReadable == false) {
00027       std::ostringstream oMessage;
00028       oMessage << "The schedule input file, '" << iScheduleFilename
00029                << "', can not be retrieved on the file-system";
00030       STDAIR_LOG_ERROR (oMessage.str());
00031       throw ScheduleInputFileNotFoundException
       (oMessage.str());
00032     }
00033
00034     // Initialise the Flight-Period file parser.
00035     FlightPeriodFileParser lFlightPeriodParser (ioBomRoot
      , iScheduleFilename);
00036
00037     // Parse the CSV-formatted schedule input file, and generate the
00038     // corresponding Inventories for the airlines.
00039     lFlightPeriodParser.generateInventories ();
00040
00041     // Complete the BomRoot BOM building
00042     // Create the routings for all the inventories.
00043     InventoryManager::createDirectAccesses
       (ioBomRoot);
00044
00045     // Build the similar flight-date sets and the corresponding guillotine
00046     // blocks.
00047     InventoryManager::buildSimilarSegmentCabinSets
       (ioBomRoot);
00048
00049     // Bid price vector initialisation
00050     InventoryManager::setDefaultBidPriceVector
       (ioBomRoot);
00051
00052   }
00053
00054 }
```

23.131 airinv/command/ScheduleParser.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
#include <stdair/command/CmdAbstract.hpp>
```

Classes

- class AIRINV::ScheduleParser

  Class wrapping the parser entry point.

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.132 ScheduleParser.hpp

```
00001 #ifndef __AIRINV_CMD_SCHEDULEPARSER_HPP
00002 #define __AIRINV_CMD_SCHEDULEPARSER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/command/CmdAbstract.hpp>
00010
00012 namespace stdair {
00013   class BomRoot;
00014 }
00015
00016 namespace AIRINV {
00017
00021   class ScheduleParser : public stdair::CmdAbstract {
00022   public:
00031     static void generateInventories (const
      stdair::Filename_T& iScheduleFilename,
00032                                      stdair::BomRoot&);
00033   };
00034 }
00035 #endif // __AIRINV_CMD_SCHEDULEPARSER_HPP
```

23.133 airinv/command/ScheduleParserHelper.cpp File Reference

```
#include <cassert>
#include <stdair/stdair_exceptions.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/InventoryGenerator.hpp>
#include <airinv/command/ScheduleParserHelper.hpp>
```

Namespaces

- namespace AIRINV
- namespace AIRINV::ScheduleParserHelper

Functions

- repeat_p_t AIRINV::ScheduleParserHelper::airline_code_p (chset_t("0-9A-Z").derived(), 2, 3)
- bounded1_4_p_t AIRINV::ScheduleParserHelper::flight_number_p (uint1_4_p.derived(), 0u, 9999u)
- bounded4_p_t AIRINV::ScheduleParserHelper::year_p (uint4_p.derived(), 2000u, 2099u)
- bounded2_p_t AIRINV::ScheduleParserHelper::month_p (uint2_p.derived(), 1u, 12u)
- bounded2_p_t AIRINV::ScheduleParserHelper::day_p (uint2_p.derived(), 1u, 31u)
- repeat_p_t AIRINV::ScheduleParserHelper::dow_p (chset_t("0-1").derived().derived(), 7, 7)
- repeat_p_t AIRINV::ScheduleParserHelper::airport_p (chset_t("0-9A-Z").derived(), 3, 3)
- bounded2_p_t AIRINV::ScheduleParserHelper::hours_p (uint2_p.derived(), 0u, 23u)
- bounded2_p_t AIRINV::ScheduleParserHelper::minutes_p (uint2_p.derived(), 0u, 59u)
- bounded2_p_t AIRINV::ScheduleParserHelper::seconds_p (uint2_p.derived(), 0u, 59u)
- chset_t AIRINV::ScheduleParserHelper::cabin_code_p ("A-Z")
- repeat_p_t AIRINV::ScheduleParserHelper::class_code_list_p (chset_t("A-Z").derived(), 1, 26)

Variables

- int1_p_t AIRINV::ScheduleParserHelper::int1_p
- uint2_p_t AIRINV::ScheduleParserHelper::uint2_p
- uint4_p_t AIRINV::ScheduleParserHelper::uint4_p
- uint1_4_p_t AIRINV::ScheduleParserHelper::uint1_4_p
- int1_p_t AIRINV::ScheduleParserHelper::family_code_p

23.134 ScheduleParserHelper.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/stdair_exceptions.hpp>
00008 #include <stdair/bom/BomRoot.hpp>
00009 #include <stdair/service/Logger.hpp>
00010 // AirInv
00011 #include <airinv/command/InventoryGenerator.hpp
      >
00012 // #define BOOST_SPIRIT_DEBUG
00013 #include <airinv/command/ScheduleParserHelper.hpp
      >
00014
00015 //
00016 namespace bsc = boost::spirit::classic;
00017
00018 namespace AIRINV {
00019
00020   namespace ScheduleParserHelper {
00021
00022     // ////////////////////////////////////////////////////////////////////
00023     //  Semantic actions
00024     // ////////////////////////////////////////////////////////////////////
00025
00026     ParserSemanticAction::
00027     ParserSemanticAction (FlightPeriodStruct
      & ioFlightPeriod)
00028       : _flightPeriod (ioFlightPeriod) {
00029     }
00030
00031     // ////////////////////////////////////////////////////////////////////
00032     storeAirlineCode::
00033     storeAirlineCode (FlightPeriodStruct&
       ioFlightPeriod)
00034       : ParserSemanticAction (ioFlightPeriod) {
00035     }
00036
00037     // ////////////////////////////////////////////////////////////////////
00038     void storeAirlineCode::operator() (iterator_t
       iStr,
00039                                        iterator_t iStrEnd) const {
00040       const stdair::AirlineCode_T lAirlineCode (iStr, iStrEnd);
00041       _flightPeriod._airlineCode = lAirlineCode;
00042
00043       // As that's the beginning of a new flight, the list of legs
00044       // must be reset
00045       _flightPeriod._legList.clear();
00046     }
00047
00048     // ////////////////////////////////////////////////////////////////////
00049     storeFlightNumber::
00050     storeFlightNumber (FlightPeriodStruct
      & ioFlightPeriod)
00051       : ParserSemanticAction (ioFlightPeriod) {
00052     }
00053
00054     // ////////////////////////////////////////////////////////////////////
00055     void storeFlightNumber::operator() (unsigned
      int iNumber) const {
00056       _flightPeriod._flightNumber = iNumber;
00057     }
00058
00059     // ////////////////////////////////////////////////////////////////////
00060     storeDateRangeStart::
00061     storeDateRangeStart (FlightPeriodStruct
      & ioFlightPeriod)
00062       : ParserSemanticAction (ioFlightPeriod) {
00063     }
00064
00065     // ////////////////////////////////////////////////////////////////////
00066     void storeDateRangeStart::operator() (
      iterator_t iStr,
00067                                           iterator_t iStrEnd) const {
00068       _flightPeriod._dateRangeStart = _flightPeriod
      .getDate();
00069
00070       // Reset the number of seconds
00071       _flightPeriod._itSeconds = 0;
00072     }
00073
00074     // ////////////////////////////////////////////////////////////////////
00075     storeDateRangeEnd::
```

```
00076     storeDateRangeEnd (FlightPeriodStruct
      & ioFlightPeriod)
00077       : ParserSemanticAction (ioFlightPeriod) {
00078     }
00079
00080     // ////////////////////////////////////////////////////////////////////
00081     void storeDateRangeEnd::operator() (
      iterator_t iStr,
00082                                         iterator_t iStrEnd) const {
00083       // As a Boost date period (DatePeriod_T) defines the last day of
00084       // the period to be end-date - one day, we have to add one day to that
00085       // end date before.
00086       const stdair::DateOffset_T oneDay (1);
00087       _flightPeriod._dateRangeEnd = _flightPeriod
      .getDate() + oneDay;
00088
00089       // Transform the date pair (i.e., the date range) into a date period
00090       _flightPeriod._dateRange =
00091         stdair::DatePeriod_T (_flightPeriod._dateRangeStart
      ,
00092                               _flightPeriod._dateRangeEnd
      );
00093
00094       // Reset the number of seconds
00095       _flightPeriod._itSeconds = 0;
00096     }
00097
00098     // ////////////////////////////////////////////////////////////////////
00099     storeDow::storeDow (FlightPeriodStruct&
       ioFlightPeriod)
00100       : ParserSemanticAction (ioFlightPeriod) {
00101     }
00102
00103     // ////////////////////////////////////////////////////////////////////
00104     void storeDow::operator() (iterator_t iStr,
      iterator_t iStrEnd) const {
00105       stdair::DOW_String_T lDow (iStr, iStrEnd);
00106       _flightPeriod._dow = lDow;
00107     }
00108
00109     // ////////////////////////////////////////////////////////////////////
00110     storeLegBoardingPoint::
00111     storeLegBoardingPoint (FlightPeriodStruct
      & ioFlightPeriod)
00112       : ParserSemanticAction (ioFlightPeriod) {
00113     }
00114
00115     // ////////////////////////////////////////////////////////////////////
00116     void storeLegBoardingPoint::operator() (
      iterator_t iStr,
00117                                             iterator_t iStrEnd) const
       {
00118       stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00119
00120       // If a leg has already been parsed, add it to the FlightPeriod
00121       if (_flightPeriod._legAlreadyDefined ==
      true) {
00122         _flightPeriod._legList.push_back (_flightPeriod
      ._itLeg);
00123       } else {
00124         _flightPeriod._legAlreadyDefined = true;
00125       }
00126
00127       // Set the (new) boarding point
00128       _flightPeriod._itLeg._boardingPoint =
      lBoardingPoint;
00129
00130       // As that's the beginning of a new leg, the list of cabins
00131       // must be reset
00132       _flightPeriod._itLeg._cabinList.clear();
00133
00134       // Add the airport code if it is not already stored in the airport lists
00135       _flightPeriod.addAirport (lBoardingPoint);
00136     }
00137
00138     // ////////////////////////////////////////////////////////////////////
00139     storeLegOffPoint::
00140     storeLegOffPoint (FlightPeriodStruct&
       ioFlightPeriod)
00141       : ParserSemanticAction (ioFlightPeriod) {
00142     }
00143
00144     // ////////////////////////////////////////////////////////////////////
00145     void storeLegOffPoint::operator() (iterator_t
       iStr,
00146                                        iterator_t iStrEnd) const {
00147       stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
```

```
00148       _flightPeriod._itLeg._offPoint = lOffPoint;
00149
00150       // Add the airport code if it is not already stored in the airport lists
00151       _flightPeriod.addAirport (lOffPoint);
00152     }
00153
00154     // ////////////////////////////////////////////////////////////////////
00155     storeBoardingTime::
00156     storeBoardingTime (FlightPeriodStruct
      & ioFlightPeriod)
00157       : ParserSemanticAction (ioFlightPeriod) {
00158     }
00159
00160     // ////////////////////////////////////////////////////////////////////
00161     void storeBoardingTime::operator() (
      iterator_t iStr,
00162                                         iterator_t iStrEnd) const {
00163       _flightPeriod._itLeg._boardingTime =
      _flightPeriod.getTime();
00164
00165       // Reset the number of seconds
00166       _flightPeriod._itSeconds = 0;
00167
00168       // Reset the date off-set
00169       _flightPeriod._dateOffset = 0;
00170     }
00171
00172     // ////////////////////////////////////////////////////////////////////
00173     storeOffTime::
00174     storeOffTime (FlightPeriodStruct&
      ioFlightPeriod)
00175       : ParserSemanticAction (ioFlightPeriod) {
00176     }
00177
00178     // ////////////////////////////////////////////////////////////////////
00179     void storeOffTime::operator() (iterator_t
       iStr,
00180                                    iterator_t iStrEnd) const {
00181       _flightPeriod._itLeg._offTime = _flightPeriod
      .getTime();
00182
00183       // Reset the number of seconds
00184       _flightPeriod._itSeconds = 0;
00185
00186       // As the boarding date off set is optional, it can be set only
00187       // afterwards, based on the staging date off-set value
00188       // (_flightPeriod._dateOffset).
00189       const stdair::DateOffset_T lDateOffset (_flightPeriod.
      _dateOffset);
00190       _flightPeriod._itLeg._boardingDateOffset
       = lDateOffset;
00191     }
00192
00193     // ////////////////////////////////////////////////////////////////////
00194     storeElapsedTime::
00195     storeElapsedTime (FlightPeriodStruct&
       ioFlightPeriod)
00196       : ParserSemanticAction (ioFlightPeriod) {
00197     }
00198
00199     // ////////////////////////////////////////////////////////////////////
00200     void storeElapsedTime::operator() (iterator_t
       iStr,
00201                                        iterator_t iStrEnd) const {
00202       _flightPeriod._itLeg._elapsed = _flightPeriod
      .getTime();
00203
00204       // Reset the number of seconds
00205       _flightPeriod._itSeconds = 0;
00206
00207       // As the boarding date off set is optional, it can be set only
00208       // afterwards, based on the staging date off-set value
00209       // (_flightPeriod._dateOffset).
00210       const stdair::DateOffset_T lDateOffset (_flightPeriod.
      _dateOffset);
00211       _flightPeriod._itLeg._offDateOffset =
      lDateOffset;
00212     }
00213
00214     // ////////////////////////////////////////////////////////////////////
00215     storeLegCabinCode::
00216     storeLegCabinCode (FlightPeriodStruct
      & ioFlightPeriod)
00217       : ParserSemanticAction (ioFlightPeriod) {
00218     }
00219
00220     // ////////////////////////////////////////////////////////////////////
```

```
00221     void storeLegCabinCode::operator() (char
      iChar) const {
00222       _flightPeriod._itLegCabin._cabinCode =
      iChar;
00223       //std::cout << "Cabin code: " << iChar << std::endl;
00224     }
00225
00226     // ////////////////////////////////////////////////////////////////
00227     storeCapacity::
00228     storeCapacity (FlightPeriodStruct&
      ioFlightPeriod)
00229       : ParserSemanticAction (ioFlightPeriod) {
00230     }
00231
00232     // ////////////////////////////////////////////////////////////////
00233     void storeCapacity::operator() (double iReal)
       const {
00234       _flightPeriod._itLegCabin._saleableCapacity
       = iReal;
00235       //std::cout << "Capacity: " << iReal << std::endl;
00236
00237       // The capacity is the last (according to the arrival order
00238       // within the schedule input file) detail of the leg cabin. Hence,
00239       // when a capacity is parsed, it means that the full cabin
00240       // details have already been parsed as well: the cabin can
00241       // thus be added to the leg.
00242       _flightPeriod._itLeg._cabinList.push_back (
      _flightPeriod._itLegCabin);
00243     }
00244
00245     // ////////////////////////////////////////////////////////////////
00246     storeSegmentSpecificity::
00247     storeSegmentSpecificity (FlightPeriodStruct
      & ioFlightPeriod)
00248       : ParserSemanticAction (ioFlightPeriod) {
00249     }
00250
00251     // ////////////////////////////////////////////////////////////////
00252     void storeSegmentSpecificity::operator()
      (char iChar) const {
00253       if (iChar == '0') {
00254         _flightPeriod._areSegmentDefinitionsSpecific
       = false;
00255       } else {
00256         _flightPeriod._areSegmentDefinitionsSpecific
       = true;
00257       }
00258
00259       // Do a few sanity checks: the two lists should get exactly the same
00260       // content (in terms of airport codes). The only difference is that one
00261       // is a STL set, and the other a STL vector.
00262       assert (_flightPeriod._airportList.size()
00263               == _flightPeriod._airportOrderedList
      .size());
00264       assert (_flightPeriod._airportList.size() >= 2);
00265
00266       // Since all the legs have now been parsed, we get all the airports
00267       // and the segments may be built.
00268       _flightPeriod.buildSegments();
00269     }
00270
00271     // ////////////////////////////////////////////////////////////////
00272     storeSegmentBoardingPoint::
00273     storeSegmentBoardingPoint (FlightPeriodStruct
      & ioFlightPeriod)
00274       : ParserSemanticAction (ioFlightPeriod) {
00275     }
00276
00277     // ////////////////////////////////////////////////////////////////
00278     void storeSegmentBoardingPoint::operator()
      (iterator_t iStr,
00279                                             iterator_t iStrEnd)
       const {
00280       stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00281       _flightPeriod._itSegment._boardingPoint
       = lBoardingPoint;
00282     }
00283
00284     // ////////////////////////////////////////////////////////////////
00285     storeSegmentOffPoint::
00286     storeSegmentOffPoint (FlightPeriodStruct
      & ioFlightPeriod)
00287       : ParserSemanticAction (ioFlightPeriod) {
00288     }
00289
00290     // ////////////////////////////////////////////////////////////////
00291     void storeSegmentOffPoint::operator() (
```

```
      iterator_t iStr,
00292                                         iterator_t iStrEnd) const
      {
00293       stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
00294       _flightPeriod._itSegment._offPoint =
      lOffPoint;
00295     }
00296
00297     // ////////////////////////////////////////////////////////////////////
00298     storeSegmentCabinCode::
00299     storeSegmentCabinCode (FlightPeriodStruct
      & ioFlightPeriod)
00300       : ParserSemanticAction (ioFlightPeriod) {
00301     }
00302
00303     // ////////////////////////////////////////////////////////////////////
00304     void storeSegmentCabinCode::operator() (
      char iChar) const {
00305       _flightPeriod._itSegmentCabin._cabinCode
       = iChar;
00306     }
00307
00308     // ////////////////////////////////////////////////////////////////////
00309     storeClasses::
00310     storeClasses (FlightPeriodStruct&
      ioFlightPeriod)
00311       : ParserSemanticAction (ioFlightPeriod) {
00312     }
00313
00314     // ////////////////////////////////////////////////////////////////////
00315     void storeClasses::operator() (iterator_t
       iStr,
00316                                    iterator_t iStrEnd) const {
00317       std::string lClasses (iStr, iStrEnd);
00318       _flightPeriod._itSegmentCabin._itFareFamily
      ._classes = lClasses;
00319
00320       // The list of classes is the last (according to the arrival order
00321       // within the schedule input file) detail of the segment cabin. Hence,
00322       // when a list of classes is parsed, it means that the full segment
00323       // cabin details have already been parsed as well: the segment cabin
00324       // can thus be added to the segment.
00325       if (_flightPeriod._areSegmentDefinitionsSpecific
       == true) {
00326         _flightPeriod.addSegmentCabin (
      _flightPeriod._itSegment,
00327                                        _flightPeriod.
      _itSegmentCabin);
00328       } else {
00329         _flightPeriod.addSegmentCabin (
      _flightPeriod._itSegmentCabin);
00330       }
00331     }
00332
00333     // ////////////////////////////////////////////////////////////////////
00334     storeFamilyCode::
00335     storeFamilyCode (FlightPeriodStruct&
      ioFlightPeriod)
00336       : ParserSemanticAction (ioFlightPeriod) {
00337     }
00338
00339     // ////////////////////////////////////////////////////////////////////
00340     void storeFamilyCode::operator() (int iCode)
       const {
00341       std::ostringstream ostr;
00342       ostr << iCode;
00343       _flightPeriod._itSegmentCabin._itFareFamily
      ._familyCode = ostr.str();
00344     }
00345
00346     // ////////////////////////////////////////////////////////////////////
00347     storeFClasses::
00348     storeFClasses (FlightPeriodStruct&
      ioFlightPeriod)
00349       : ParserSemanticAction (ioFlightPeriod) {
00350     }
00351
00352     // ////////////////////////////////////////////////////////////////////
00353     void storeFClasses::operator() (iterator_t
       iStr,
00354                                     iterator_t iStrEnd) const {
00355       std::string lClasses (iStr, iStrEnd);
00356       FareFamilyStruct lFareFamily (_flightPeriod.
      _itSegmentCabin._itFareFamily._familyCode
      ,
00357                                     lClasses);
00358
```

```
00359       // The list of classes is the last (according to the arrival order
00360       // within the schedule input file) detail of the segment cabin. Hence,
00361       // when a list of classes is parsed, it means that the full segment
00362       // cabin details have already been parsed as well: the segment cabin
00363       // can thus be added to the segment.
00364       if (_flightPeriod._areSegmentDefinitionsSpecific
     == true) {
00365         _flightPeriod.addFareFamily (_flightPeriod
    ._itSegment,
00366                                      _flightPeriod._itSegmentCabin
    ,
00367                                      lFareFamily);
00368       } else {
00369         _flightPeriod.addFareFamily (_flightPeriod
    ._itSegmentCabin,
00370                                      lFareFamily);
00371       }
00372     }
00373
00374     // ////////////////////////////////////////////////////////////////////
00375     doEndFlight::
00376     doEndFlight (stdair::BomRoot& ioBomRoot,
00377                  FlightPeriodStruct& ioFlightPeriod)
00378       : ParserSemanticAction (ioFlightPeriod),
00379         _bomRoot (ioBomRoot) {
00380     }
00381
00382     // ////////////////////////////////////////////////////////////////////
00383     // void doEndFlight::operator() (char iChar) const {
00384     void doEndFlight::operator() (iterator_t
    iStr,
00385                                   iterator_t iStrEnd) const {
00386
00387       assert (_flightPeriod._legAlreadyDefined
    == true);
00388       _flightPeriod._legList.push_back (_flightPeriod
    ._itLeg);
00389
00390       // The lists of legs and cabins must be reset
00391       _flightPeriod._legAlreadyDefined = false;
00392       _flightPeriod._itLeg._cabinList.clear();
00393
00394       // DEBUG: Display the result
00395       STDAIR_LOG_DEBUG ("FlightPeriod: " << _flightPeriod.describe
    ());
00396
00397       // Create the FlightDate BOM objects, and potentially the intermediary
00398       // objects (e.g., Inventory).
00399       InventoryGenerator::createFlightDate (_bomRoot, _flightPeriod
    );
00400     }
00401
00402
00403     // ////////////////////////////////////////////////////////////////////
00404     //
00405     //  Utility Parsers
00406     //
00407     // ////////////////////////////////////////////////////////////////////
00409     int1_p_t int1_p;
00410
00412     uint2_p_t uint2_p;
00413
00415     uint4_p_t uint4_p;
00416
00418     uint1_4_p_t uint1_4_p;
00419
00421     repeat_p_t airline_code_p (chset_t("0-9A-Z")
    .derived(), 2, 3);
00422
00424     bounded1_4_p_t flight_number_p (uint1_4_p
    .derived(), 0u, 9999u);
00425
00427     bounded4_p_t year_p (uint4_p.derived(), 2000u,
    2099u);
00428
00430     bounded2_p_t month_p (uint2_p.derived(), 1u, 12u)
    ;
00431
00433     bounded2_p_t day_p (uint2_p.derived(), 1u, 31u);
00434
00436     repeat_p_t dow_p (chset_t("0-1").derived().derived(),
     7, 7);
00437
00439     repeat_p_t airport_p (chset_t("0-9A-Z").derived()
    , 3, 3);
00440
00442     bounded2_p_t hours_p (uint2_p.derived(), 0u, 23u)
```

```
      ;
00443
00445     bounded2_p_t minutes_p (uint2_p.derived(), 0u,
      59u);
00446
00448     bounded2_p_t seconds_p (uint2_p.derived(), 0u,
      59u);
00449
00451     chset_t cabin_code_p ("A-Z");
00452
00454     int1_p_t family_code_p;
00455
00457     repeat_p_t class_code_list_p (chset_t("
      A-Z").derived(), 1, 26);
00458
00459
00460     // ////////////////////////////////////////////////////////////////
00461     //  (Boost Spirit) Grammar Definition
00462     // ////////////////////////////////////////////////////////////////
00463
00464     // ////////////////////////////////////////////////////////////////
00465     FlightPeriodParser::
00466     FlightPeriodParser (stdair::BomRoot& ioBomRoot,
00467                         FlightPeriodStruct& ioFlightPeriod)
00468       : _bomRoot (ioBomRoot),
00469         _flightPeriod (ioFlightPeriod) {
00470     }
00471
00472     // ////////////////////////////////////////////////////////////////
00473     template<typename ScannerT>
00474     FlightPeriodParser::definition<ScannerT>::
00475     definition (FlightPeriodParser const& self)
       {
00476
00477       flight_period_list = *( not_to_be_parsed | flight_period )
00478         ;
00479
00480       not_to_be_parsed =
00481         bsc::lexeme_d[ bsc::comment_p("//") | bsc::comment_p("/*", "*/")
00482                        | bsc::space_p ]
00483         ;
00484
00485       flight_period = flight_key
00486         >> +( ';' >> leg )
00487         >> ';' >> segment_section
00488         >> flight_period_end[doEndFlight (self._bomRoot, self.
      _flightPeriod)]
00489         ;
00490
00491       flight_period_end = bsc::ch_p(';')
00492         ;
00493
00494       flight_key = airline_code
00495         >> ';' >> flight_number
00496         >> ';' >> date[storeDateRangeStart(self.
      _flightPeriod)]
00497         >> ';' >> date[storeDateRangeEnd(self._flightPeriod)]
00498         >> ';' >> dow[storeDow(self._flightPeriod)]
00499         ;
00500
00501       airline_code =
00502         bsc::lexeme_d[(airline_code_p)[storeAirlineCode
      (self._flightPeriod)]]
00503         ;
00504
00505       flight_number =
00506         bsc::lexeme_d[(flight_number_p)[storeFlightNumber
      (self._flightPeriod)]]
00507         ;
00508
00509       date =
00510         bsc::lexeme_d[(year_p)[bsc::assign_a(self._flightPeriod._itYear)]
00511           >> '-' >> (month_p)[bsc::assign_a(self._flightPeriod._itMonth)
      ]
00512           >> '-' >> (day_p)[bsc::assign_a(self._flightPeriod._itDay)]]
00513         ;
00514
00515       dow = bsc::lexeme_d[ dow_p ]
00516         ;
00517
00518       leg = leg_key >> ';' >> leg_details >> +( ';' >> leg_cabin_details )
00519         ;
00520
00521       leg_key =
00522         (airport_p)[storeLegBoardingPoint(self.
      _flightPeriod)]
00523         >> ';'
```

```
00524         >> (airport_p)[storeLegOffPoint(self.
      _flightPeriod)]
00525         ;
00526
00527       leg_details =
00528         time[storeBoardingTime(self._flightPeriod)]
00529         >> !(date_offset)
00530         >> ';'
00531         >> time[storeOffTime(self._flightPeriod)]
00532         >> !(date_offset)
00533         >> ';'
00534         >> time[storeElapsedTime(self._flightPeriod)]
00535         ;
00536
00537       time =
00538         bsc::lexeme_d[(hours_p)[bsc::assign_a(self._flightPeriod.
      _itHours)]
00539           >> ':' >> (minutes_p)[bsc::assign_a(self._flightPeriod.
      _itMinutes)]
00540           >> !(':' >> (seconds_p)[bsc::assign_a(self._flightPeriod.
      _itSeconds)])]
00541         ;
00542
00543       date_offset =
00544         bsc::ch_p('/')
00545         >> (int1_p)[bsc::assign_a(self._flightPeriod._dateOffset)]
00546         ;
00547
00548       leg_cabin_details =
00549         (cabin_code_p)[storeLegCabinCode(self.
      _flightPeriod)]
00550         >> ';' >> (bsc::ureal_p)[storeCapacity(self._flightPeriod)
      ]
00551         ;
00552
00553       segment_key =
00554         (airport_p)[storeSegmentBoardingPoint
      (self._flightPeriod)]
00555         >> ';'
00556         >> (airport_p)[storeSegmentOffPoint(self.
      _flightPeriod)]
00557         ;
00558
00559       segment_section =
00560         generic_segment | specific_segment_list
00561         ;
00562
00563       generic_segment =
00564         bsc::ch_p('0')[storeSegmentSpecificity(self.
      _flightPeriod)]
00565         >> +(';' >> segment_cabin_details)
00566         ;
00567
00568       specific_segment_list =
00569         bsc::ch_p('1')[storeSegmentSpecificity(self.
      _flightPeriod)]
00570         >> +(';' >> segment_key >> full_segment_cabin_details)
00571         ;
00572
00573       full_segment_cabin_details =
00574         +(';' >> segment_cabin_details)
00575         ;
00576
00577       segment_cabin_details =
00578         (cabin_code_p)[storeSegmentCabinCode(
      self._flightPeriod)]
00579         >> ';' >> (class_code_list_p)[storeClasses
      (self._flightPeriod)]
00580         >> +(';' >> family_cabin_details)
00581         ;
00582
00583       family_cabin_details =
00584         (family_code_p)[storeFamilyCode(self.
      _flightPeriod)]
00585         >> ';'
00586         >> (class_code_list_p)[storeFClasses(self
      ._flightPeriod)]
00587         ;
00588
00589       // BOOST_SPIRIT_DEBUG_NODE (FlightPeriodParser);
00590       BOOST_SPIRIT_DEBUG_NODE (flight_period_list);
00591       BOOST_SPIRIT_DEBUG_NODE (not_to_be_parsed);
00592       BOOST_SPIRIT_DEBUG_NODE (flight_period);
00593       BOOST_SPIRIT_DEBUG_NODE (flight_period_end);
00594       BOOST_SPIRIT_DEBUG_NODE (flight_key);
00595       BOOST_SPIRIT_DEBUG_NODE (airline_code);
00596       BOOST_SPIRIT_DEBUG_NODE (flight_number);
```

```
00597       BOOST_SPIRIT_DEBUG_NODE (date);
00598       BOOST_SPIRIT_DEBUG_NODE (dow);
00599       BOOST_SPIRIT_DEBUG_NODE (leg);
00600       BOOST_SPIRIT_DEBUG_NODE (leg_key);
00601       BOOST_SPIRIT_DEBUG_NODE (leg_details);
00602       BOOST_SPIRIT_DEBUG_NODE (time);
00603       BOOST_SPIRIT_DEBUG_NODE (date_offset);
00604       BOOST_SPIRIT_DEBUG_NODE (leg_cabin_details);
00605       BOOST_SPIRIT_DEBUG_NODE (segment_section);
00606       BOOST_SPIRIT_DEBUG_NODE (segment_key);
00607       BOOST_SPIRIT_DEBUG_NODE (generic_segment);
00608       BOOST_SPIRIT_DEBUG_NODE (specific_segment_list);
00609       BOOST_SPIRIT_DEBUG_NODE (full_segment_cabin_details);
00610       BOOST_SPIRIT_DEBUG_NODE (segment_cabin_details);
00611       BOOST_SPIRIT_DEBUG_NODE (family_cabin_details);
00612     }
00613
00614     // ////////////////////////////////////////////////////////////////////
00615     template<typename ScannerT>
00616     bsc::rule<ScannerT> const&
00617     FlightPeriodParser::definition<ScannerT>::start
      () const {
00618       return flight_period_list;
00619     }
00620   }
00621
00622
00624   //
00625   //  Entry class for the file parser
00626   //
00628
00629   // ////////////////////////////////////////////////////////////////////////
00630   FlightPeriodFileParser::
00631   FlightPeriodFileParser (stdair::BomRoot& ioBomRoot,
00632                           const stdair::Filename_T& iFilename)
00633     : _filename (iFilename), _bomRoot (ioBomRoot) {
00634     init();
00635   }
00636
00637   // ////////////////////////////////////////////////////////////////////////
00638   void FlightPeriodFileParser::init() {
00639     // Open the file
00640     _startIterator = iterator_t (_filename);
00641
00642     // Check the filename exists and can be open
00643     if (!_startIterator) {
00644       std::ostringstream oMessage;
00645       oMessage << "The file " << _filename << " can not be open." << std::endl;
00646       STDAIR_LOG_ERROR (oMessage.str());
00647       throw ScheduleInputFileNotFoundException
      (oMessage.str());
00648     }
00649
00650     // Create an EOF iterator
00651     _endIterator = _startIterator.make_end();
00652   }
00653
00654   // ////////////////////////////////////////////////////////////////////////
00655   bool FlightPeriodFileParser::generateInventories
      () {
00656     bool oResult = false;
00657
00658     STDAIR_LOG_DEBUG ("Parsing schedule input file: " << _filename);
00659
00660     // Initialise the parser (grammar) with the helper/staging structure.
00661     ScheduleParserHelper::FlightPeriodParser
      lFPParser (_bomRoot, _flightPeriod);
00662
00663     // Launch the parsing of the file and, thanks to the doEndFlight
00664     // call-back structure, the building of the whole BomRoot BOM
00665     // (i.e., including Inventory, FlightDate, LegDate, SegmentDate, etc.)
00666     bsc::parse_info<iterator_t> info = bsc::parse (_startIterator, _endIterator
      ,
00667                                                    lFPParser,
00668                                                    bsc::space_p - bsc::eol_p);
00669
00670     // Retrieves whether or not the parsing was successful
00671     oResult = info.hit;
00672
00673     const bool isFull = info.full;
00674
00675     const std::string hasBeenFullyReadStr = (isFull  == true)?"":"not ";
00676     if (oResult == true && isFull == true) {
00677       STDAIR_LOG_DEBUG ("Parsing of schedule input file: " << _filename
00678                         << " succeeded: read " << info.length
00679                         << " characters. The input file has "
00680                         << hasBeenFullyReadStr
```

```
00681                       << "been fully read. Stop point: " << info.stop);
00682
00683     } else {
00684       STDAIR_LOG_ERROR ("Parsing of schedule input file: " << _filename
00685                         << " failed: read " << info.length
00686                         << " characters. The input file has "
00687                         << hasBeenFullyReadStr
00688                         << "been fully read. Stop point: " << info.stop);
00689       throw ScheduleFileParsingFailedException
       ("Parsing of schedule input file: "
00690                                                + _filename + " failed.");
00691     }
00692
00693     return oResult;
00694   }
00695
00696 }
```

23.135 airinv/command/ScheduleParserHelper.hpp File Reference

```
#include <string>
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/basic/BasParserTypes.hpp>
#include <airinv/bom/FlightPeriodStruct.hpp>
```

Classes

- struct AIRINV::ScheduleParserHelper::ParserSemanticAction
- struct AIRINV::ScheduleParserHelper::storeAirlineCode
- struct AIRINV::ScheduleParserHelper::storeFlightNumber
- struct AIRINV::ScheduleParserHelper::storeDateRangeStart
- struct AIRINV::ScheduleParserHelper::storeDateRangeEnd
- struct AIRINV::ScheduleParserHelper::storeDow
- struct AIRINV::ScheduleParserHelper::storeLegBoardingPoint
- struct AIRINV::ScheduleParserHelper::storeLegOffPoint
- struct AIRINV::ScheduleParserHelper::storeBoardingTime
- struct AIRINV::ScheduleParserHelper::storeOffTime
- struct AIRINV::ScheduleParserHelper::storeElapsedTime
- struct AIRINV::ScheduleParserHelper::storeLegCabinCode
- struct AIRINV::ScheduleParserHelper::storeCapacity
- struct AIRINV::ScheduleParserHelper::storeSegmentSpecificity
- struct AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint
- struct AIRINV::ScheduleParserHelper::storeSegmentOffPoint
- struct AIRINV::ScheduleParserHelper::storeSegmentCabinCode
- struct AIRINV::ScheduleParserHelper::storeClasses
- struct AIRINV::ScheduleParserHelper::storeFamilyCode
- struct AIRINV::ScheduleParserHelper::storeFClasses
- struct AIRINV::ScheduleParserHelper::doEndFlight
- struct AIRINV::ScheduleParserHelper::FlightPeriodParser
- struct AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >
- class AIRINV::FlightPeriodFileParser

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV
- namespace AIRINV::ScheduleParserHelper

23.136 ScheduleParserHelper.hpp

```
00001 #ifndef __AIRINV_CMD_SCHEDULEPARSERHELPER_HPP
00002 #define __AIRINV_CMD_SCHEDULEPARSERHELPER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/command/CmdAbstract.hpp>
00011 // Airinv
00012 #include <airinv/AIRINV_Types.hpp>
00013 #include <airinv/basic/BasParserTypes.hpp>
00014 #include <airinv/bom/FlightPeriodStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018   class BomRoot;
00019 }
00020
00021 namespace AIRINV {
00022
00023   namespace ScheduleParserHelper {
00024
00025     // //////////////////////////////////////////////////////////////////
00026     //  Semantic actions
00027     // //////////////////////////////////////////////////////////////////
00029     struct ParserSemanticAction {
00031       ParserSemanticAction (FlightPeriodStruct
      &);
00033       FlightPeriodStruct& _flightPeriod;
00034     };
00035
00037     struct storeAirlineCode : public ParserSemanticAction
       {
00039       storeAirlineCode (FlightPeriodStruct&);
00041       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00042     };
00043
00045     struct storeFlightNumber : public ParserSemanticAction
       {
00047       storeFlightNumber (FlightPeriodStruct&
      );
00049       void operator() (unsigned int iNumber) const;
00050     };
00051
00053     struct storeDateRangeStart : public ParserSemanticAction
       {
00055       storeDateRangeStart (FlightPeriodStruct
      &);
00057       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00058     };
00059
00061     struct storeDateRangeEnd : public ParserSemanticAction
       {
00063       storeDateRangeEnd (FlightPeriodStruct&
      );
00065       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00066     };
00067
00069     struct storeDow : public ParserSemanticAction {
00071       storeDow (FlightPeriodStruct&);
00073       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00074     };
00075
00077     struct storeLegBoardingPoint : public
      ParserSemanticAction {
00079       storeLegBoardingPoint (FlightPeriodStruct
      &);
00081       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00082     };
00083
00085     struct storeLegOffPoint : public ParserSemanticAction
       {
00087       storeLegOffPoint (FlightPeriodStruct&);
00089       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00090     };
00091
00093     struct storeBoardingTime : public ParserSemanticAction
```

```
      {
00095       storeBoardingTime (FlightPeriodStruct&
     );
00097       void operator() (iterator_t iStr, iterator_t
      iStrEnd) const;
00098     };
00099
00101     struct storeOffTime : public ParserSemanticAction
      {
00103       storeOffTime (FlightPeriodStruct&);
00105       void operator() (iterator_t iStr, iterator_t
      iStrEnd) const;
00106     };
00107
00109     struct storeElapsedTime : public ParserSemanticAction
      {
00111       storeElapsedTime (FlightPeriodStruct&);
00113       void operator() (iterator_t iStr, iterator_t
      iStrEnd) const;
00114     };
00115
00117     struct storeLegCabinCode : public ParserSemanticAction
      {
00119       storeLegCabinCode (FlightPeriodStruct&
     );
00121       void operator() (char iChar) const;
00122     };
00123
00125     struct storeCapacity : public ParserSemanticAction
      {
00127       storeCapacity (FlightPeriodStruct&);
00129       void operator() (double iReal) const;
00130     };
00131
00136     struct storeSegmentSpecificity : public
     ParserSemanticAction {
00138       storeSegmentSpecificity (FlightPeriodStruct
     &);
00140       void operator() (char iChar) const;
00141     };
00142
00144     struct storeSegmentBoardingPoint : public
     ParserSemanticAction {
00146       storeSegmentBoardingPoint (FlightPeriodStruct
     &);
00148       void operator() (iterator_t iStr, iterator_t
      iStrEnd) const;
00149     };
00150
00152     struct storeSegmentOffPoint : public
     ParserSemanticAction {
00154       storeSegmentOffPoint (FlightPeriodStruct
     &);
00156       void operator() (iterator_t iStr, iterator_t
      iStrEnd) const;
00157     };
00158
00160     struct storeSegmentCabinCode : public
     ParserSemanticAction {
00162       storeSegmentCabinCode (FlightPeriodStruct
     &);
00164       void operator() (char iChar) const;
00165     };
00166
00168     struct storeClasses : public ParserSemanticAction
      {
00170       storeClasses (FlightPeriodStruct&);
00172       void operator() (iterator_t iStr, iterator_t
      iStrEnd) const;
00173     };
00174
00176     struct storeFamilyCode : public ParserSemanticAction
      {
00178       storeFamilyCode (FlightPeriodStruct&);
00180       void operator() (int iCode) const;
00181     };
00182
00184     struct storeFClasses : public ParserSemanticAction
      {
00186       storeFClasses (FlightPeriodStruct&);
00188       void operator() (iterator_t iStr, iterator_t
      iStrEnd) const;
00189     };
00190
00192     struct doEndFlight : public ParserSemanticAction
      {
00194       doEndFlight (stdair::BomRoot&, FlightPeriodStruct
```

```
      &);
00196       void operator() (iterator_t iStr, iterator_t
       iStrEnd) const;
00198       stdair::BomRoot& _bomRoot;
00199     };
00200
00201
00203     //
00204     //  (Boost Spirit) Grammar Definition
00205     //
00207
00249     struct FlightPeriodParser :
00250       public boost::spirit::classic::grammar<FlightPeriodParser> {
00251
00252       FlightPeriodParser (stdair::BomRoot&,
      FlightPeriodStruct&);
00253
00254       template <typename ScannerT>
00255       struct definition {
00256         definition (FlightPeriodParser const& self)
      ;
00257
00258         // Instantiation of rules
00259         boost::spirit::classic::rule<ScannerT> flight_period_list
      ,
00260           not_to_be_parsed, flight_period,
      flight_period_end,
00261           flight_key, airline_code, flight_number
      ,
00262           date, dow, time, date_offset,
00263           leg, leg_key, leg_details, leg_cabin_details
      ,
00264           segment_section, segment_key,
      full_segment_cabin_details,
00265           segment_cabin_details, full_family_cabin_details
      ,
00266           family_cabin_details, generic_segment
      , specific_segment_list;
00267
00269         boost::spirit::classic::rule<ScannerT> const& start() const;
00270       };
00271
00272       // Parser Context
00273       stdair::BomRoot& _bomRoot;
00274       FlightPeriodStruct& _flightPeriod;
00275     };
00276
00277   }
00282
00283   //
00284   //  Entry class for the file parser
00285   //
00287
00292   class FlightPeriodFileParser : public
      stdair::CmdAbstract {
00293   public:
00295     FlightPeriodFileParser (stdair::BomRoot& ioBomRoot,
00296                             const stdair::Filename_T& iFilename);
00297
00299     bool generateInventories ();
00300
00301   private:
00303     void init();
00304
00305   private:
00306     // Attributes
00308     stdair::Filename_T _filename;
00309
00311     iterator_t _startIterator;
00312
00314     iterator_t _endIterator;
00315
00317     stdair::BomRoot& _bomRoot;
00318
00320     FlightPeriodStruct _flightPeriod;
00321   };
00322
00323 }
00324 #endif // __AIRINV_CMD_SCHEDULEPARSERHELPER_HPP
```

23.137 airinv/command/vault/DCPEventGenerator.cpp File Reference

```
#include <cassert>
```

```
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/factory/FacBomManager.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/bom/DCPEventStruct.hpp>
#include <airinv/command/DCPEventGenerator.hpp>
```

Namespaces

- namespace AIRINV

23.138 DCPEventGenerator.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/bom/BomManager.hpp>
00008 #include <stdair/bom/BomRoot.hpp>
00009 #include <stdair/factory/FacBomManager.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // AirInv
00012 #include <airinv/bom/DCPEventStruct.hpp>
00013 #include <airinv/command/DCPEventGenerator.hpp>
00014
00015 namespace AIRINV {
00016
00017   // ////////////////////////////////////////////////////////////////////
00018   void DCPEventGenerator::
00019   createDCPEvent (stdair::BomRoot& ioBomRoot,
00020                   DCPEventStruct& iDCPEventStruct) {
00021
00022     // Set the airport-pair primary key.
00023     /*
00024     const stdair::AirportCode_T& lBoardPoint = iDCPEventStruct._origin;
00025     const stdair::AirportCode_T& lOffPoint = iDCPEventStruct._destination;
00026     */
00027
00028     // Set the DCP date-period primary key.
00029     const stdair::Date_T& lDateRangeStart = iDCPEventStruct._dateRangeStart;
00030     const stdair::Date_T& lDateRangeEnd = iDCPEventStruct._dateRangeEnd;
00031     const stdair::DatePeriod_T lDatePeriod (lDateRangeStart, lDateRangeEnd);
00032
00033     // Set the DCP time-period primary key.
00034     /*
00035     const stdair::Time_T& lTimeRangeStart = iDCPEventStruct._timeRangeStart;
00036     const stdair::Time_T& lTimeRangeEnd = iDCPEventStruct._timeRangeEnd;
00037     */
00038
00039     // Generate the DCPEvent
00040     const stdair::DayDuration_T& lAdvancePurchase =
00041       iDCPEventStruct._advancePurchase;
00042     const stdair::SaturdayStay_T& lSaturdayStay = iDCPEventStruct._saturdayStay
     ;
00043     const stdair::ChangeFees_T& lChangeFees = iDCPEventStruct._changeFees;
00044     const stdair::NonRefundable_T& lNonRefundable =
00045       iDCPEventStruct._nonRefundable;
00046     const stdair::DayDuration_T& lMinimumStay = iDCPEventStruct._minimumStay;
00047     const stdair::Fare_T& lDCP = iDCPEventStruct._DCP;
00048
00049     // Generate Segment Features and link them to their DCPEvent
00050     stdair::ClassList_StringList_T::const_iterator lItCurrentClassCodeList =
00051       iDCPEventStruct._classCodeList.begin();
00052
00053     const unsigned int lAirlineListSize = iDCPEventStruct.getAirlineListSize();
00054     const unsigned int lClassCodeListSize =
00055       iDCPEventStruct.getClassCodeListSize();
00056     assert (lAirlineListSize == lClassCodeListSize);
00057
00058     iDCPEventStruct.beginClassCode();
00059     for (iDCPEventStruct.beginAirline();
00060          iDCPEventStruct.hasNotReachedEndAirline();
00061          iDCPEventStruct.iterateAirline()) {
00062       /*
00063       const stdair::AirlineCode_T& lAirlineCode =
```

```
00064         iDCPEventStruct.getCurrentAirlineCode();
00065       const std::string& lClassCodeList =
      iDCPEventStruct.getCurrentClassCode();
00066       iDCPEventStruct.iterateClassCode();
00067       */
00068     }
00069   }
00070
00071 }
00072
```

23.139 airinv/command/vault/DCPEventGenerator.hpp File Reference

```
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

Classes

- class AIRINV::DCPEventGenerator

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV
- namespace AIRINV::DCPParserHelper

23.140 DCPEventGenerator.hpp

```
00001 #ifndef __AIRINV_CMD_DCPEVENTGENERATOR_HPP
00002 #define __AIRINV_CMD_DCPEVENTGENERATOR_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // StdAir
00008 #include <stdair/command/CmdAbstract.hpp>
00009 // AirInv
00010 #include <airinv/AIRINV_Types.hpp>
00011
00012 // Forward declarations
00013 namespace stdair {
00014   class BomRoot;
00015   class DCPEvent;
00016 }
00017
00018 namespace AIRINV {
00019
00020   // Forward declarations
00021   struct DCPEventStruct;
00022   namespace DCPParserHelper {
00023     struct doEndDCP;
00024   }
00025
00027   class DCPEventGenerator : public stdair::CmdAbstract {
00028     // Only the following class may use methods of DCPGenerator.
00029     // Indeed, as those methods build the BOM, it is not good to expose
00030     // them public.
00031     friend class DCPFileParser;
00032     friend struct DCPParserHelper::doEndDCP;
00033     friend class DCPParser;
00034   private:
00037     static void createDCPEvent (stdair::BomRoot&, DCPEventStruct&
      );
00038   };
00039
00040 }
00041 #endif // __AIRINV_CMD_DCPEVENTGENERATOR_HPP
```

23.141 airinv/command/vault/DCPParser.cpp File Reference

```
#include <cassert>
#include <string>
#include <stdair/service/Logger.hpp>
#include <airinv/command/DCPParserHelper.hpp>
#include <airinv/command/DCPParser.hpp>
```

Namespaces

- namespace AIRINV

23.142 DCPParser.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <string>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // AirSched
00010 #include <airinv/command/DCPParserHelper.hpp>
00011 #include <airinv/command/DCPParser.hpp>
00012
00013 namespace AIRINV {
00014
00015   // ////////////////////////////////////////////////////////////////////
00016   void DCPParser::DCPRuleGeneration (const
      stdair::Filename_T& iFilename,
00017                                      stdair::BomRoot& ioBomRoot) {
00018
00019     // Initialise the DCP file parser
00020     DCPRuleFileParser lDCPRuleFileParser (ioBomRoot, iFilename
      );
00021
00022     // Parse the CSV-formatted DCP input file and generate the
00023     // corresponding DCP events
00024     lDCPRuleFileParser.generateDCPRules();
00025   }
00026
00027 }
```

23.143 airinv/command/vault/DCPParser.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
#include <stdair/command/CmdAbstract.hpp>
```

Classes

- class AIRINV::DCPParser

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.144 DCPParser.hpp

```
00001 #ifndef __AIRINV_CMD_DCPPARSER_HPP
00002 #define __AIRINV_CMD_DCPPARSER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/command/CmdAbstract.hpp>
00010
00011 // Forward declarations.
00012 namespace stdair {
00013   class BomRoot;
00014 }
00015
00016 namespace AIRINV {
00017
00019   class DCPParser : public stdair::CmdAbstract {
00020   public:
00028     static void DCPRuleGeneration (const stdair::Filename_T&,
00029                                    stdair::BomRoot&);
00030   };
00031 }
00032 #endif // __AIRINV_CMD_DCPPARSER_HPP
```

23.145 airinv/command/vault/DCPParserHelper.cpp File Reference

```
#include <cassert>
#include <string>
#include <vector>
#include <fstream>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/DCPParserHelper.hpp>
#include <airinv/command/DCPRuleGenerator.hpp>
```

Namespaces

- namespace AIRINV
- namespace AIRINV::DCPParserHelper

Variables

- stdair::int1_p_t AIRINV::DCPParserHelper::int1_p
- stdair::uint2_p_t AIRINV::DCPParserHelper::uint2_p
- stdair::uint4_p_t AIRINV::DCPParserHelper::uint4_p
- stdair::uint1_4_p_t AIRINV::DCPParserHelper::uint1_4_p
- stdair::hour_p_t AIRINV::DCPParserHelper::hour_p
- stdair::minute_p_t AIRINV::DCPParserHelper::minute_p
- stdair::second_p_t AIRINV::DCPParserHelper::second_p
- stdair::year_p_t AIRINV::DCPParserHelper::year_p
- stdair::month_p_t AIRINV::DCPParserHelper::month_p
- stdair::day_p_t AIRINV::DCPParserHelper::day_p

23.146 DCPParserHelper.cpp

```
00001  // //////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////
00004 // STL
```

```
00005 #include <cassert>
00006 #include <string>
00007 #include <vector>
00008 #include <fstream>
00009 // StdAir
00010 #include <stdair/basic/BasFileMgr.hpp>
00011 #include <stdair/bom/BomRoot.hpp>
00012 #include <stdair/service/Logger.hpp>
00013 // AirInv
00014 #include <airinv/command/DCPParserHelper.hpp>
00015 #include <airinv/command/DCPRuleGenerator.hpp>
00016
00017 namespace AIRINV {
00018
00019   namespace DCPParserHelper {
00020
00021     // ////////////////////////////////////////////////////////////////////
00022     //  Semantic actions
00023     // ////////////////////////////////////////////////////////////////////
00024
00025     ParserSemanticAction::ParserSemanticAction
      (DCPRuleStruct& ioDCPRule)
00026       : _DCPRule (ioDCPRule) {
00027     }
00028
00029     // ////////////////////////////////////////////////////////////////////
00030     storeDCPId::storeDCPId (DCPRuleStruct& ioDCPRule)
00031       : ParserSemanticAction (ioDCPRule) {
00032     }
00033
00034     // ////////////////////////////////////////////////////////////////////
00035     void storeDCPId::operator() (unsigned int iDCPId,
00036                                  boost::spirit::qi::unused_type,
00037                                  boost::spirit::qi::unused_type) const {
00038       _DCPRule._DCPId = iDCPId;
00039
00040       // DEBUG
00041       //STDAIR_LOG_DEBUG ( "DCP Id: " << _DCPRule._DCPId);
00042
00043       _DCPRule._nbOfAirlines = 0;
00044       _DCPRule._airlineCode = "";
00045       _DCPRule._classCode = "";
00046       _DCPRule._airlineCodeList.clear();
00047       _DCPRule._classCodeList.clear();
00048       _DCPRule._classCodeListOfList.clear();
00049       _DCPRule._itSeconds = 0;
00050     }
00051
00052     // ////////////////////////////////////////////////////////////////////
00053     storeOrigin ::
00054     storeOrigin (DCPRuleStruct& ioDCPRule)
00055       : ParserSemanticAction (ioDCPRule) {
00056     }
00057
00058     // ////////////////////////////////////////////////////////////////////
00059     void storeOrigin::operator() (std::vector<char>
    iChar,
00060                                   boost::spirit::qi::unused_type,
00061                                   boost::spirit::qi::unused_type) const {
00062       stdair::AirportCode_T lOrigin (iChar.begin(), iChar.end());
00063       // DEBUG
00064       //STDAIR_LOG_DEBUG ( "Origin: " << lOrigin);
00065       _DCPRule._origin = lOrigin;
00066     }
00067
00068     // ////////////////////////////////////////////////////////////////////
00069     storeDestination ::
00070     storeDestination (DCPRuleStruct& ioDCPRule)
00071       : ParserSemanticAction (ioDCPRule) {
00072     }
00073
00074     // ////////////////////////////////////////////////////////////////////
00075     void storeDestination::operator() (
    std::vector<char> iChar,
00076                                        boost::spirit::qi::unused_type,
00077                                        boost::spirit::qi::unused_type) const {
00078       stdair::AirportCode_T lDestination (iChar.begin(), iChar.end());
00079       // DEBUG
00080       //STDAIR_LOG_DEBUG ( "Destination: " << lDestination);
00081       _DCPRule._destination = lDestination;
00082     }
00083
00084     // ////////////////////////////////////////////////////////////////////
00085     storeDateRangeStart::
00086     storeDateRangeStart (DCPRuleStruct& ioDCPRule)
00087       : ParserSemanticAction (ioDCPRule) {
00088     }
```

```
00089
00090     // ////////////////////////////////////////////////////////////////////
00091     void storeDateRangeStart::operator() (
      boost::spirit::qi::unused_type,
00092                                           boost::spirit::qi::unused_type,
00093                                           boost::spirit::qi::unused_type) const
       {
00094       _DCPRule._dateRangeStart = _DCPRule.getDate();
00095       // DEBUG
00096       //STDAIR_LOG_DEBUG ("Date Range Start: "<< _DCPRule._dateRangeStart);
00097     }
00098
00099     // ////////////////////////////////////////////////////////////////////
00100     storeDateRangeEnd::
00101     storeDateRangeEnd(DCPRuleStruct& ioDCPRule)
00102       : ParserSemanticAction (ioDCPRule) {
00103     }
00104
00105     // ////////////////////////////////////////////////////////////////////
00106     void storeDateRangeEnd::operator() (
      boost::spirit::qi::unused_type,
00107                                         boost::spirit::qi::unused_type,
00108                                         boost::spirit::qi::unused_type) const {
00109        _DCPRule._dateRangeEnd = _DCPRule.getDate();
00110        // DEBUG
00111        //STDAIR_LOG_DEBUG ("Date Range End: " << _DCPRule._dateRangeEnd);
00112     }
00113
00114     // ////////////////////////////////////////////////////////////////////
00115     storeStartRangeTime::
00116     storeStartRangeTime (DCPRuleStruct& ioDCPRule)
00117       : ParserSemanticAction (ioDCPRule) {
00118     }
00119
00120     // ////////////////////////////////////////////////////////////////////
00121     void storeStartRangeTime::operator() (
      boost::spirit::qi::unused_type,
00122                                           boost::spirit::qi::unused_type,
00123                                           boost::spirit::qi::unused_type) const
       {
00124       _DCPRule._timeRangeStart = _DCPRule.getTime();
00125       // DEBUG
00126       //STDAIR_LOG_DEBUG ("Time Range Start: " << _DCPRule._timeRangeStart);
00127       // Reset the number of seconds
00128       _DCPRule._itSeconds = 0;
00129     }
00130
00131     // ////////////////////////////////////////////////////////////////////
00132     storeEndRangeTime::
00133     storeEndRangeTime (DCPRuleStruct& ioDCPRule)
00134       : ParserSemanticAction (ioDCPRule) {
00135     }
00136
00137     // ////////////////////////////////////////////////////////////////////
00138     void storeEndRangeTime::operator() (
      boost::spirit::qi::unused_type,
00139                                         boost::spirit::qi::unused_type,
00140                                         boost::spirit::qi::unused_type) const {
00141       _DCPRule._timeRangeEnd = _DCPRule.getTime();
00142       // DEBUG
00143       //STDAIR_LOG_DEBUG ("Time Range End: " << _DCPRule._timeRangeEnd);
00144       // Reset the number of seconds
00145       _DCPRule._itSeconds = 0;
00146     }
00147
00148     // ////////////////////////////////////////////////////////////////////
00149     storePOS ::
00150     storePOS (DCPRuleStruct& ioDCPRule)
00151       : ParserSemanticAction (ioDCPRule) {
00152     }
00153
00154     // ////////////////////////////////////////////////////////////////////
00155     void storePOS::operator() (std::vector<char> iChar,
00156                                boost::spirit::qi::unused_type,
00157                                boost::spirit::qi::unused_type) const {
00158       stdair::AirlineCode_T lPOS (iChar.begin(), iChar.end());
00159       _DCPRule._pos = lPOS;
00160       // DEBUG
00161       //STDAIR_LOG_DEBUG ("POS: " << _DCPRule._pos);
00162     }
00163
00164     // ////////////////////////////////////////////////////////////////////
00165     storeCabinCode ::
00166     storeCabinCode (DCPRuleStruct& ioDCPRule)
00167       : ParserSemanticAction (ioDCPRule) {
00168     }
00169
```

```
00170     // ////////////////////////////////////////////////////////////////////
00171     void storeCabinCode::operator() (char iChar,
00172                                      boost::spirit::qi::unused_type,
00173                                      boost::spirit::qi::unused_type) const {
00174       std::ostringstream ostr;
00175       ostr << iChar;
00176       std::string cabinCodeStr = ostr.str();
00177       const stdair::CabinCode_T lCabinCode (cabinCodeStr);
00178       _DCPRule._cabinCode = lCabinCode;
00179
00180       // DEBUG
00181       //STDAIR_LOG_DEBUG ("Cabin Code: " << lCabinCode);
00182
00183     }
00184
00185     // ////////////////////////////////////////////////////////////////////
00186     storeChannel ::
00187     storeChannel (DCPRuleStruct& ioDCPRule)
00188       : ParserSemanticAction (ioDCPRule) {
00189     }
00190
00191     // ////////////////////////////////////////////////////////////////////
00192     void storeChannel::operator() (std::vector<char>
    iChar,
00193                                    boost::spirit::qi::unused_type,
00194                                    boost::spirit::qi::unused_type) const {
00195       stdair::ChannelLabel_T lChannel (iChar.begin(), iChar.end());
00196       if (lChannel != "IN" && lChannel != "IF"
00197           && lChannel != "DN" && lChannel != "DF") {
00198         // DEBUG
00199         STDAIR_LOG_DEBUG ("Invalid channel " << lChannel);
00200       }
00201       _DCPRule._channel = lChannel;
00202       // DEBUG
00203       //STDAIR_LOG_DEBUG ("Channel: " << _DCPRule._channel);
00204     }
00205
00206     // ////////////////////////////////////////////////////////////////////
00207     storeAdvancePurchase ::
00208     storeAdvancePurchase (DCPRuleStruct& ioDCPRule)
00209       : ParserSemanticAction (ioDCPRule) {
00210     }
00211
00212     // ////////////////////////////////////////////////////////////////////
00213     void storeAdvancePurchase::operator() (
    unsigned int iAdancePurchase,
00214                                            boost::spirit::qi::unused_type,
00215                                            boost::spirit::qi::unused_type)
     const {
00216       _DCPRule._advancePurchase = iAdancePurchase;
00217       // DEBUG
00218       //STDAIR_LOG_DEBUG ( "Advance Purchase: " << _DCPRule._advancePurchase);
00219     }
00220
00221     // ////////////////////////////////////////////////////////////////////
00222     storeSaturdayStay ::
00223     storeSaturdayStay (DCPRuleStruct& ioDCPRule)
00224       : ParserSemanticAction (ioDCPRule) {
00225     }
00226
00227     // ////////////////////////////////////////////////////////////////////
00228     void storeSaturdayStay::operator() (char
    iSaturdayStay,
00229                                         boost::spirit::qi::unused_type,
00230                                         boost::spirit::qi::unused_type) const {
00231       bool lBool = false;
00232       if (iSaturdayStay == 'T') {
00233         lBool = true;
00234       } else {
00235         if (iSaturdayStay != 'F') {
00236           // DEBUG
00237           STDAIR_LOG_DEBUG ("Invalid saturdayStay char " << iSaturdayStay);
00238         }
00239       }
00240       stdair::SaturdayStay_T lSaturdayStay (lBool);
00241       _DCPRule._saturdayStay = lSaturdayStay;
00242       // DEBUG
00243       //STDAIR_LOG_DEBUG ("Saturday Stay: " << _DCPRule._saturdayStay);
00244     }
00245
00246     // ////////////////////////////////////////////////////////////////////
00247     storeChangeFees ::
00248     storeChangeFees (DCPRuleStruct& ioDCPRule)
00249       : ParserSemanticAction (ioDCPRule) {
00250     }
00251
00252     // ////////////////////////////////////////////////////////////////////
```

```
00253     void storeChangeFees::operator() (char
      iChangefees,
00254                                       boost::spirit::qi::unused_type,
00255                                       boost::spirit::qi::unused_type) const {
00256
00257       bool lBool = false;
00258       if (iChangefees == 'T') {
00259         lBool = true;
00260       } else {
00261         if (iChangefees != 'F') {
00262           // DEBUG
00263           STDAIR_LOG_DEBUG ("Invalid change fees char " << iChangefees);
00264         }
00265       }
00266       stdair::ChangeFees_T lChangefees (lBool);
00267       _DCPRule._changeFees = lChangefees;
00268       // DEBUG
00269       //STDAIR_LOG_DEBUG ("Change fees: " << _DCPRule._changeFees);
00270     }
00271
00272     // ////////////////////////////////////////////////////////////////////
00273     storeNonRefundable ::
00274     storeNonRefundable (DCPRuleStruct& ioDCPRule)
00275       : ParserSemanticAction (ioDCPRule) {
00276     }
00277
00278     // ////////////////////////////////////////////////////////////////////
00279     void storeNonRefundable::operator() (char
      iNonRefundable,
00280                                          boost::spirit::qi::unused_type,
00281                                          boost::spirit::qi::unused_type) const
      {
00282       bool lBool = false;
00283       if (iNonRefundable == 'T') {
00284         lBool = true;
00285       } else {
00286         if (iNonRefundable != 'F') {
00287           // DEBUG
00288           STDAIR_LOG_DEBUG ("Invalid non refundable char " << iNonRefundable);
00289         }
00290       }
00291       stdair::NonRefundable_T lNonRefundable (lBool);
00292       _DCPRule._nonRefundable = lNonRefundable;
00293       // DEBUG
00294       //STDAIR_LOG_DEBUG ("Non refundable: " << _DCPRule._nonRefundable);
00295     }
00296
00297     // ////////////////////////////////////////////////////////////////////
00298     storeMinimumStay ::
00299     storeMinimumStay (DCPRuleStruct& ioDCPRule)
00300       : ParserSemanticAction (ioDCPRule) {
00301     }
00302
00303     // ////////////////////////////////////////////////////////////////////
00304     void storeMinimumStay::operator() (unsigned
      int iMinStay,
00305                                        boost::spirit::qi::unused_type,
00306                                        boost::spirit::qi::unused_type) const {
00307       _DCPRule._minimumStay = iMinStay;
00308       // DEBUG
00309       //STDAIR_LOG_DEBUG ("Minimum Stay: " << _DCPRule._minimumStay );
00310     }
00311
00312     // ////////////////////////////////////////////////////////////////////
00313     storeDCP ::
00314     storeDCP (DCPRuleStruct& ioDCPRule)
00315       : ParserSemanticAction (ioDCPRule) {
00316     }
00317
00318     // ////////////////////////////////////////////////////////////////////
00319     void storeDCP::operator() (double iDCP,
00320                                boost::spirit::qi::unused_type,
00321                                boost::spirit::qi::unused_type) const {
00322       _DCPRule._DCP = iDCP;
00323       // DEBUG
00324       //STDAIR_LOG_DEBUG ("DCP: " << _DCPRule._DCP);
00325     }
00326
00327     // ////////////////////////////////////////////////////////////////////
00328     storeAirlineCode ::
00329     storeAirlineCode (DCPRuleStruct& ioDCPRule)
00330       : ParserSemanticAction (ioDCPRule) {
00331     }
00332
00333     // ////////////////////////////////////////////////////////////////////
00334     void storeAirlineCode::operator() (
      std::vector<char> iChar,
```

```
00335                                     boost::spirit::qi::unused_type,
00336                                     boost::spirit::qi::unused_type) const {
00337
00338       bool lAlreadyInTheList = false;
00339       stdair::AirlineCode_T lAirlineCode (iChar.begin(), iChar.end());
00340       // Update the airline code
00341       _DCPRule._airlineCode = lAirlineCode;
00342       // Test if the DCPRule Struct stands for interline products
00343       if (_DCPRule._airlineCodeList.size() > 0) {
00344         _DCPRule._classCodeListOfList.push_back(_DCPRule.
     _classCodeList);
00345         _DCPRule._classCodeList.clear();
00346         // Update the number of airlines if necessary
00347         std::vector<stdair::AirlineCode_T>::iterator Airline_iterator;
00348         for (Airline_iterator = _DCPRule._airlineCodeList.begin();
00349              Airline_iterator != _DCPRule._airlineCodeList.end();
00350              ++Airline_iterator) {
00351           stdair::AirlineCode_T lPreviousAirlineCode =
00352             *Airline_iterator;
00353           if (lPreviousAirlineCode == lAirlineCode) {
00354             lAlreadyInTheList = true;
00355             /*STDAIR_LOG_DEBUG ("Airline Code Already Existing: "
00356               << lAirlineCode);*/
00357           }
00358         }
00359         if (lAlreadyInTheList == false) {
00360           /*STDAIR_LOG_DEBUG ("New Airline Code: "
00361           << lAirlineCode);*/
00362           _DCPRule._airlineCodeList.push_back(lAirlineCode);
00363           _DCPRule._classCodeList.clear();
00364         }
00365       } else {
00366         /*STDAIR_LOG_DEBUG ("First Airline Code: "
00367           << lAirlineCode);*/
00368         _DCPRule._airlineCodeList.push_back (lAirlineCode);
00369       }
00370       // DEBUG
00371       //STDAIR_LOG_DEBUG ( "Airline code: " << lAirlineCode);
00372     }
00373
00374     // ////////////////////////////////////////////////////////////////////
00375     storeClass ::
00376     storeClass (DCPRuleStruct& ioDCPRule)
00377       : ParserSemanticAction (ioDCPRule) {
00378     }
00379
00380     // ////////////////////////////////////////////////////////////////////
00381     void storeClass::operator() (std::vector<char> iChar
     ,
00382                                  boost::spirit::qi::unused_type,
00383                                  boost::spirit::qi::unused_type) const {
00384       std::ostringstream ostr;
00385       for (std::vector<char>::const_iterator lItVector = iChar.begin();
00386          lItVector != iChar.end();
00387          lItVector++) {
00388         ostr << *lItVector;
00389       }
00390       std::string classCodeStr = ostr.str();
00391       // Insertion of this class Code list in the whole classCode name
00392       _DCPRule._classCodeList.push_back(classCodeStr);
00393       // DEBUG
00394       // STDAIR_LOG_DEBUG ("Class Code: " << classCodeStr);
00395     }
00396
00397     // ////////////////////////////////////////////////////////////////////
00398     doEndDCP::
00399     doEndDCP (stdair::BomRoot& ioBomRoot,
00400               DCPRuleStruct& ioDCPRule)
00401       : ParserSemanticAction (ioDCPRule),
00402         _bomRoot (ioBomRoot) {
00403     }
00404
00405     // ////////////////////////////////////////////////////////////////////
00406     void doEndDCP::operator() (
     boost::spirit::qi::unused_type,
00407                                boost::spirit::qi::unused_type,
00408                                boost::spirit::qi::unused_type) const {
00409       // DEBUG
00410       // STDAIR_LOG_DEBUG ("Do End");
00411       // Generation of the DCP rule object.
00412       _DCPRule._classCodeListOfList.push_back(_DCPRule.
     _classCodeList);
00413       DCPRuleGenerator::createDCPRule (_bomRoot, _DCPRule);
00414       STDAIR_LOG_DEBUG(_DCPRule.describe());
00415     }
00416
00417     // ////////////////////////////////////////////////////////////////////
```

```
00418     //
00419     //  Utility Parsers
00420     //
00421     // ////////////////////////////////////////////////////////////////////
00423     namespace bsq = boost::spirit::qi;
00424     namespace bsa = boost::spirit::ascii;
00425
00427     stdair::int1_p_t int1_p;
00428
00430     stdair::uint2_p_t uint2_p;
00431
00433     stdair::uint4_p_t uint4_p;
00434
00436     stdair::uint1_4_p_t uint1_4_p;
00437
00439     stdair::hour_p_t hour_p;
00440     stdair::minute_p_t minute_p;
00441     stdair::second_p_t second_p;
00442
00444     stdair::year_p_t year_p;
00445     stdair::month_p_t month_p;
00446     stdair::day_p_t day_p;
00447
00448     // ////////////////////////////////////////////////////////////////////
00449     //  (Boost Spirit) Grammar Definition
00450     // ////////////////////////////////////////////////////////////////////
00451
00452     // ////////////////////////////////////////////////////////////////////
00453     DCPRuleParser::DCPRuleParser (stdair::BomRoot&
      ioBomRoot,
00454                                   DCPRuleStruct& ioDCPRule) :
00455       DCPRuleParser::base_type(start),
00456       _bomRoot(ioBomRoot), _DCPRule(ioDCPRule) {
00457
00458       start = *(comments | DCP_rule);
00459
00460       comments = (bsq::lexeme[bsq::repeat(2)[bsa::char_('/')]
00461                               >> +(bsa::char_ - bsq::eol)
00462                               >> bsq::eol]
00463                   | bsq::lexeme[bsa::char_('/') >>bsa::char_('*')
00464                                 >> +(bsa::char_ - bsa::char_('*'))
00465                                 >> bsa::char_('*') >> bsa::char_('/')]);
00466
00467       DCP_rule = DCP_key
00468         >> +( ';' >> segment )
00469         >> DCP_rule_end[doEndDCP(_bomRoot, _DCPRule
      )];
00470
00471       DCP_rule_end = bsa::char_(';');
00472
00473       DCP_key = DCP_id
00474         >> ';' >> origin >> ';' >> destination
00475         >> ';' >> dateRangeStart >> ';' >> dateRangeEnd
00476         >> ';' >> timeRangeStart >> ';' >> timeRangeEnd
00477         >> ';' >> position >>  ';' >> cabinCode >> ';' >>
      channel
00478         >> ';' >> advancePurchase >> ';' >> saturdayStay
00479         >> ';' >> changeFees >> ';' >> nonRefundable
00480         >> ';' >> minimumStay >> ';' >> DCP;
00481
00482       DCP_id = uint1_4_p[storeDCPId(_DCPRule)]
      ;
00483
00484       origin = bsq::repeat(3)[bsa::char_("A-Z")][storeOrigin(
      _DCPRule)];
00485
00486       destination =
00487         bsq::repeat(3)[bsa::char_("A-Z")][storeDestination(
      _DCPRule)];
00488
00489       dateRangeStart = date[storeDateRangeStart
      (_DCPRule)];
00490
00491       dateRangeEnd = date[storeDateRangeEnd(
      _DCPRule)];
00492
00493       date = bsq::lexeme
00494         [year_p[boost::phoenix::ref(_DCPRule._itYear) =
      bsq::labels::_1]
00495         >> '-'
00496         >> month_p[boost::phoenix::ref(_DCPRule._itMonth) =
      bsq::labels::_1]
00497         >> '-'
00498         >> day_p[boost::phoenix::ref(_DCPRule._itDay) =
      bsq::labels::_1] ];
00499
00500       timeRangeStart = time[storeStartRangeTime
```

```
      (_DCPRule)];
00501
00502       timeRangeEnd = time[storeEndRangeTime(
      _DCPRule)];
00503
00504       time =  bsq::lexeme
00505         [hour_p[boost::phoenix::ref(_DCPRule._itHours) =
      bsq::labels::_1]
00506         >> ':'
00507         >> minute_p[boost::phoenix::ref(_DCPRule._itMinutes) =
      bsq::labels::_1]
00508         >> - (':' >> second_p[boost::phoenix::ref(_DCPRule.
      _itSeconds) = bsq::labels::_1]) ];
00509
00510       position = bsq::repeat(3)[bsa::char_("A-Z")][storePOS(
      _DCPRule)];
00511
00512       cabinCode = bsa::char_("A-Z")[storeCabinCode(
      _DCPRule)];
00513
00514       channel = bsq::repeat(2)[bsa::char_("A-Z")][storeChannel
      (_DCPRule)];
00515
00516       advancePurchase = uint1_4_p[storeAdvancePurchase
      (_DCPRule)];
00517
00518       saturdayStay = bsa::char_("A-Z")[storeSaturdayStay
      (_DCPRule)];
00519
00520       changeFees = bsa::char_("A-Z")[storeChangeFees(
      _DCPRule)];
00521
00522       nonRefundable = bsa::char_("A-Z")[storeNonRefundable
      (_DCPRule)];
00523
00524       minimumStay = uint1_4_p[storeMinimumStay
      (_DCPRule)];
00525
00526       DCP = bsq::double_[storeDCP(_DCPRule)];
00527
00528       segment = bsq::repeat(2)[bsa::char_("A-Z")][storeAirlineCode
      (_DCPRule)]
00529         //>> ';'
00530         //>> bsa::char_("A-Z")[storeClass(_DCPRule)]
00531         >> +(';' >> list_class);
00532
00533       list_class = bsq::repeat(1,bsq::inf)[bsa::char_("A-Z")][
      storeClass(_DCPRule)];
00534
00535       //BOOST_SPIRIT_DEBUG_NODE (DCPRuleParser);
00536       BOOST_SPIRIT_DEBUG_NODE (start);
00537       BOOST_SPIRIT_DEBUG_NODE (comments);
00538       BOOST_SPIRIT_DEBUG_NODE (DCP_rule);
00539       BOOST_SPIRIT_DEBUG_NODE (DCP_rule_end);
00540       BOOST_SPIRIT_DEBUG_NODE (DCP_key);
00541       BOOST_SPIRIT_DEBUG_NODE (DCP_id);
00542       BOOST_SPIRIT_DEBUG_NODE (origin);
00543       BOOST_SPIRIT_DEBUG_NODE (destination);
00544       BOOST_SPIRIT_DEBUG_NODE (dateRangeStart);
00545       BOOST_SPIRIT_DEBUG_NODE (dateRangeEnd);
00546       BOOST_SPIRIT_DEBUG_NODE (date);
00547       BOOST_SPIRIT_DEBUG_NODE (timeRangeStart);
00548       BOOST_SPIRIT_DEBUG_NODE (timeRangeEnd);
00549       BOOST_SPIRIT_DEBUG_NODE (time);
00550       BOOST_SPIRIT_DEBUG_NODE (position);
00551       BOOST_SPIRIT_DEBUG_NODE (cabinCode);
00552       BOOST_SPIRIT_DEBUG_NODE (channel);
00553       BOOST_SPIRIT_DEBUG_NODE (advancePurchase);
00554       BOOST_SPIRIT_DEBUG_NODE (saturdayStay);
00555       BOOST_SPIRIT_DEBUG_NODE (changeFees);
00556       BOOST_SPIRIT_DEBUG_NODE (nonRefundable);
00557       BOOST_SPIRIT_DEBUG_NODE (minimumStay);
00558       BOOST_SPIRIT_DEBUG_NODE (DCP);
00559       BOOST_SPIRIT_DEBUG_NODE (segment);
00560       BOOST_SPIRIT_DEBUG_NODE (list_class);
00561     }
00562   }
00563
00565   //
00566   //  Entry class for the file parser
00567   //
00569
00570   // ////////////////////////////////////////////////////////////////////
00571   DCPRuleFileParser::
00572   DCPRuleFileParser (stdair::BomRoot& ioBomRoot,
00573                      const stdair::Filename_T& iFilename)
00574     : _filename (iFilename), _bomRoot (ioBomRoot) {
```

```
00575     init();
00576   }
00577
00578   // ////////////////////////////////////////////////////////////////////
00579   void DCPRuleFileParser::init() {
00580     // Check that the file exists and is readable
00581     const bool doesExistAndIsReadable =
00582       stdair::BasFileMgr::doesExistAndIsReadable (_filename);
00583
00584     if (doesExistAndIsReadable == false) {
00585       STDAIR_LOG_ERROR ("The DCP schedule file " << _filename
00586                         << " does not exist or can not be  read.");
00587
00588       throw DCPInputFileNotFoundException ("The DCP file " + _filename + " does
       not exist or can not be read");
00589     }
00590   }
00591
00592   // ////////////////////////////////////////////////////////////////////
00593   bool DCPRuleFileParser::generateDCPRules (
      ) {
00594
00595     STDAIR_LOG_DEBUG ("Parsing DCP input file: " << _filename);
00596
00597     // File to be parsed
00598     const std::string* lFileName = &_filename;
00599     const char *lChar = (*lFileName).c_str();
00600     std::ifstream fileToBeParsed(lChar, std::ios_base::in);
00601
00602     // Check the filename exists and can be open
00603     if (fileToBeParsed == false) {
00604       STDAIR_LOG_ERROR ("The DCP file " << _filename << " can not be open."
00605                         << std::endl);
00606
00607       throw DCPInputFileNotFoundException ("The file " + _filename + " does not
       exist or can not be read");
00608     }
00609
00610     // Create an input iterator
00611     stdair::base_iterator_t inputBegin (fileToBeParsed);
00612
00613     // Convert input iterator to an iterator usable by spirit parser
00614     stdair::iterator_t
00615       start (boost::spirit::make_default_multi_pass (inputBegin));
00616     stdair::iterator_t end;
00617
00618     // Initialise the parser (grammar) with the helper/staging structure.
00619     DCPParserHelper::DCPRuleParser lFPParser(
      _bomRoot, _DCPRule);
00620
00621     // Launch the parsing of the file and, thanks to the doEndDCP
00622     // call-back structure, the building of the whole BomRoot BOM
00623
00624     const bool hasParsingBeenSuccesful =
00625        boost::spirit::qi::phrase_parse (start, end, lFPParser,
00626                                         boost::spirit::ascii::space);
00627
00628     if (hasParsingBeenSuccesful == false) {
00629       // TODO: decide whether to throw an exceqption
00630       STDAIR_LOG_ERROR ("Parsing of DCP input file: " << _filename
00631                         << " failed");
00632     }
00633     if  (start != end) {
00634       // TODO: decide whether to throw an exception
00635       STDAIR_LOG_ERROR ("Parsing of DCP input file: " << _filename
00636                         << " failed");
00637     }
00638     if (hasParsingBeenSuccesful == true && start == end) {
00639       STDAIR_LOG_DEBUG ("Parsing of DCP input file: " << _filename
00640       << " succeeded");
00641     }
00642     return hasParsingBeenSuccesful;
00643   }
00644
00645 }
```

23.147 airinv/command/vault/DCPParserHelper.hpp File Reference

```
#include <stdair/basic/BasParserTypes.hpp>
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/bom/DCPRuleStruct.hpp>
```

Classes

- struct AIRINV::DCPParserHelper::ParserSemanticAction
- struct AIRINV::DCPParserHelper::storeDCPId
- struct AIRINV::DCPParserHelper::storeOrigin
- struct AIRINV::DCPParserHelper::storeDestination
- struct AIRINV::DCPParserHelper::storeDateRangeStart
- struct AIRINV::DCPParserHelper::storeDateRangeEnd
- struct AIRINV::DCPParserHelper::storeStartRangeTime
- struct AIRINV::DCPParserHelper::storeEndRangeTime
- struct AIRINV::DCPParserHelper::storePOS
- struct AIRINV::DCPParserHelper::storeCabinCode
- struct AIRINV::DCPParserHelper::storeChannel
- struct AIRINV::DCPParserHelper::storeAdvancePurchase
- struct AIRINV::DCPParserHelper::storeSaturdayStay
- struct AIRINV::DCPParserHelper::storeChangeFees
- struct AIRINV::DCPParserHelper::storeNonRefundable
- struct AIRINV::DCPParserHelper::storeMinimumStay
- struct AIRINV::DCPParserHelper::storeDCP
- struct AIRINV::DCPParserHelper::storeAirlineCode
- struct AIRINV::DCPParserHelper::storeClass
- struct AIRINV::DCPParserHelper::doEndDCP
- struct AIRINV::DCPParserHelper::DCPRuleParser
- class AIRINV::DCPRuleFileParser

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV
- namespace AIRINV::DCPParserHelper

23.148 DCPParserHelper.hpp

```
00001 #ifndef __AIRINV_CMD_DCPPARSERHELPER_HPP
00002 #define __AIRINV_CMD_DCPPARSERHELPER_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // StdAir
00008 // The stdair/basic/BasParserTypes.hpp header includes Boost.Spirit headers
00009 //#define BOOST_SPIRIT_DEBUG
00010 #include <stdair/basic/BasParserTypes.hpp>
00011 #include <stdair/command/CmdAbstract.hpp>
00012 // AirInv
00013 #include <airinv/AIRINV_Types.hpp>
00014 #include <airinv/bom/DCPRuleStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018   class BomRoot;
00019 }
00020
00021 namespace AIRINV {
00022
00023   namespace DCPParserHelper {
00024
00025     // ////////////////////////////////////////////////////////////////////
00026     //  Semantic actions
00027     // ////////////////////////////////////////////////////
```

```
00029
00030     struct ParserSemanticAction {
00032       ParserSemanticAction (DCPRuleStruct&);
00034       DCPRuleStruct& _DCPRule;
00035     };
00036
00038     struct storeDCPId : public ParserSemanticAction
      {
00040       storeDCPId (DCPRuleStruct&);
00042       void operator() (unsigned int,
00043                        boost::spirit::qi::unused_type,
00044                        boost::spirit::qi::unused_type) const;
00045     };
00046
00048     struct storeOrigin : public ParserSemanticAction
      {
00050       storeOrigin (DCPRuleStruct&);
00052       void operator() (std::vector<char>,
00053                        boost::spirit::qi::unused_type,
00054                        boost::spirit::qi::unused_type) const;
00055     };
00056
00058     struct storeDestination : public ParserSemanticAction
      {
00060       storeDestination (DCPRuleStruct&);
00062       void operator() (std::vector<char>,
00063                        boost::spirit::qi::unused_type,
00064                        boost::spirit::qi::unused_type) const;
00065     };
00066
00068     struct storeDateRangeStart : public ParserSemanticAction
      {
00070       storeDateRangeStart (DCPRuleStruct&);
00072       void operator() (boost::spirit::qi::unused_type,
00073                        boost::spirit::qi::unused_type,
00074                        boost::spirit::qi::unused_type) const;
00075     };
00076
00078     struct storeDateRangeEnd : public ParserSemanticAction
      {
00080       storeDateRangeEnd (DCPRuleStruct&);
00082       void operator() (boost::spirit::qi::unused_type,
00083                        boost::spirit::qi::unused_type,
00084                        boost::spirit::qi::unused_type) const;
00085     };
00086
00088     struct storeStartRangeTime : public ParserSemanticAction
      {
00090       storeStartRangeTime (DCPRuleStruct&);
00092       void operator() (boost::spirit::qi::unused_type,
00093                        boost::spirit::qi::unused_type,
00094                        boost::spirit::qi::unused_type) const;
00095     };
00096
00098     struct storeEndRangeTime : public ParserSemanticAction
      {
00100       storeEndRangeTime (DCPRuleStruct&);
00102       void operator() (boost::spirit::qi::unused_type,
00103                        boost::spirit::qi::unused_type,
00104                        boost::spirit::qi::unused_type) const;
00105     };
00106
00108     struct storePOS : public ParserSemanticAction {
00110       storePOS (DCPRuleStruct&);
00112       void operator() (std::vector<char>,
00113                        boost::spirit::qi::unused_type,
00114                        boost::spirit::qi::unused_type) const;
00115     };
00116
00118     struct storeCabinCode : public ParserSemanticAction
      {
00120       storeCabinCode  (DCPRuleStruct&);
00122       void operator() (char,
00123                        boost::spirit::qi::unused_type,
00124                        boost::spirit::qi::unused_type) const;
00125     };
00126
00128     struct storeChannel : public ParserSemanticAction
      {
00130       storeChannel (DCPRuleStruct&);
00132       void operator() (std::vector<char>,
00133                        boost::spirit::qi::unused_type,
00134                        boost::spirit::qi::unused_type) const;
00135     };
00136
00138     struct storeAdvancePurchase : public
      ParserSemanticAction {
```

```
00140       storeAdvancePurchase (DCPRuleStruct&);
00142       void operator() (unsigned int,
00143                        boost::spirit::qi::unused_type,
00144                        boost::spirit::qi::unused_type) const;
00145     };
00146
00148     struct storeSaturdayStay : public ParserSemanticAction
      {
00150       storeSaturdayStay (DCPRuleStruct&);
00152       void operator() (char,
00153                        boost::spirit::qi::unused_type,
00154                        boost::spirit::qi::unused_type) const;
00155     };
00156
00158     struct storeChangeFees : public ParserSemanticAction
      {
00160       storeChangeFees (DCPRuleStruct&);
00162       void operator() (char,
00163                        boost::spirit::qi::unused_type,
00164                        boost::spirit::qi::unused_type) const;
00165     };
00166
00168     struct storeNonRefundable : public ParserSemanticAction
      {
00170       storeNonRefundable (DCPRuleStruct&);
00172       void operator() (char,
00173                        boost::spirit::qi::unused_type,
00174                        boost::spirit::qi::unused_type) const;
00175     };
00176
00178     struct storeMinimumStay : public ParserSemanticAction
      {
00180       storeMinimumStay (DCPRuleStruct&);
00182       void operator() (unsigned int,
00183                        boost::spirit::qi::unused_type,
00184                        boost::spirit::qi::unused_type) const;
00185     };
00186
00188     struct storeDCP : public ParserSemanticAction {
00190       storeDCP (DCPRuleStruct&);
00192       void operator() (double,
00193                        boost::spirit::qi::unused_type,
00194                        boost::spirit::qi::unused_type) const;
00195     };
00196
00198     struct storeAirlineCode : public ParserSemanticAction
      {
00200       storeAirlineCode (DCPRuleStruct&);
00202       void operator() (std::vector<char>,
00203                        boost::spirit::qi::unused_type,
00204                        boost::spirit::qi::unused_type) const;
00205     };
00206
00208     struct storeClass : public ParserSemanticAction
      {
00210       storeClass (DCPRuleStruct&);
00212       void operator() (std::vector<char>,
00213                        boost::spirit::qi::unused_type,
00214                        boost::spirit::qi::unused_type) const;
00215     };
00216
00218     struct doEndDCP : public ParserSemanticAction {
00220       doEndDCP (stdair::BomRoot&, DCPRuleStruct&);
00222       void operator() (boost::spirit::qi::unused_type,
00223                        boost::spirit::qi::unused_type,
00224                        boost::spirit::qi::unused_type) const;
00226       stdair::BomRoot& _bomRoot;
00227     };
00228
00229
00231     //
00232     //  (Boost Spirit) Grammar Definition
00233     //
00235
00304     struct DCPRuleParser :
00305       public boost::spirit::qi::grammar<stdair::iterator_t,
00306                                         boost::spirit::ascii::space_type> {
00307
00308       DCPRuleParser (stdair::BomRoot&, DCPRuleStruct&);
00309
00310       // Instantiation of rules
00311       boost::spirit::qi::rule<stdair::iterator_t,
00312                               boost::spirit::ascii::space_type>
00313       start, comments, DCP_rule, DCP_rule_end,
      DCP_key, DCP_id, origin,
00314         destination, dateRangeStart, dateRangeEnd
     , date, timeRangeStart,
```

```
00315         timeRangeEnd, time, position, cabinCode
      , channel, advancePurchase,
00316         saturdayStay, changeFees, nonRefundable
      , minimumStay, DCP,
00317         segment, list_class;
00318
00319       // Parser Context
00320       stdair::BomRoot& _bomRoot;
00321       DCPRuleStruct& _DCPRule;
00322     };
00323
00324   }
00325
00327   //
00328   //  Entry class for the file parser
00329   //
00331
00337   class DCPRuleFileParser : public stdair::CmdAbstract {
00338   public:
00340     DCPRuleFileParser (stdair::BomRoot& ioBomRoot,
00341                        const stdair::Filename_T& iFilename);
00342
00344     bool generateDCPRules ();
00345
00346   private:
00348     void init();
00349
00350   private:
00351     // Attributes
00353     stdair::Filename_T _filename;
00354
00356     stdair::BomRoot& _bomRoot;
00357
00359     DCPRuleStruct _DCPRule;
00360   };
00361
00362 }
00363 #endif // __AIRINV_CMD_DCPPARSERHELPER_HPP
```

23.149 airinv/config/airinv-paths.hpp File Reference

Macros

- #define PACKAGE "airinv"
- #define PACKAGE_NAME "AIRINV"
- #define PACKAGE_VERSION "0.1.2"
- #define PREFIXDIR "/usr"
- #define EXEC_PREFIX "/usr"
- #define BINDIR "/usr/bin"
- #define LIBDIR "/usr/lib"
- #define LIBEXECDIR "/usr/libexec"
- #define SBINDIR "/usr/sbin"
- #define SYSCONFDIR "/usr/etc"
- #define INCLUDEDIR "/usr/include"
- #define DATAROOTDIR "/usr/share"
- #define DATADIR "/usr/share"
- #define DOCDIR "/usr/share/doc/airinv-0.1.2"
- #define MANDIR "/usr/share/man"
- #define INFODIR "/usr/share/info"
- #define HTMLDIR "/usr/share/doc/airinv-0.1.2/html"
- #define PDFDIR "/usr/share/doc/airinv-0.1.2/html"
- #define STDAIR_SAMPLE_DIR "/usr/share/stdair/samples"

23.149.1 Macro Definition Documentation

23.149.1.1 #define PACKAGE "airinv"

Definition at line 4 of file airinv-paths.hpp.

23.149.1.2 #define PACKAGE_NAME "AIRINV"

Definition at line 5 of file airinv-paths.hpp.

23.149.1.3 #define PACKAGE_VERSION "0.1.2"

Definition at line 6 of file airinv-paths.hpp.

23.149.1.4 #define PREFIXDIR "/usr"

Definition at line 7 of file airinv-paths.hpp.

23.149.1.5 #define EXEC_PREFIX "/usr"

Definition at line 8 of file airinv-paths.hpp.

23.149.1.6 #define BINDIR "/usr/bin"

Definition at line 9 of file airinv-paths.hpp.

23.149.1.7 #define LIBDIR "/usr/lib"

Definition at line 10 of file airinv-paths.hpp.

23.149.1.8 #define LIBEXECDIR "/usr/libexec"

Definition at line 11 of file airinv-paths.hpp.

23.149.1.9 #define SBINDIR "/usr/sbin"

Definition at line 12 of file airinv-paths.hpp.

23.149.1.10 #define SYSCONFDIR "/usr/etc"

Definition at line 13 of file airinv-paths.hpp.

23.149.1.11 #define INCLUDEDIR "/usr/include"

Definition at line 14 of file airinv-paths.hpp.

23.149.1.12 #define DATAROOTDIR "/usr/share"

Definition at line 15 of file airinv-paths.hpp.

23.149.1.13 #define DATADIR "/usr/share"

Definition at line 16 of file airinv-paths.hpp.

23.149.1.14 #define DOCDIR "/usr/share/doc/airinv-0.1.2"

Definition at line 17 of file airinv-paths.hpp.

23.149.1.15 #define MANDIR "/usr/share/man"

Definition at line 18 of file airinv-paths.hpp.

23.149.1.16 #define INFODIR "/usr/share/info"

Definition at line 19 of file airinv-paths.hpp.

23.149.1.17 #define HTMLDIR "/usr/share/doc/airinv-0.1.2/html"

Definition at line 20 of file airinv-paths.hpp.

23.149.1.18 #define PDFDIR "/usr/share/doc/airinv-0.1.2/html"

Definition at line 21 of file airinv-paths.hpp.

23.149.1.19 #define STDAIR_SAMPLE_DIR "/usr/share/stdair/samples"

Definition at line 22 of file airinv-paths.hpp.

23.150 airinv-paths.hpp

```
00001 #ifndef __AIRINV_PATHS_HPP__
00002 #define __AIRINV_PATHS_HPP__
00003
00004 #define PACKAGE "airinv"
00005 #define PACKAGE_NAME "AIRINV"
00006 #define PACKAGE_VERSION "0.1.2"
00007 #define PREFIXDIR "/usr"
00008 #define EXEC_PREFIX "/usr"
00009 #define BINDIR "/usr/bin"
00010 #define LIBDIR "/usr/lib"
00011 #define LIBEXECDIR "/usr/libexec"
00012 #define SBINDIR "/usr/sbin"
00013 #define SYSCONFDIR "/usr/etc"
00014 #define INCLUDEDIR "/usr/include"
00015 #define DATAROOTDIR "/usr/share"
00016 #define DATADIR "/usr/share"
00017 #define DOCDIR "/usr/share/doc/airinv-0.1.2"
00018 #define MANDIR "/usr/share/man"
00019 #define INFODIR "/usr/share/info"
00020 #define HTMLDIR "/usr/share/doc/airinv-0.1.2/html"
00021 #define PDFDIR "/usr/share/doc/airinv-0.1.2/html"
00022 #define STDAIR_SAMPLE_DIR "/usr/share/stdair/samples"
00023
00024 #endif // __AIRINV_PATHS_HPP__
```

23.151 airinv/config/airinv-paths.hpp.in File Reference

Macros

- #define __AIRINV_PATHS_HPP__
- #define PACKAGE "@PACKAGE@"
- #define PACKAGE_NAME "@PACKAGE_NAME@"
- #define PACKAGE_VERSION "@PACKAGE_VERSION@"
- #define PREFIXDIR "@prefix@"
- #define EXEC_PREFIX "@exec_prefix@"
- #define BINDIR "@bindir@"
- #define LIBDIR "@libdir@"
- #define LIBEXECDIR "@libexecdir@"
- #define SBINDIR "@sbindir@"
- #define SYSCONFDIR "@sysconfdir@"
- #define INCLUDEDIR "@includedir@"
- #define DATAROOTDIR "@datarootdir@"
- #define DATADIR "@datadir@"
- #define DOCDIR "@docdir@"
- #define MANDIR "@mandir@"
- #define INFODIR "@infodir@"
- #define HTMLDIR "@htmldir@"
- #define PDFDIR "@pdfdir@"
- #define STDAIR_SAMPLE_DIR "@sampledir@"

23.151.1 Macro Definition Documentation

23.151.1.1 #define __AIRINV_PATHS_HPP__

Definition at line 2 of file airinv-paths.hpp.in.

23.151.1.2 #define PACKAGE "@PACKAGE@"

Definition at line 4 of file airinv-paths.hpp.in.

23.151.1.3 #define PACKAGE_NAME "@PACKAGE_NAME@"

Definition at line 5 of file airinv-paths.hpp.in.

23.151.1.4 #define PACKAGE_VERSION "@PACKAGE_VERSION@"

Definition at line 6 of file airinv-paths.hpp.in.

23.151.1.5 #define PREFIXDIR "@prefix@"

Definition at line 7 of file airinv-paths.hpp.in.

23.151.1.6 #define EXEC_PREFIX "@exec_prefix@"

Definition at line 8 of file airinv-paths.hpp.in.

23.151.1.7 #define BINDIR "@bindir@"

Definition at line 9 of file airinv-paths.hpp.in.

23.151.1.8 #define LIBDIR "@libdir@"

Definition at line 10 of file airinv-paths.hpp.in.

23.151.1.9 #define LIBEXECDIR "@libexecdir@"

Definition at line 11 of file airinv-paths.hpp.in.

23.151.1.10 #define SBINDIR "@sbindir@"

Definition at line 12 of file airinv-paths.hpp.in.

23.151.1.11 #define SYSCONFDIR "@sysconfdir@"

Definition at line 13 of file airinv-paths.hpp.in.

23.151.1.12 #define INCLUDEDIR "@includedir@"

Definition at line 14 of file airinv-paths.hpp.in.

23.151.1.13 #define DATAROOTDIR "@datarootdir@"

Definition at line 15 of file airinv-paths.hpp.in.

23.151.1.14 #define DATADIR "@datadir@"

Definition at line 16 of file airinv-paths.hpp.in.

23.151.1.15 #define DOCDIR "@docdir@"

Definition at line 17 of file airinv-paths.hpp.in.

23.151.1.16 #define MANDIR "@mandir@"

Definition at line 18 of file airinv-paths.hpp.in.

23.151.1.17 #define INFODIR "@infodir@"

Definition at line 19 of file airinv-paths.hpp.in.

23.151.1.18 #define HTMLDIR "@htmldir@"

Definition at line 20 of file airinv-paths.hpp.in.

23.151.1.19 #define PDFDIR "@pdfdir@"

Definition at line 21 of file airinv-paths.hpp.in.

23.151.1.20 #define STDAIR_SAMPLE_DIR "@sampledir@"

Definition at line 22 of file airinv-paths.hpp.in.

23.152 airinv-paths.hpp.in

```
00001 #ifndef __AIRINV_PATHS_HPP__
00002 #define __AIRINV_PATHS_HPP__
00003
00004 #define PACKAGE "@PACKAGE@"
00005 #define PACKAGE_NAME "@PACKAGE_NAME@"
00006 #define PACKAGE_VERSION "@PACKAGE_VERSION@"
00007 #define PREFIXDIR "@prefix@"
00008 #define EXEC_PREFIX "@exec_prefix@"
00009 #define BINDIR "@bindir@"
00010 #define LIBDIR "@libdir@"
00011 #define LIBEXECDIR "@libexecdir@"
00012 #define SBINDIR "@sbindir@"
00013 #define SYSCONFDIR "@sysconfdir@"
00014 #define INCLUDEDIR "@includedir@"
00015 #define DATAROOTDIR "@datarootdir@"
00016 #define DATADIR "@datadir@"
00017 #define DOCDIR "@docdir@"
00018 #define MANDIR "@mandir@"
00019 #define INFODIR "@infodir@"
00020 #define HTMLDIR "@htmldir@"
00021 #define PDFDIR "@pdfdir@"
00022 #define STDAIR_SAMPLE_DIR "@sampledir@"
00023
00024 #endif // __AIRINV_PATHS_HPP__
```

23.153 airinv/factory/FacAirinvMasterServiceContext.cpp File Reference

```
#include <cassert>
#include <stdair/service/FacSupervisor.hpp>
#include <airinv/factory/FacAirinvMasterServiceContext.hpp>
#include <airinv/service/AIRINV_Master_ServiceContext.hpp>
```

Namespaces

- namespace AIRINV

23.154 FacAirinvMasterServiceContext.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
```

```
00006 // StdAir
00007 #include <stdair/service/FacSupervisor.hpp>
00008 // AirInv
00009 #include <airinv/factory/FacAirinvMasterServiceContext.hpp
      >
00010 #include <airinv/service/AIRINV_Master_ServiceContext.hpp
      >
00011
00012 namespace AIRINV {
00013
00014   FacAirinvMasterServiceContext* FacAirinvMasterServiceContext::_instance =
      NULL;
00015
00016   // ////////////////////////////////////////////////////////////////////
00017   FacAirinvMasterServiceContext::~FacAirinvMasterServiceContext
      () {
00018     _instance = NULL;
00019   }
00020
00021   // ////////////////////////////////////////////////////////////////////
00022   FacAirinvMasterServiceContext&
      FacAirinvMasterServiceContext::instance(
      ) {
00023
00024     if (_instance == NULL) {
00025       _instance = new FacAirinvMasterServiceContext
      ();
00026       assert (_instance != NULL);
00027
00028       stdair::FacSupervisor::instance().
      registerServiceFactory (_instance);
00029     }
00030     return *_instance;
00031   }
00032
00033   // ////////////////////////////////////////////////////////////////////
00034   AIRINV_Master_ServiceContext&
      FacAirinvMasterServiceContext::create() {
00035     AIRINV_Master_ServiceContext*
      aAIRINV_Master_ServiceContext_ptr = NULL;
00036
00037     aAIRINV_Master_ServiceContext_ptr = new AIRINV_Master_ServiceContext
      ();
00038     assert (aAIRINV_Master_ServiceContext_ptr != NULL);
00039
00040     // The new object is added to the Bom pool
00041     _pool.push_back (aAIRINV_Master_ServiceContext_ptr);
00042
00043     return *aAIRINV_Master_ServiceContext_ptr;
00044   }
00045
00046 }
```

23.155 airinv/factory/FacAirinvMasterServiceContext.hpp File Reference

```
#include <string>
#include <stdair/service/FacServiceAbstract.hpp>
```

Classes

- class AIRINV::FacAirinvMasterServiceContext

  Factory for Bucket.

Namespaces

- namespace AIRINV

23.156 FacAirinvMasterServiceContext.hpp

```
00001 #ifndef __AIRINV_FAC_FACAIRINVMASTERSERVICECONTEXT_HPP
00002 #define __AIRINV_FAC_FACAIRINVMASTERSERVICECONTEXT_HPP
00003
```

```
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/service/FacServiceAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00015   class AIRINV_Master_ServiceContext;
00016
00020   class FacAirinvMasterServiceContext : public
      stdair::FacServiceAbstract {
00021   public:
00022
00026     static FacAirinvMasterServiceContext& instance
      ();
00027
00032     ~FacAirinvMasterServiceContext();
00033
00037     AIRINV_Master_ServiceContext& create();
00038
00039
00040   protected:
00044     FacAirinvMasterServiceContext() {}
00045
00046   private:
00048     static FacAirinvMasterServiceContext*
      _instance;
00049   };
00050
00051 }
00052 #endif // __AIRINV_FAC_FACAIRINVMASTERSERVICECONTEXT_HPP
```

23.157 airinv/factory/FacAirinvServiceContext.cpp File Reference

```
#include <cassert>
#include <stdair/service/FacSupervisor.hpp>
#include <airinv/factory/FacAirinvServiceContext.hpp>
#include <airinv/service/AIRINV_ServiceContext.hpp>
```

Namespaces

- namespace AIRINV

23.158 FacAirinvServiceContext.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/service/FacSupervisor.hpp>
00008 // AirInv
00009 #include <airinv/factory/FacAirinvServiceContext.hpp
      >
00010 #include <airinv/service/AIRINV_ServiceContext.hpp
      >
00011
00012 namespace AIRINV {
00013
00014   FacAirinvServiceContext* FacAirinvServiceContext::_instance = NULL;
00015
00016   // ////////////////////////////////////////////////////////////////////
00017   FacAirinvServiceContext::~FacAirinvServiceContext
      () {
00018     _instance = NULL;
00019   }
00020
00021   // ////////////////////////////////////////////////////////////////////
00022   FacAirinvServiceContext&
      FacAirinvServiceContext::instance() {
00023
```

```
00024     if (_instance == NULL) {
00025       _instance = new FacAirinvServiceContext();
00026       assert (_instance != NULL);
00027
00028       stdair::FacSupervisor::instance().
      registerServiceFactory (_instance);
00029     }
00030     return *_instance;
00031   }
00032
00033   // ////////////////////////////////////////////////////////////////////
00034   AIRINV_ServiceContext& FacAirinvServiceContext::create
      () {
00035     AIRINV_ServiceContext* aAIRINV_ServiceContext_ptr =
      NULL;
00036
00037     aAIRINV_ServiceContext_ptr = new AIRINV_ServiceContext
      ();
00038     assert (aAIRINV_ServiceContext_ptr != NULL);
00039
00040     // The new object is added to the Bom pool
00041     _pool.push_back (aAIRINV_ServiceContext_ptr);
00042
00043     return *aAIRINV_ServiceContext_ptr;
00044   }
00045
00046 }
```

23.159 airinv/factory/FacAirinvServiceContext.hpp File Reference

```
#include <string>
#include <stdair/service/FacServiceAbstract.hpp>
```

Classes

- class AIRINV::FacAirinvServiceContext

Namespaces

- namespace AIRINV

23.160 FacAirinvServiceContext.hpp

```
00001 #ifndef __AIRINV_FAC_FACAIRINVSERVICECONTEXT_HPP
00002 #define __AIRINV_FAC_FACAIRINVSERVICECONTEXT_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/service/FacServiceAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00015   class AIRINV_ServiceContext;
00016
00018   class FacAirinvServiceContext : public
      stdair::FacServiceAbstract {
00019   public:
00020
00024     static FacAirinvServiceContext& instance();
00025
00030     ~FacAirinvServiceContext();
00031
00035     AIRINV_ServiceContext& create();
00036
00037
00038   protected:
00042     FacAirinvServiceContext() {}
00043
00044   private:
```

```
00046     static FacAirinvServiceContext* _instance;
00047   };
00048
00049 }
00050 #endif // __AIRINV_FAC_FACAIRINVSERVICECONTEXT_HPP
```

23.161 airinv/factory/FacBomAbstract.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <boost/functional/hash/hash.hpp>
#include <airinv/bom/BomAbstract.hpp>
#include <airinv/factory/FacBomAbstract.hpp>
```

Namespaces

- namespace AIRINV

23.162 FacBomAbstract.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // Boost (STL Extension)
00008 #include <boost/functional/hash/hash.hpp>
00009 // Airinv
00010 #include <airinv/bom/BomAbstract.hpp>
00011 #include <airinv/factory/FacBomAbstract.hpp>
00012
00013 namespace AIRINV {
00014
00015   // ////////////////////////////////////////////////////////////////////
00016   FacBomAbstract::~FacBomAbstract() {
00017     clean ();
00018   }
00019
00020   // ////////////////////////////////////////////////////////////////////
00021   void FacBomAbstract::clean() {
00022     for (BomPool_T::iterator itBom = _pool.begin();
00023          itBom != _pool.end(); itBom++) {
00024       BomAbstract* currentBom_ptr = *itBom;
00025       assert (currentBom_ptr != NULL);
00026
00027       delete (currentBom_ptr); currentBom_ptr = NULL;
00028     }
00029
00030     // Empty the pool of Factories
00031     _pool.clear();
00032   }
00033
00034   // ////////////////////////////////////////////////////////////////////
00035   std::size_t FacBomAbstract::getID (const BomAbstract
      * iBomAbstract_ptr) {
00036     const void* lPtr = iBomAbstract_ptr;
00037     boost::hash<const void*> ptr_hash;
00038     const std::size_t lID = ptr_hash (lPtr);
00039     return lID;
00040   }
00041
00042   // ////////////////////////////////////////////////////////////////////
00043   std::size_t FacBomAbstract::getID (const BomAbstract
      & iBomAbstract) {
00044     return getID (&iBomAbstract);
00045   }
00046
00047   // ////////////////////////////////////////////////////////////////////
00048   std::string FacBomAbstract::getIDString(const
      BomAbstract* iBomAbstract_ptr) {
00049     const std::size_t lID = getID (iBomAbstract_ptr);
00050     std::ostringstream oStr;
00051     oStr << lID;
```

```
00052     return oStr.str();
00053   }
00054
00055   // ////////////////////////////////////////////////////////////////////
00056   std::string FacBomAbstract::getIDString (const
      BomAbstract& iBomAbstract) {
00057     return getIDString (&iBomAbstract);
00058   }
00059
00060 }
```

23.163 airinv/factory/FacBomAbstract.hpp File Reference

```
#include <string>
#include <vector>
```

Classes

- class AIRINV::FacBomAbstract

Namespaces

- namespace AIRINV

23.164 FacBomAbstract.hpp

```
00001 #ifndef __AIRINV_FAC_FACBOMABSTRACT_HPP
00002 #define __AIRINV_FAC_FACBOMABSTRACT_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010
00011 namespace AIRINV {
00012
00013   // Forward declarations
00014   class BomAbstract;
00015
00017   class FacBomAbstract {
00018     friend class FacSupervisor;
00019   public:
00020
00022     typedef std::vector<BomAbstract*> BomPool_T;
00023
00025     static std::size_t getID (const BomAbstract*);
00026
00028     static std::size_t getID (const BomAbstract&);
00029
00032     static std::string getIDString (const BomAbstract*);
00033
00036     static std::string getIDString (const BomAbstract&);
00037
00038   protected:
00041     FacBomAbstract() {}
00042     FacBomAbstract(const FacBomAbstract&) {}
00043
00045     virtual ~FacBomAbstract();
00046
00047   private:
00049     void clean();
00050
00051   protected:
00053     BomPool_T _pool;
00054   };
00055 }
00056 #endif // __AIRINV_FAC_FACBOMABSTRACT_HPP
```

23.165 airinv/factory/FacServiceAbstract.cpp File Reference

```
#include <cassert>
#include <airinv/service/ServiceAbstract.hpp>
#include <airinv/factory/FacServiceAbstract.hpp>
```

Namespaces

- namespace AIRINV

23.166 FacServiceAbstract.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AIRINV
00007 #include <airinv/service/ServiceAbstract.hpp>
00008 #include <airinv/factory/FacServiceAbstract.hpp
      >
00009
00010 namespace AIRINV {
00011
00012   // ////////////////////////////////////////////////////////////////////
00013   FacServiceAbstract::~FacServiceAbstract
      () {
00014     clean ();
00015   }
00016
00017   // ////////////////////////////////////////////////////////////////////
00018   void FacServiceAbstract::clean() {
00019     for (ServicePool_T::iterator itService = _pool.begin();
00020          itService != _pool.end(); itService++) {
00021       ServiceAbstract* currentService_ptr = *itService;
00022       assert (currentService_ptr != NULL);
00023
00024       delete (currentService_ptr); currentService_ptr = NULL;
00025     }
00026
00027     // Empty the pool of Service Factories
00028     _pool.clear();
00029   }
00030
00031 }
```

23.167 airinv/factory/FacServiceAbstract.hpp File Reference

```
#include <vector>
```

Classes

- class AIRINV::FacServiceAbstract

Namespaces

- namespace AIRINV

23.168 FacServiceAbstract.hpp

```
00001 #ifndef __AIRINV_FAC_FACSERVICEABSTRACT_HPP
00002 #define __AIRINV_FAC_FACSERVICEABSTRACT_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
```

```
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <vector>
00009
00010 namespace AIRINV {
00011
00012   // Forward declarations
00013   class ServiceAbstract;
00014
00016   class FacServiceAbstract {
00017   public:
00018
00020     typedef std::vector<ServiceAbstract*> ServicePool_T;
00021
00023     virtual ~FacServiceAbstract();
00024
00026     void clean();
00027
00028   protected:
00031     FacServiceAbstract() {}
00032
00034     ServicePool_T _pool;
00035   };
00036
00037 }
00038 #endif // __AIRINV_FAC_FACSERVICEABSTRACT_HPP
```

23.169 airinv/factory/FacSupervisor.cpp File Reference

```
#include <cassert>
#include <airinv/factory/FacBomAbstract.hpp>
#include <airinv/factory/FacServiceAbstract.hpp>
#include <airinv/factory/FacSupervisor.hpp>
```

Namespaces

- namespace AIRINV

23.170 FacSupervisor.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AIRINV
00007 #include <airinv/factory/FacBomAbstract.hpp>
00008 #include <airinv/factory/FacServiceAbstract.hpp
      >
00009 #include <airinv/factory/FacSupervisor.hpp>
00010
00011 namespace AIRINV {
00012
00013   FacSupervisor* FacSupervisor::_instance = NULL;
00014
00015   // ////////////////////////////////////////////////////////////////////
00016   FacSupervisor::FacSupervisor () {
00017   }
00018
00019   // ////////////////////////////////////////////////////////////////////
00020   FacSupervisor& FacSupervisor::instance()
      {
00021     if (_instance == NULL) {
00022       _instance = new FacSupervisor();
00023     }
00024
00025     return *_instance;
00026   }
00027
00028   // ////////////////////////////////////////////////////////////////////
00029   void FacSupervisor::
00030   registerBomFactory (FacBomAbstract*
      ioFacBomAbstract_ptr) {
00031     _bomPool.push_back (ioFacBomAbstract_ptr);
```

```
00032   }
00033
00034   // ////////////////////////////////////////////////////////////////////
00035   void FacSupervisor::
00036   registerServiceFactory (FacServiceAbstract
      * ioFacServiceAbstract_ptr) {
00037     _svcPool.push_back (ioFacServiceAbstract_ptr);
00038   }
00039
00040   // ////////////////////////////////////////////////////////////////////
00041   FacSupervisor::~FacSupervisor() {
00042     cleanBomLayer();
00043     cleanServiceLayer();
00044   }
00045
00046   // ////////////////////////////////////////////////////////////////////
00047   void FacSupervisor::cleanBomLayer() {
00048     for (BomFactoryPool_T::const_iterator itFactory = _bomPool.begin();
00049          itFactory != _bomPool.end(); itFactory++) {
00050       const FacBomAbstract* currentFactory_ptr = *itFactory;
00051       assert (currentFactory_ptr != NULL);
00052
00053       delete (currentFactory_ptr); currentFactory_ptr = NULL;
00054     }
00055
00056     // Empty the pool of Bom Factories
00057     _bomPool.clear();
00058   }
00059
00060   // ////////////////////////////////////////////////////////////////////
00061   void FacSupervisor::cleanServiceLayer() {
00062     for (ServiceFactoryPool_T::const_iterator itFactory = _svcPool.begin();
00063          itFactory != _svcPool.end(); itFactory++) {
00064       const FacServiceAbstract* currentFactory_ptr = *
      itFactory;
00065       assert (currentFactory_ptr != NULL);
00066
00067       delete (currentFactory_ptr); currentFactory_ptr = NULL;
00068     }
00069
00070     // Empty the pool of Service Factories
00071     _svcPool.clear();
00072   }
00073
00074   // ////////////////////////////////////////////////////////////////////
00075   void FacSupervisor::cleanFactory () {
00076         if (_instance != NULL) {
00077                 _instance->cleanBomLayer();
00078                 _instance->cleanServiceLayer();
00079         }
00080     delete (_instance); _instance = NULL;
00081   }
00082
00083 }
```

23.171 airinv/factory/FacSupervisor.hpp File Reference

```
#include <vector>
```

Classes

- class AIRINV::FacSupervisor

Namespaces

- namespace AIRINV

23.172 FacSupervisor.hpp

```
00001 #ifndef __AIRINV_FAC_FACSUPERVISOR_HPP
00002 #define __AIRINV_FAC_FACSUPERVISOR_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
```

```
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <vector>
00009
00010 namespace AIRINV {
00011
00012   // Forward declarations
00013   class FacBomAbstract;
00014   class FacServiceAbstract;
00015
00017   class FacSupervisor {
00018   public:
00019
00021     typedef std::vector<FacBomAbstract*> BomFactoryPool_T;
00022       typedef std::vector<FacServiceAbstract*> ServiceFactoryPool_T
      ;
00023
00027     static FacSupervisor& instance();
00028
00033     void registerBomFactory (FacBomAbstract*);
00034
00039     void registerServiceFactory (FacServiceAbstract
     *);
00040
00044     void cleanBomLayer();
00045
00049     void cleanServiceLayer();
00050
00053     static void cleanFactory ();
00054
00058     ~FacSupervisor();
00059
00060
00061   protected:
00065     FacSupervisor ();
00066     FacSupervisor (const FacSupervisor&) {}
00067
00068
00069   private:
00071     static FacSupervisor* _instance;
00072
00074     BomFactoryPool_T _bomPool;
00075
00077     ServiceFactoryPool_T _svcPool;
00078   };
00079 }
00080 #endif // __AIRINV_FAC_FACSUPERVISOR_HPP
```

23.173 airinv/FlightRequestStatus.hpp File Reference

```
#include <string>
#include <stdair/basic/StructAbstract.hpp>
```

Classes

- struct AIRINV::FlightRequestStatus

Namespaces

- namespace AIRINV

23.174 FlightRequestStatus.hpp

```
00001 #ifndef __AIRINV_BAS_FLIGHTREQUESTSTATUS_HPP
00002 #define __AIRINV_BAS_FLIGHTREQUESTSTATUS_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
```

```
00010 #include <stdair/basic/StructAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00015   struct FlightRequestStatus : public stdair::StructAbstract
      {
00016   public:
00017     typedef enum {
00018       OK = 0,
00019       NOT_FOUND,
00020       INTERNAL_ERROR,
00021       LAST_VALUE
00022     } EN_FlightRequestStatus;
00023
00025     static const std::string& getLabel (const EN_FlightRequestStatus
      &);
00026
00028     static const std::string& getCodeLabel (const
      EN_FlightRequestStatus&);
00029
00031     static std::string describeLabels();
00032
00034     EN_FlightRequestStatus getCode() const;
00035
00037     const std::string describe() const;
00038
00039
00040   public:
00042     FlightRequestStatus (const EN_FlightRequestStatus
      &);
00044     FlightRequestStatus (const std::string& iCode);
00045
00046
00047   private:
00049     static const std::string _labels[LAST_VALUE];
00051     static const std::string _codeLabels[LAST_VALUE];
00052
00053
00054   private:
00055     // //////// Attributes /////////
00057     EN_FlightRequestStatus _code;
00058   };
00059
00060 }
00061 #endif // __AIRINV_BAS_FLIGHTREQUESTSTATUS_HPP
```

23.175 airinv/server/AirInvClient.cpp File Reference

```
#include <string>
#include <iostream>
#include <zmq.hpp>
```

Functions

- int main (int argc, char *argv[])

23.175.1 Function Documentation

23.175.1.1 int main (int *argc*, char * *argv[]*)

Definition at line 11 of file AirInvClient.cpp.

23.176 AirInvClient.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <string>
00006 #include <iostream>
00007 // ZeroMQ
```

```
00008 #include <zmq.hpp>
00009
00010 // ////////////////// M A I N //////////////////////
00011 int main (int argc, char* argv[]) {
00012   // Prepare our context and socket
00013   zmq::context_t context (1);
00014   zmq::socket_t socket (context, ZMQ_REQ);
00015
00016   std::cout << "Connecting to hello world server..." << std::endl;
00017   socket.connect ("tcp://localhost:5555");
00018
00019   // Do 10 requests, waiting each time for a response
00020   for (int request_nbr = 0; request_nbr != 10; request_nbr++) {
00021     zmq::message_t request (6);
00022     memcpy ((void *) request.data (), "Hello", 5);
00023     std::cout << "Sending Hello " << request_nbr << "..." << std::endl;
00024     socket.send (request);
00025
00026     // Get the reply.
00027     zmq::message_t reply;
00028     socket.recv (&reply);
00029     std::cout << "Received World " << request_nbr << std::endl;
00030   }
00031   return 0;
00032 }
```

23.177 airinv/server/AirInvClient_ASIO.cpp File Reference

```
#include <cassert>
#include <iostream>
#include <string>
#include <boost/asio.hpp>
#include <boost/array.hpp>
```

Functions

- int main (int argc, char *argv[])

23.177.1 Function Documentation

23.177.1.1 int main (int *argc*, char * *argv[]*)

Definition at line 14 of file AirInvClient_ASIO.cpp.

23.178 AirInvClient_ASIO.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <iostream>
00007 #include <string>
00008 // Boost.ASIO
00009 #include <boost/asio.hpp>
00010 // Boost.Array
00011 #include <boost/array.hpp>
00012
00013 // ////////// M A I N ////////////////
00014 int main (int argc, char* argv[]) {
00015
00016   // Host name
00017   std::string lHostname = "localhost";
00018
00019   // Service name (as specified within /etc/services)
00020   // The "aria" service corresponds to the port 2624
00021   const std::string lServiceName = "aria";
00022
00023   try {
00024
```

```
00025     if (argc >= 2) {
00026       lHostname = argv[1];
00027     }
00028
00029     boost::asio::io_service lIOService;
00030
00031     boost::asio::ip::tcp::resolver lResolver (lIOService);
00032
00033     boost::asio::ip::tcp::resolver::query lQuery (lHostname, lServiceName);
00034
00035     boost::asio::ip::tcp::resolver::iterator itEndPoint =
00036       lResolver.resolve (lQuery);
00037     boost::asio::ip::tcp::resolver::iterator lEnd;
00038
00039     boost::asio::ip::tcp::socket lSocket (lIOService);
00040     boost::system::error_code lError = boost::asio::error::host_not_found;
00041
00042     //
00043     while (lError && itEndPoint != lEnd) {
00044       const boost::asio::ip::tcp::endpoint lEndPoint = *itEndPoint;
00045
00046       // DEBUG
00047       std::cout << "Testing end point: " << std::endl;
00048
00049       lSocket.close();
00050       lSocket.connect (lEndPoint, lError);
00051       ++itEndPoint;
00052     }
00053
00054     //
00055     if (lError) {
00056       throw boost::system::system_error (lError);
00057     }
00058     assert (!lError);
00059
00060     // DEBUG
00061     const boost::asio::ip::tcp::endpoint lValidEndPoint;
00062     std::cout << "Valid end point: " << lValidEndPoint << std::endl;
00063
00064     // Send a message to the server
00065     const std::string lMessage ("Hello AirInv Server!");
00066     boost::asio::write (lSocket, boost::asio::buffer (lMessage),
00067                         boost::asio::transfer_all(), lError);
00068
00069     // Read the reply from the server
00070     boost::array<char, 256> lBuffer;
00071
00072     size_t lLength = lSocket.read_some (boost::asio::buffer(lBuffer), lError);
00073
00074     // Some other error than connection closed cleanly by peer
00075     if (lError && lError != boost::asio::error::eof) {
00076       throw boost::system::system_error (lError);
00077     }
00078
00079     // DEBUG
00080     std::cout << "Reply from the server: ";
00081     std::cout.write (lBuffer.data(), lLength);
00082     std::cout << std::endl;
00083
00084   } catch (std::exception& lException) {
00085     std::cerr << lException.what() << std::endl;
00086   }
00087
00088   return 0;
00089 }
```

23.179 airinv/server/AirInvServer.cpp File Reference

23.180 AirInvServer.cpp

```
00001
00005 // ////////////////////////////////////////////////////////////////////
00006 // Import section
00007 // ////////////////////////////////////////////////////////////////////
00008 // STL
00009 #include <cassert>
00010 #include <sstream>
00011 #include <fstream>
00012 #include <string>
00013 #include <unistd.h>
00014 // Boost (Extended STL)
00015 #include <boost/program_options.hpp>
00016 #include <boost/tokenizer.hpp>
```

```
00017 // ZeroMQ
00018 #include <zmq.hpp>
00019 // StdAir
00020 #include <stdair/basic/BasLogParams.hpp>
00021 #include <stdair/basic/BasDBParams.hpp>
00022 #include <stdair/bom/BomJSONImport.hpp>
00023 #include <stdair/bom/BomJSONExport.hpp>
00024 #include <stdair/service/Logger.hpp>
00025 // AirInvServer
00026 #include <airinv/config/airinv-paths.hpp>
00027 #include <airinv/AIRINV_Master_Service.hpp>
00028
00029 // ///////// Type definitions ///////////
00030 typedef unsigned int ServerPort_T;
00031
00032 // //////// Constants //////
00034 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("airinvServer.log");
00035
00037 const std::string K_AIRINV_DEFAULT_SERVER_PROTOCOL ("tcp://");
00038
00040 const std::string K_AIRINV_DEFAULT_SERVER_ADDRESS ("*");
00041
00043 const ServerPort_T K_AIRINV_DEFAULT_SERVER_PORT (5555);
00044
00046 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00047                                                        "/invdump01.csv");
00049 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00050                                                       "/schedule01.csv");
00052 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00053                                                  "/ond01.csv");
00054
00056 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00057                                                    "/yield01.csv");
00058
00063 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00064
00069 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00070
00074 const int K_AIRINV_EARLY_RETURN_STATUS = 99;
00075
00079 struct Command_T {
00080   typedef enum {
00081     NOP = 0,
00082     QUIT,
00083     DISPLAY,
00084     SELL,
00085     LAST_VALUE
00086   } Type_T;
00087 };
00088
00089 // ///////// Parsing of Options & Configuration /////////
00090 // A helper function to simplify the main part.
00091 template<class T> std::ostream& operator<< (std::ostream& os,
00092                                             const std::vector<T>& v) {
00093   std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00094   return os;
00095 }
00096
00098 int readConfiguration (int argc, char* argv[], std::string& ioServerProtocol,
00099                        std::string& ioServerAddress, ServerPort_T& ioServerPort
      ,
00100                        bool& ioIsBuiltin, bool& ioIsForSchedule,
00101                        stdair::Filename_T& ioInventoryFilename,
00102                        stdair::Filename_T& ioScheduleInputFilename,
00103                        stdair::Filename_T& ioODInputFilename,
00104                        stdair::Filename_T& ioYieldInputFilename,
00105                        std::string& ioLogFilename) {
00106   // Default for the built-in input
00107   ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;
00108
00109   // Default for the inventory or schedule option
00110   ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00111
00112   // Declare a group of options that will be allowed only on command line
00113   boost::program_options::options_description generic ("Generic options");
00114   generic.add_options()
00115     ("prefix", "print installation prefix")
00116     ("version,v", "print version string")
00117     ("help,h", "produce help message");
00118
00119   // Declare a group of options that will be allowed both on command
00120   // line and in config file
00121
00122   boost::program_options::options_description config ("Configuration");
00123   config.add_options()
00124     ("builtin,b",
00125      "The sample BOM tree can be either built-in or parsed from an input file.
```

```
      That latter must then be given with the -i/--inventory or -s/--schedule option")
00126     ("for_schedule,f",
00127      "The BOM tree should be built from a schedule file (instead of from an
      inventory dump)")
00128     ("inventory,i",
00129      boost::program_options::value< std::string >(&ioInventoryFilename)->
     default_value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00130      "(CVS) input file for the inventory")
00131     ("schedule,s",
00132      boost::program_options::value< std::string >(&ioScheduleInputFilename)->
     default_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00133      "(CVS) input file for the schedule")
00134     ("ond,o",
00135      boost::program_options::value< std::string >(&ioODInputFilename)->
     default_value(K_AIRINV_DEFAULT_OND_FILENAME),
00136      "(CVS) input file for the O&D")
00137     ("yield,y",
00138      boost::program_options::value< std::string >(&ioYieldInputFilename)->
     default_value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00139      "(CVS) input file for the yield")
00140     ("protocol,t",
00141      boost::program_options::value< std::string >(&ioServerProtocol)->
     default_value(K_AIRINV_DEFAULT_SERVER_PROTOCOL),
00142      "Server protocol")
00143     ("address,a",
00144      boost::program_options::value< std::string >(&ioServerAddress)->
     default_value(K_AIRINV_DEFAULT_SERVER_ADDRESS),
00145      "Server address")
00146     ("port,p",
00147      boost::program_options::value< ServerPort_T >(&ioServerPort)->
     default_value(K_AIRINV_DEFAULT_SERVER_PORT),
00148      "Server port")
00149     ("log,l",
00150      boost::program_options::value< std::string >(&ioLogFilename)->
     default_value(K_AIRINV_DEFAULT_LOG_FILENAME),
00151      "Filename for the output logs")
00152     ;
00153
00154   // Hidden options, will be allowed both on command line and
00155   // in config file, but will not be shown to the user.
00156   boost::program_options::options_description hidden ("Hidden options");
00157   hidden.add_options()
00158     ("copyright",
00159      boost::program_options::value< std::vector<std::string> >(),
00160      "Show the copyright (license)");
00161
00162   boost::program_options::options_description cmdline_options;
00163   cmdline_options.add(generic).add(config).add(hidden);
00164
00165   boost::program_options::options_description config_file_options;
00166   config_file_options.add(config).add(hidden);
00167   boost::program_options::options_description visible ("Allowed options");
00168   visible.add(generic).add(config);
00169
00170   boost::program_options::positional_options_description p;
00171   p.add ("copyright", -1);
00172
00173   boost::program_options::variables_map vm;
00174   boost::program_options::
00175     store (boost::program_options::command_line_parser (argc, argv).
00176            options (cmdline_options).positional(p).run(), vm);
00177
00178   std::ifstream ifs ("airinvServer.cfg");
00179   boost::program_options::store (parse_config_file (ifs, config_file_options),
00180                                  vm);
00181   boost::program_options::notify (vm);
00182
00183   if (vm.count ("help")) {
00184     std::cout << visible << std::endl;
00185     return K_AIRINV_EARLY_RETURN_STATUS;
00186   }
00187
00188   if (vm.count ("version")) {
00189     std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION
      << std::endl;
00190     return K_AIRINV_EARLY_RETURN_STATUS;
00191   }
00192
00193   if (vm.count ("prefix")) {
00194     std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00195     return K_AIRINV_EARLY_RETURN_STATUS;
00196   }
00197
00198   if (vm.count ("protocol")) {
00199     ioServerProtocol = vm["protocol"].as< std::string >();
00200     std::cout << "Server protocol is: " << ioServerProtocol << std::endl;
00201   }
```

```
00202
00203   if (vm.count ("address")) {
00204     ioServerAddress = vm["address"].as< std::string >();
00205     std::cout << "Server address is: " << ioServerAddress << std::endl;
00206   }
00207
00208   if (vm.count ("port")) {
00209     ioServerPort = vm["port"].as< ServerPort_T >();
00210     std::cout << "Server port is: " << ioServerPort << std::endl;
00211   }
00212
00213   if (vm.count ("builtin")) {
00214     ioIsBuiltin = true;
00215   }
00216   const std::string isBuiltinStr = (ioIsBuiltin == true)?"yes":"no";
00217   std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
00218
00219   if (vm.count ("for_schedule")) {
00220     ioIsForSchedule = true;
00221   }
00222   const std::string isForScheduleStr = (ioIsForSchedule == true)?"yes":"no";
00223   std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00224             << std::endl;
00225
00226   if (ioIsBuiltin == false) {
00227
00228     if (ioIsForSchedule == false) {
00229       // The BOM tree should be built from parsing an inventory dump
00230       if (vm.count ("inventory")) {
00231         ioInventoryFilename = vm["inventory"].as< std::string >();
00232         std::cout << "Input inventory filename is: " << ioInventoryFilename
00233                   << std::endl;
00234
00235       } else {
00236         // The built-in option is not selected. However, no inventory dump
00237         // file is specified
00238         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00239                   << " -f/--for_schedule and -s/--schedule options "
00240                   << "must be specified" << std::endl;
00241       }
00242
00243     } else {
00244       // The BOM tree should be built from parsing a schedule (and O&D) file
00245       if (vm.count ("schedule")) {
00246         ioScheduleInputFilename = vm["schedule"].as< std::string >();
00247         std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00248                   << std::endl;
00249
00250       } else {
00251         // The built-in option is not selected. However, no schedule file
00252         // is specified
00253         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00254                   << " -f/--for_schedule and -s/--schedule options "
00255                   << "must be specified" << std::endl;
00256       }
00257
00258       if (vm.count ("ond")) {
00259         ioODInputFilename = vm["ond"].as< std::string >();
00260         std::cout << "Input O&D filename is: " << ioODInputFilename <<
      std::endl;
00261       }
00262
00263       if (vm.count ("yield")) {
00264         ioYieldInputFilename = vm["yield"].as< std::string >();
00265         std::cout << "Input yield filename is: " << ioYieldInputFilename <<
      std::endl;
00266       }
00267     }
00268   }
00269
00270   if (vm.count ("log")) {
00271     ioLogFilename = vm["log"].as< std::string >();
00272     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00273   }
00274
00275   return 0;
00276 }
00277
00278
00279 // ///////// Utility functions on top of the ZeroMQ library /////////
00283 static std::string s_recv (zmq::socket_t& socket) {
00284   zmq::message_t message;
00285   socket.recv (&message);
00286
00287   return std::string (static_cast<char*> (message.data()), message.size());
00288 }
00289
```

```
00293 static bool s_send (zmq::socket_t& socket, const std::string& string) {
00294   zmq::message_t message (string.size());
00295   memcpy (message.data(), string.data(), string.size());
00296
00297   bool rc = socket.send (message);
00298   return rc;
00299 }
00300
00301
00302 // ////////////////////// M A I N ////////////////////////
00303 int main (int argc, char* argv[]) {
00304
00305   // Server parameters (for ZeroMQ)
00306   std::string ioServerProtocol;
00307   std::string ioServerAddress;
00308   ServerPort_T ioServerPort;
00309
00310   // State whether the BOM tree should be built-in or parsed from an
00311   // input file
00312   bool isBuiltin;
00313   bool isForSchedule;
00314
00315   // Input file names
00316   stdair::Filename_T lInventoryFilename;
00317   stdair::Filename_T lScheduleInputFilename;
00318   stdair::Filename_T lODInputFilename;
00319   stdair::Filename_T lYieldInputFilename;
00320
00321   // Output log File
00322   stdair::Filename_T lLogFilename;
00323
00324   // Call the command-line option parser
00325   const int lOptionParserStatus =
00326     readConfiguration (argc, argv, ioServerProtocol, ioServerAddress,
00327                        ioServerPort, isBuiltin, isForSchedule,
00328                        lInventoryFilename, lScheduleInputFilename,
00329                        lODInputFilename, lYieldInputFilename, lLogFilename);
00330
00331   if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00332     return 0;
00333   }
00334
00335   // Set the log parameters
00336   std::ofstream logOutputFile;
00337   // Open and clean the log outputfile
00338   logOutputFile.open (lLogFilename.c_str());
00339   logOutputFile.clear();
00340
00341   // Initialise the inventory service
00342   const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00343   AIRINV::AIRINV_Master_Service airinvService (
      lLogParams);
00344
00345   // DEBUG
00346   STDAIR_LOG_DEBUG ("Initialisation of the AirInv server");
00347
00348   // Check wether or not a (CSV) input file should be read
00349   if (isBuiltin == true) {
00350
00351     // Build the sample BOM tree for RMOL
00352     airinvService.buildSampleBom();
00353
00354   } else {
00355     if (isForSchedule == true) {
00356       // Build the BOM tree from parsing a schedule file (and O&D list)
00357       AIRRAC::YieldFilePath lYieldFilePath (lYieldInputFilename);
00358       airinvService.parseAndLoad (lScheduleInputFilename, lODInputFilename,
00359                                   lYieldFilePath);
00360
00361     } else {
00362       // Build the BOM tree from parsing an inventory dump file
00363       airinvService.parseAndLoad (lInventoryFilename);
00364     }
00365   }
00366
00367   // Build the connection string (e.g., "tcp://*:5555", which is the default)
00368   std::ostringstream oZeroMQBindStream;
00369   oZeroMQBindStream << ioServerProtocol << ioServerAddress
00370                     << ":" << ioServerPort;
00371   const std::string lZeroMQBindString (oZeroMQBindStream.str());
00372
00373   // Prepare the context and socket of the server
00374   zmq::context_t context (1);
00375   zmq::socket_t socket (context, ZMQ_REP);
00376   socket.bind (lZeroMQBindString.c_str());
00377
00378   // DEBUG
```

```
00379   STDAIR_LOG_DEBUG ("The AirInv server is ready to receive requests...");
00380
00381   while (true) {
00382
00383     // Wait for next request from client, which is expected to give
00384     // the JSON-ified details of the requested flight-date
00385     const std::string& lFlightDateKeyJSONString = s_recv (socket);
00386
00387     // DEBUG
00388     STDAIR_LOG_DEBUG ("Received: '" << lFlightDateKeyJSONString << "'");
00389
00390     // Extract, from the JSON-ified string an airline code
00391     stdair::AirlineCode_T lAirlineCode;
00392     stdair::BomJSONImport::jsonImportInventoryKey (lFlightDateKeyJSONString,
00393                                                    lAirlineCode);
00394
00395     // Extract, from the JSON-ified string a flight number and a departure date
00396     stdair::FlightNumber_T lFlightNumber;
00397     stdair::Date_T lDate;
00398     stdair::BomJSONImport::jsonImportFlightDateKey (lFlightDateKeyJSONString,
00399                                                     lFlightNumber, lDate);
00400
00401     // DEBUG
00402     STDAIR_LOG_DEBUG ("=> airline code = '" << lAirlineCode
00403                       << "', flight number = " << lFlightNumber
00404                       << "', departure date = '" << lDate << "'");
00405
00406     // DEBUG: Display the flight-date dump
00407     const std::string& lFlightDateCSVDump =
00408       airinvService.csvDisplay (lAirlineCode, lFlightNumber, lDate);
00409     STDAIR_LOG_DEBUG (std::endl << lFlightDateCSVDump);
00410
00411     // Dump the full details of the flight-date into the JSON-ified flight-date
00412     const std::string& lFlightDateJSONDump =
00413       airinvService.jsonExport (lAirlineCode, lFlightNumber, lDate);
00414
00415     // DEBUG
00416     STDAIR_LOG_DEBUG ("Send: '" << lFlightDateJSONDump << "'");
00417
00418     // Send back the flight-date details to the client
00419     s_send (socket, lFlightDateJSONDump);
00420   }
00421
00422   return 0;
00423 }
00424
```

23.181 airinv/server/AirInvServer.hpp File Reference

```
#include <string>
#include <vector>
#include <boost/asio.hpp>
#include <boost/noncopyable.hpp>
#include <boost/shared_ptr.hpp>
#include <stdair/stdair_basic_types.hpp>
#include <airinv/server/Connection.hpp>
#include <airinv/server/RequestHandler.hpp>
```

Classes

- class AIRINV::AirInvServer

Namespaces

- namespace AIRINV

23.182 AirInvServer.hpp

```
00001 #ifndef __AIRINV_SVR_AIRINVSERVER_HPP
00002 #define __AIRINV_SVR_AIRINVSERVER_HPP
```

```
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // Boost
00011 #include <boost/asio.hpp>
00012 #include <boost/noncopyable.hpp>
00013 #include <boost/shared_ptr.hpp>
00014 // StdAir
00015 #include <stdair/stdair_basic_types.hpp>
00016 // AirInv
00017 #include <airinv/server/Connection.hpp>
00018 #include <airinv/server/RequestHandler.hpp>
00019
00020 namespace AIRINV {
00021
00023   class AirInvServer : private boost::noncopyable {
00024   public:
00025     // ////////////// Constructors and Destructors /////////////////
00029     AirInvServer (const std::string& address, const std::string&
     port,
00030                   const stdair::AirlineCode_T& iAirlineCode,
00031                   std::size_t thread_pool_size);
00033     ~AirInvServer();
00034
00035
00036   public:
00037     // ////////////////// Business Methods ////////////////////
00039     void run();
00040
00042     void stop();
00043
00044
00045   private:
00046     // ////////////// Constructors and Destructors /////////////////
00048     AirInvServer();
00049     AirInvServer(const AirInvServer&);
00050
00051
00052   private:
00053     // ////////////// Attributes /////////////////
00055     void handleAccept (const boost::system::error_code& e);
00056
00058     std::size_t _threadPoolSize;
00059
00061     boost::asio::io_service _ioService;
00062
00064     boost::asio::ip::tcp::acceptor _acceptor;
00065
00067     ConnectionShrPtr_T _newConnection;
00068
00070     RequestHandler _requestHandler;
00071   };
00072
00073 }
00074 #endif // __AIRINV_SVR_AIRINVSERVER_HPP
```

23.183 airinv/server/AirInvServer_ASIO.cpp File Reference

```
#include <cassert>
#include <boost/thread.hpp>
#include <boost/bind.hpp>
#include <airinv/server/AirInvServer.hpp>
```

Namespaces

- namespace AIRINV

Typedefs

- typedef boost::shared_ptr < boost::thread > AIRINV::ThreadShrPtr_T

- typedef std::vector
  < ThreadShrPtr_T > AIRINV::ThreadShrPtrList_T

23.184 AirInvServer_ASIO.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/thread.hpp>
00008 #include <boost/bind.hpp>
00009 // AirInv
00010 #include <airinv/server/AirInvServer.hpp>
00011
00012 namespace AIRINV {
00013
00014   // Type definitions
00015   typedef boost::shared_ptr<boost::thread> ThreadShrPtr_T;
00016   typedef std::vector<ThreadShrPtr_T> ThreadShrPtrList_T;
00017
00018
00019   // ////////////////////////////////////////////////////////////////////
00020   AirInvServer::AirInvServer (const std::string& address,
00021                               const std::string& port,
00022                               const stdair::AirlineCode_T& iAirlineCode,
00023                               std::size_t iThreadPoolSize)
00024     : _threadPoolSize (iThreadPoolSize), _acceptor (_ioService),
00025       _newConnection (new Connection (_ioService, _requestHandler)),
00026       _requestHandler (iAirlineCode) {
00027
00028     // Open the acceptor with the option to reuse the address
00029     // (i.e. SO_REUSEADDR).
00030     boost::asio::ip::tcp::resolver resolver (_ioService);
00031     boost::asio::ip::tcp::resolver::query query (address, port);
00032     boost::asio::ip::tcp::endpoint endpoint = *resolver.resolve(query);
00033
00034     _acceptor.open (endpoint.protocol());
00035     _acceptor.set_option (boost::asio::ip::tcp::acceptor::reuse_address(true));
00036     _acceptor.bind (endpoint);
00037     _acceptor.listen();
00038
00039     assert (_newConnection != NULL);
00040     _acceptor.async_accept (_newConnection->socket(),
00041                             boost::bind (&AirInvServer::handleAccept, this,
00042                                          boost::asio::placeholders::error));
00043   }
00044
00045   // ////////////////////////////////////////////////////////////////////
00046   AirInvServer::~AirInvServer () {
00047   }
00048
00049   // ////////////////////////////////////////////////////////////////////
00050   void AirInvServer::run() {
00051     // Create a pool of threads to run all of the io_services.
00052     ThreadShrPtrList_T lThreadList;
00053
00054     for (std::size_t itThread = 0; itThread != _threadPoolSize; ++itThread) {
00055       ThreadShrPtr_T lThread (new boost::thread (boost::bind (&
      boost::asio::io_service::run,
00056                                                               &_ioService)));
00057       lThreadList.push_back (lThread);
00058     }
00059
00060     // Wait for all threads in the pool to exit.
00061     for (std::size_t itThread = 0; itThread != lThreadList.size(); ++itThread)
     {
00062       boost::shared_ptr<boost::thread> lThread_ptr = lThreadList.at (itThread);
00063       assert (lThread_ptr != NULL);
00064       lThread_ptr->join();
00065     }
00066   }
00067
00068   // ////////////////////////////////////////////////////////////////////
00069   void AirInvServer::stop() {
00070     _ioService.stop();
00071   }
00072
00073   // ////////////////////////////////////////////////////////////////////
00074   void AirInvServer::handleAccept (const boost::system::error_code& iError) {
00075
00076     if (!iError) {
00077
```

```
00078       assert (_newConnection != NULL);
00079
00080       // The Connection object now takes in charge reading an incoming
00081       // message from the socket, and writing back a message.
00082       _newConnection->start();
00083
00084       // The (Boost) shared pointer is resetted to a newly allocated Connection
00085       // object. As the older Connection object is no longer pointed to, it is
00086       // deleted by the shared pointer mechanism.
00087       _newConnection.reset (new Connection (_ioService,
      _requestHandler));
00088
00089       _acceptor.async_accept (_newConnection->socket(),
00090                               boost::bind (&AirInvServer::handleAccept, this,
00091                                            boost::asio::placeholders::error));
00092     }
00093   }
00094
00095 }
```

23.185 airinv/server/BomPropertyTree.cpp File Reference

```
#include <boost/property_tree/ptree.hpp>
#include <boost/property_tree/json_parser.hpp>
#include <boost/foreach.hpp>
#include <airinv/server/BomPropertyTree.hpp>
```

Namespaces

- namespace stdair

  Forward declarations.

23.186 BomPropertyTree.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // Boost Property Tree
00005 #include <boost/property_tree/ptree.hpp>
00006 #include <boost/property_tree/json_parser.hpp>
00007 // Boost ForEach
00008 #include <boost/foreach.hpp>
00009 // AirInvServer
00010 #include <airinv/server/BomPropertyTree.hpp>
00011
00012 namespace bpt = boost::property_tree;
00013
00014 namespace stdair {
00015
00016   // Loads BomPropertyTree structure from the specified JSON file
00017   void BomPropertyTree::load (const std::string& iBomTree)
      {
00018     // Create an empty property tree object
00019     bpt::ptree pt;
00020
00021     // Load the JSON formatted string into the property tree. If reading fails
00022     // (cannot open stream, parse error), an exception is thrown.
00023     std::istringstream iStr (iBomTree);
00024     read_json (iStr, pt);
00025
00026     // Get the airline_code and store it in the _airlineCode variable.
00027     // Note that we construct the path to the value by separating
00028     // the individual keys with dots. If dots appear in the keys,
00029     // a path type with a different separator can be used.
00030     // If the flight_date.airline_code key is not found, an exception is
      thrown.
00031     _airlineCode = pt.get<stdair::AirlineCode_T> ("
      flight_date.airline_code");
00032
00033     // Get the departure_date and store it in the _departureDate variable.
00034     // This is another version of the get method: if the value is
00035     // not found, the default value (specified by the second
00036     // parameter) is returned instead. The type of the value
00037     // extracted is determined by the type of the second parameter,
```

```
00038     // so we can simply write get(...) instead of get<int>(...).
00039     _flightNumber =
00040       pt.get<stdair::FlightNumber_T> ("flight_date.flight_number", 100);
00041
00042     const std::string& lDepartureDateStr =
00043       pt.get<std::string> ("flight_date.departure_date");
00044     _departureDate = boost::gregorian::from_simple_string (
      lDepartureDateStr);
00045
00046     // Iterate over the flight_date.airport_codes section and store all found
00047     // codes in the _airportCodeList set. The get_child() function
00048     // returns a reference to the child at the specified path; if
00049     // there is no such child, it throws. Property tree iterators
00050     // are models of BidirectionalIterator.
00051     /*
00052     BOOST_FOREACH (bpt::ptree::value_type &v,
00053                    pt.get_child ("flight_date.airport_codes")) {
00054       _airportCodeList.insert (v.second.data());
00055     }
00056     */
00057   }
00058
00059   // Saves the BomPropertyTree structure to the specified JSON file
00060   std::string BomPropertyTree::save() const {
00061     std::ostringstream oStr;
00062
00063     // Create an empty property tree object
00064     bpt::ptree pt;
00065
00066     // Put airline code in property tree
00067     pt.put ("flight_date.airline_code", _airlineCode);
00068
00069     // Put flight number level in property tree
00070     pt.put ("flight_date.flight_number", _flightNumber);
00071
00072     // Put the flight departure date in property tree
00073     const std::string& lDepartureDateStr =
00074       boost::gregorian::to_simple_string (_departureDate);
00075     pt.put ("flight_date.departure_date", lDepartureDateStr);
00076
00077     // Iterate over the airport codes in the set and put them in the
00078     // property tree. Note that the put function places the new
00079     // key at the end of the list of keys. This is fine most of
00080     // the time. If you want to place an item at some other place
00081     // (i.e. at the front or somewhere in the middle), this can
00082     // be achieved using a combination of the insert and put_own
00083     // functions.
00084     bpt::ptree lAirportCodeArray;
00085     BOOST_FOREACH (const std::string& name, _airportCodeList) {
00086       lAirportCodeArray.push_back (std::pair<bpt::ptree::key_type,
00087                                              bpt::ptree::data_type> ("", name))
      ;
00088     }
00089     pt.put_child ("flight_date.airport_codes", lAirportCodeArray);
00090     //pt.push_back (std::make_pair ("flight_date.airport_codes",
       lAirportCodeArray));
00091
00092     // Write the property tree to the JSON stream.
00093     write_json (oStr, pt);
00094
00095     return oStr.str();
00096   }
00097
00098 }
```

23.187 airinv/server/BomPropertyTree.hpp File Reference

```
#include <string>
#include <set>
#include <stdair/stdair_basic_types.hpp>
#include <stdair/stdair_date_time_types.hpp>
```

Classes

- struct stdair::BomPropertyTree

Namespaces

- namespace stdair

  Forward declarations.

23.188 BomPropertyTree.hpp

```
00001 #ifndef __AIRINV_SVR_BOMPROPERTYTREE_HPP
00002 #define __AIRINV_SVR_BOMPROPERTYTREE_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <set>
00010 // StdAir
00011 #include <stdair/stdair_basic_types.hpp>
00012 #include <stdair/stdair_date_time_types.hpp>
00013
00014 namespace stdair {
00015
00019   struct BomPropertyTree {
00024     void load (const std::string& iBomTree);
00025
00029     std::string save() const;
00030
00031     // ************* Attributes ************
00033     stdair::AirlineCode_T _airlineCode;
00034
00036     stdair::FlightNumber_T _flightNumber;
00037
00039     stdair::Date_T _departureDate;
00040
00042     std::set<stdair::AirportCode_T> _airportCodeList;
00043   };
00044
00045 }
00046 #endif // __AIRINV_SVR_BOMPROPERTYTREE_HPP
```

23.189 airinv/server/Connection.cpp File Reference

```
#include <cassert>
#include <vector>
#include <boost/bind.hpp>
#include <airinv/server/RequestHandler.hpp>
#include <airinv/server/Connection.hpp>
```

Namespaces

- namespace AIRINV

23.190 Connection.cpp

```
00001 // //////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <vector>
00007 // Boost
00008 #include <boost/bind.hpp>
00009 // AirInv
00010 #include <airinv/server/RequestHandler.hpp>
00011 #include <airinv/server/Connection.hpp>
00012
00013 namespace AIRINV {
00014
00015   // //////////////////////////////////////////////////////////////////
00016   Connection::Connection (boost::asio::io_service&
```

```
      ioService,
00017                           RequestHandler& ioHandler)
00018     : _strand (ioService), _socket (ioService), _requestHandler (ioHandler) {
00019   }
00020
00021   // ////////////////////////////////////////////////////////////////////
00022   boost::asio::ip::tcp::socket& Connection::socket() {
00023     return _socket;
00024   }
00025
00026   // ////////////////////////////////////////////////////////////////////
00027   void Connection::start() {
00028
00029     _socket.async_read_some (boost::asio::buffer (_buffer),
00030                              _strand.wrap (boost::bind (&Connection::handleRead
      ,
00031                                                         shared_from_this(),
00032
      boost::asio::placeholders::error,
00033
      boost::asio::placeholders::bytes_transferred)));
00034   }
00035
00036   // ////////////////////////////////////////////////////////////////////
00037   void Connection::handleRead (const boost::system::error_code& iErrorCode,
00038                                std::size_t bytes_transferred) {
00039     if (!iErrorCode) {
00040       _request._flightDetails = _buffer.data();
00041       const bool hasBeenSuccessfull = _requestHandler.handleRequest
       (_request,
00042                                                                   _reply);
00043
00044       if (hasBeenSuccessfull == true) {
00045
00046         boost::asio::async_write (_socket, _reply.to_buffers(),
00047                                   _strand.wrap (boost::bind (&
      Connection::handleWrite,
00048                                                              shared_from_this()
      ,
00049
      boost::asio::placeholders::error)));
00050
00051       } else {
00052
00053         boost::asio::async_write (_socket, _reply.to_buffers(),
00054                                   _strand.wrap (boost::bind (&
      Connection::handleWrite,
00055                                                              shared_from_this()
      ,
00056
      boost::asio::placeholders::error)));
00057
00058       }
00059     }
00060
00061     // If an error occurs then no new asynchronous operations are
00062     // started. This means that all shared_ptr references to the
00063     // connection object will disappear and the object will be
00064     // destroyed automatically after this handler returns. The
00065     // connection class's destructor closes the socket.
00066   }
00067
00068   // ////////////////////////////////////////////////////////////////////
00069   void Connection::handleWrite (const boost::system::error_code& iErrorCode) {
00070
00071     if (!iErrorCode) {
00072       // Initiate graceful connection closure.
00073       boost::system::error_code ignored_ec;
00074       _socket.shutdown (boost::asio::ip::tcp::socket::shutdown_both,
00075                         ignored_ec);
00076     }
00077
00078     // No new asynchronous operations are started. This means that all
00079     // shared_ptr references to the connection object will disappear
00080     // and the object will be destroyed automatically after this
00081     // handler returns. The connection class's destructor closes the
00082     // socket.
00083   }
00084
00085 }
```

23.191 airinv/server/Connection.hpp File Reference

```
#include <boost/asio.hpp>
#include <boost/array.hpp>
#include <boost/noncopyable.hpp>
#include <boost/shared_ptr.hpp>
#include <boost/enable_shared_from_this.hpp>
#include <airinv/server/Reply.hpp>
#include <airinv/server/Request.hpp>
```

Classes

- class AIRINV::Connection

Namespaces

- namespace AIRINV

Typedefs

- typedef boost::shared_ptr < Connection > AIRINV::ConnectionShrPtr_T

23.192 Connection.hpp

```
00001 #ifndef __AIRINV_SVR_CONNECTION_HPP
00002 #define __AIRINV_SVR_CONNECTION_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 // Boost
00009 #include <boost/asio.hpp>
00010 #include <boost/array.hpp>
00011 #include <boost/noncopyable.hpp>
00012 #include <boost/shared_ptr.hpp>
00013 #include <boost/enable_shared_from_this.hpp>
00014 // AirInv
00015 #include <airinv/server/Reply.hpp>
00016 #include <airinv/server/Request.hpp>
00017
00018 namespace AIRINV {
00019
00020   // Forward declarations.
00021   class RequestHandler;
00022
00023
00025   class Connection : public boost::enable_shared_from_this<Connection
      >,
00026                      private boost::noncopyable {
00027   public:
00028     // ////////////// Constructors and Destructors /////////////////
00031     Connection (boost::asio::io_service&, RequestHandler
      &);
00032
00033
00034     // /////////// Business Support Methods ////////////////
00036     boost::asio::ip::tcp::socket& socket();
00037
00039     void start();
00040
00041
00042   private:
00044     void handleRead (const boost::system::error_code& e,
00045                      std::size_t bytes_transferred);
00046
00048     void handleWrite (const boost::system::error_code& e);
00049
```

```
00052     boost::asio::io_service::strand _strand;
00053
00055     boost::asio::ip::tcp::socket _socket;
00056
00058     RequestHandler& _requestHandler;
00059
00061     boost::array<char, 8192> _buffer;
00062
00064     Request _request;
00065
00067     Reply _reply;
00068   };
00069
00071   typedef boost::shared_ptr<Connection> ConnectionShrPtr_T;
00072
00073 }
00074 #endif // __AIRINV_SVR_CONNECTION_HPP
```

23.193 airinv/server/header.hpp File Reference

```
#include <string>
```

Classes

- struct AIRINV::header

Namespaces

- namespace AIRINV

23.194 header.hpp

```
00001 #ifndef __AIRINV_SVR_HEADER_HPP
00002 #define __AIRINV_SVR_HEADER_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009
00010 namespace AIRINV {
00011
00013   struct header {
00014     std::string name;
00015     std::string value;
00016   };
00017
00018 }
00019 #endif // __AIRINV_SVR_HEADER_HPP
```

23.195 airinv/server/posix_main.cpp File Reference

```
#include <iostream>
#include <string>
#include <boost/asio.hpp>
#include <boost/thread.hpp>
#include <boost/bind.hpp>
#include <boost/lexical_cast.hpp>
#include <airinv/server/AirInvServer.hpp>
#include <pthread.h>
#include <signal.h>
```

Functions

- int main (int argc, char ∗argv[])

23.195.1 Function Documentation

23.195.1.1 int main (int *argc*, char ∗ *argv[]*)

Definition at line 25 of file posix_main.cpp.

References AIRINV::AirInvServer::run().

23.196 posix_main.cpp

```
00001 //
00002 // posix_main.cpp
00003 // ~~~~~~~~~~~~~~
00004 //
00005 // Copyright (c) 2003-2008 Christopher M. Kohlhoff (chris at kohlhoff dot com)
00006 //
00007 // Distributed under the Boost Software License, Version 1.0. (See accompanying
00008 // file LICENSE_1_0.txt or copy at http://www.boost.org/LICENSE_1_0.txt)
00009 //
00010
00011 #include <iostream>
00012 #include <string>
00013 #include <boost/asio.hpp>
00014 #include <boost/thread.hpp>
00015 #include <boost/bind.hpp>
00016 #include <boost/lexical_cast.hpp>
00017 #include <airinv/server/AirInvServer.hpp>
00018
00019 #if !defined(_WIN32)
00020
00021 #include <pthread.h>
00022 #include <signal.h>
00023
00024 // ////////////////// M A I N ////////////////////
00025 int main(int argc, char* argv[]) {
00026
00027   try {
00028
00029     // Check command line arguments.
00030     if (argc != 5) {
00031       std::cerr << "Usage: airinvServer <address> <port> <threads> <doc_root>"
00032                 << std::endl;
00033       std::cerr << "  For IPv4, try:" << std::endl;
00034       std::cerr << "    receiver 0.0.0.0 80 1 ." << std::endl;
00035       std::cerr << "  For IPv6, try:" << std::endl;
00036       std::cerr << "    receiver 0::0 80 1 ." << std::endl;
00037       return 1;
00038     }
00039
00040     // Block all signals for background thread.
00041     sigset_t new_mask;
00042     sigfillset (&new_mask);
00043     sigset_t old_mask;
00044     pthread_sigmask (SIG_BLOCK, &new_mask, &old_mask);
00045
00046     // Run server in background thread.
00047     std::size_t num_threads = boost::lexical_cast<std::size_t>(argv[3]);
00048     AIRINV::AirInvServer s (argv[1], argv[2], argv[4],
      num_threads);
00049     boost::thread t (boost::bind (&AIRINV::AirInvServer::run
      , &s));
00050
00051     // Restore previous signals.
00052     pthread_sigmask (SIG_SETMASK, &old_mask, 0);
00053
00054     // Wait for signal indicating time to shut down.
00055     sigset_t wait_mask;
00056     sigemptyset (&wait_mask);
00057     sigaddset (&wait_mask, SIGINT);
00058     sigaddset (&wait_mask, SIGQUIT);
00059     sigaddset (&wait_mask, SIGTERM);
00060     pthread_sigmask (SIG_BLOCK, &wait_mask, 0);
00061     int sig = 0;
00062     sigwait (&wait_mask, &sig);
00063
```

```
00064     // Stop the server.
00065     s.stop();
00066     t.join();
00067
00068   } catch (std::exception& e) {
00069     std::cerr << "exception: " << e.what() << "\n";
00070   }
00071
00072   return 0;
00073 }
00074
00075 #endif // !defined(_WIN32)
```

23.197 airinv/server/Reply.cpp File Reference

```
#include <cassert>
#include <string>
#include <boost/lexical_cast.hpp>
#include <airinv/server/Reply.hpp>
```

Namespaces

- namespace AIRINV

23.198 Reply.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <string>
00007 // Boost
00008 #include <boost/lexical_cast.hpp>
00009 // AirInv
00010 #include <airinv/server/Reply.hpp>
00011
00012 namespace AIRINV {
00013
00014   // ////////////////////////////////////////////////////////////////////
00015   std::vector<boost::asio::const_buffer> Reply::to_buffers() {
00016     std::vector<boost::asio::const_buffer> lBuffers;
00017     lBuffers.push_back (boost::asio::buffer(content));
00018     return lBuffers;
00019   }
00020
00021 }
```

23.199 airinv/server/Reply.hpp File Reference

```
#include <string>
#include <vector>
#include <boost/asio.hpp>
#include <airinv/FlightRequestStatus.hpp>
```

Classes

- struct AIRINV::Reply

Namespaces

- namespace AIRINV

23.200 Reply.hpp

```
00001 #ifndef __AIRINV_SVR_REPLY_HPP
00002 #define __AIRINV_SVR_REPLY_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // Boost
00011 #include <boost/asio.hpp>
00012 // AirInv
00013 #include <airinv/FlightRequestStatus.hpp>
00014
00015 namespace AIRINV {
00016
00018   struct Reply {
00020     FlightRequestStatus::EN_FlightRequestStatus
      _status;
00021
00023     std::string content;
00024
00029     std::vector<boost::asio::const_buffer> to_buffers();
00030   };
00031
00032 }
00033 #endif // __AIRINV_SVR_REPLY_HPP
```

23.201 airinv/server/Request.cpp File Reference

```
#include <cassert>
#include <airinv/server/Request.hpp>
```

Namespaces

- namespace AIRINV

23.202 Request.cpp

```
00001 // //////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AirInv
00007 #include <airinv/server/Request.hpp>
00008
00009 namespace AIRINV {
00010
00011   // //////////////////////////////////////////////////////////////////
00012   bool Request::parseFlightDate () {
00013     bool hasBeenSuccessfull = false;
00014
00015     //
00016     _airlineCode = "BA";
00017     _flightNumber = 341;
00018     _departureDate = stdair::Date_T (2010, 04, 20);
00019
00020     //
00021     hasBeenSuccessfull = true;
00022
00023     return hasBeenSuccessfull;
00024   }
00025
00026 }
```

23.203 airinv/server/Request.hpp File Reference

```
#include <string>
```

```
#include <vector>
#include <stdair/stdair_basic_types.hpp>
#include <stdair/stdair_date_time_types.hpp>
```

Classes

- struct AIRINV::Request

Namespaces

- namespace AIRINV

23.204 Request.hpp

```
00001 #ifndef __AIRINV_SVR_REQUEST_HPP
00002 #define __AIRINV_SVR_REQUEST_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_basic_types.hpp>
00012 #include <stdair/stdair_date_time_types.hpp>
00013 // AirInv
00014
00015 namespace AIRINV {
00016
00018   struct Request {
00019   public:
00024     bool parseFlightDate();
00025
00026   public:
00027     // /////////// Attributes ///////////////
00029     std::string _flightDetails;
00031     stdair::AirlineCode_T _airlineCode;
00033     stdair::FlightNumber_T _flightNumber;
00035     stdair::Date_T _departureDate;
00036   };
00037
00038 }
00039 #endif // __AIRINV_SVR_REQUEST_HPP
```

23.205 airinv/server/RequestHandler.cpp File Reference

```
#include <cassert>
#include <string>
#include <fstream>
#include <sstream>
#include <boost/lexical_cast.hpp>
#include <airinv/server/Reply.hpp>
#include <airinv/server/Request.hpp>
#include <airinv/server/RequestHandler.hpp>
```

Namespaces

- namespace AIRINV

23.206 RequestHandler.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <string>
00007 #include <fstream>
00008 #include <sstream>
00009 // Boost
00010 #include <boost/lexical_cast.hpp>
00011 // StdAir
00012 // AirInv
00013 #include <airinv/server/Reply.hpp>
00014 #include <airinv/server/Request.hpp>
00015 #include <airinv/server/RequestHandler.hpp>
00016
00017 namespace AIRINV {
00018
00019   // ////////////////////////////////////////////////////////////////////
00020   RequestHandler::RequestHandler (const
      stdair::AirlineCode_T& iAirlineCode)
00021     : _airlineCode (iAirlineCode) {
00022   }
00023
00024   // ////////////////////////////////////////////////////////////////////
00025   bool RequestHandler::
00026   handleRequest (Request& ioRequest, Reply& ioReply)
       const {
00027     bool hasBeenSuccessfull = false;
00028
00029     // Decode request string to a flight-date details (airline code,
00030     // flight number and departure date)
00031     hasBeenSuccessfull = ioRequest.parseFlightDate();
00032
00033     if (hasBeenSuccessfull == false) {
00034       ioReply._status = FlightRequestStatus::INTERNAL_ERROR
      ;
00035       return hasBeenSuccessfull;
00036     }
00037
00045     // Fill out the reply to be sent to the client.
00046     ioReply._status = FlightRequestStatus::OK;
00047     ioReply.content = "Your are looking for: '" + ioRequest.
      _flightDetails + "'. Ok, I have found your flight-date. Be
       patient until I give you more information about it";
00048
00049     return hasBeenSuccessfull;
00050   }
00051
00052 }
```

23.207 airinv/server/RequestHandler.hpp File Reference

```
#include <string>
#include <boost/noncopyable.hpp>
#include <stdair/stdair_basic_types.hpp>
```

Classes

- class AIRINV::RequestHandler

  The common handler for all incoming requests.

Namespaces

- namespace stdair

  Forward declarations.
- namespace AIRINV

23.208 RequestHandler.hpp

```
00001 #ifndef __AIRINV_SVR_REQUESTHANDLER_HPP
00002 #define __AIRINV_SVR_REQUESTHANDLER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // Boost
00010 #include <boost/noncopyable.hpp>
00011 // StdAir
00012 #include <stdair/stdair_basic_types.hpp>
00013 // AirInv
00014
00015 // Forward declarations
00016 namespace stdair {
00017   struct InventoryKey_T;
00018   struct FlightDateKey_T;
00019 }
00020
00021 namespace AIRINV {
00022
00023   // Forward declarations.
00024   struct Reply;
00025   struct Request;
00026
00028   class RequestHandler : private boost::noncopyable {
00029   public:
00030     // ////////////// Constructors and Destructors /////////////////
00034     RequestHandler (const stdair::AirlineCode_T&);
00035
00036
00037   public:
00038     // /////////// Business Support Methods ////////////////
00040     bool handleRequest (Request&, Reply&) const;
00041
00042
00043   private:
00044     // ///////////////// Attributes /////////////////
00046     stdair::AirlineCode_T _airlineCode;
00047   };
00048
00049 }
00050 #endif // __AIRINV_SVR_REQUESTHANDLER_HPP
```

23.209 airinv/server/RequestParser.cpp File Reference

```
#include <cassert>
#include <airinv/server/RequestParser.hpp>
#include <airinv/server/Request.hpp>
```

Namespaces

- namespace AIRINV

23.210 RequestParser.cpp

```
00001 // //////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AirInv
00007 #include <airinv/server/RequestParser.hpp>
00008 #include <airinv/server/Request.hpp>
00009
00010 namespace AIRINV {
00011
00012   // //////////////////////////////////////////////////////////////////
00013   RequestParser::RequestParser()
00014     : state_(method_start) {
00015   }
00016
```

```
00017 // ////////////////////////////////////////////////////////////////////////
00018 void RequestParser::reset() {
00019   state_ = method_start;
00020 }
00021
00022 // ////////////////////////////////////////////////////////////////////////
00023 boost::tribool RequestParser::consume (Request& req, char input) {
00024
00025   switch (state_) {
00026
00027   case method_start:
00028     if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00029       return false;
00030
00031     } else {
00032       state_ = method;
00033       req.method.push_back(input);
00034       return boost::indeterminate;
00035     }
00036
00037   case method:
00038     if (input == ' ') {
00039       state_ = uri;
00040       return boost::indeterminate;
00041
00042     } else if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00043       return false;
00044
00045     } else {
00046       req.method.push_back(input);
00047       return boost::indeterminate;
00048     }
00049
00050   case uri_start:
00051     if (is_ctl(input)) {
00052       return false;
00053
00054     } else {
00055       state_ = uri;
00056       req.uri.push_back(input);
00057       return boost::indeterminate;
00058     }
00059
00060   case uri:
00061     if (input == ' ') {
00062       state_ = http_version_h;
00063       return boost::indeterminate;
00064
00065     } else if (is_ctl(input)) {
00066       return false;
00067
00068     } else {
00069       req.uri.push_back(input);
00070       return boost::indeterminate;
00071     }
00072
00073   case http_version_h:
00074     if (input == 'H') {
00075       state_ = http_version_t_1;
00076       return boost::indeterminate;
00077
00078     } else {
00079       return false;
00080     }
00081
00082   case http_version_t_1:
00083     if (input == 'T') {
00084       state_ = http_version_t_2;
00085       return boost::indeterminate;
00086
00087     } else {
00088       return false;
00089     }
00090
00091   case http_version_t_2:
00092     if (input == 'T') {
00093       state_ = http_version_p;
00094       return boost::indeterminate;
00095
00096     } else {
00097       return false;
00098     }
00099
00100   case http_version_p:
00101     if (input == 'P') {
00102       state_ = http_version_slash;
00103       return boost::indeterminate;
```

```
00104
00105       } else {
00106         return false;
00107       }
00108
00109     case http_version_slash:
00110       if (input == '/') {
00111         req.http_version_major = 0;
00112         req.http_version_minor = 0;
00113         state_ = http_version_major_start;
00114         return boost::indeterminate;
00115
00116       } else {
00117         return false;
00118       }
00119
00120     case http_version_major_start:
00121       if (is_digit(input)) {
00122         req.http_version_major = req.http_version_major * 10 + input - '0';
00123         state_ = http_version_major;
00124         return boost::indeterminate;
00125
00126       } else {
00127         return false;
00128       }
00129
00130     case http_version_major:
00131       if (input == '.') {
00132         state_ = http_version_minor_start;
00133         return boost::indeterminate;
00134
00135       } else if (is_digit(input)) {
00136         req.http_version_major = req.http_version_major * 10 + input - '0';
00137         return boost::indeterminate;
00138
00139       } else {
00140         return false;
00141       }
00142
00143     case http_version_minor_start:
00144       if (is_digit(input)) {
00145         req.http_version_minor = req.http_version_minor * 10 + input - '0';
00146         state_ = http_version_minor;
00147         return boost::indeterminate;
00148
00149       } else {
00150         return false;
00151       }
00152
00153     case http_version_minor:
00154       if (input == '\r') {
00155         state_ = expecting_newline_1;
00156         return boost::indeterminate;
00157
00158       } else if (is_digit(input)) {
00159         req.http_version_minor = req.http_version_minor * 10 + input - '0';
00160         return boost::indeterminate;
00161
00162       } else {
00163         return false;
00164       }
00165
00166     case expecting_newline_1:
00167       if (input == '\n') {
00168         state_ = header_line_start;
00169         return boost::indeterminate;
00170
00171       } else {
00172         return false;
00173       }
00174
00175     case header_line_start:
00176       if (input == '\r') {
00177         state_ = expecting_newline_3;
00178         return boost::indeterminate;
00179
00180       } else if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00181         return false;
00182
00183       } else {
00184         state_ = header_name;
00185         return boost::indeterminate;
00186       }
00187
00188     case header_lws:
00189       if (input == '\r') {
00190         state_ = expecting_newline_2;
```

```
00191         return boost::indeterminate;
00192
00193       } else if (input == ' ' || input == '\t') {
00194         return boost::indeterminate;
00195
00196       } else if (is_ctl(input)) {
00197         return false;
00198
00199       } else {
00200         state_ = header_value;
00201         return boost::indeterminate;
00202       }
00203
00204     case header_name:
00205       if (input == ':') {
00206         state_ = space_before_header_value;
00207         return boost::indeterminate;
00208
00209       } else if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00210         return false;
00211
00212       } else {
00213         return boost::indeterminate;
00214       }
00215
00216     case space_before_header_value:
00217       if (input == ' ') {
00218         state_ = header_value;
00219         return boost::indeterminate;
00220
00221       } else {
00222         return false;
00223       }
00224
00225     case header_value:
00226       if (input == '\r') {
00227         state_ = expecting_newline_2;
00228         return boost::indeterminate;
00229
00230       } else if (is_ctl(input)) {
00231         return false;
00232
00233       } else {
00234         return boost::indeterminate;
00235       }
00236
00237     case expecting_newline_2:
00238       if (input == '\n') {
00239         state_ = header_line_start;
00240         return boost::indeterminate;
00241
00242       } else {
00243         return false;
00244       }
00245
00246     case expecting_newline_3:
00247       return (input == '\n');
00248
00249     default:
00250       return false;
00251     }
00252   }
00253
00254   // ////////////////////////////////////////////////////////////////////////
00255   bool RequestParser::is_char(int c) {
00256     return c >= 0 && c <= 127;
00257   }
00258
00259   // ////////////////////////////////////////////////////////////////////////
00260   bool RequestParser::is_ctl(int c) {
00261     return (c >= 0 && c <= 31) || (c == 127);
00262   }
00263
00264   // ////////////////////////////////////////////////////////////////////////
00265   bool RequestParser::is_tspecial(int c) {
00266     switch (c) {
00267     case '(': case ')': case '<': case '>': case '@':
00268     case ',': case ';': case ':': case '\\': case '"':
00269     case '/': case '[': case ']': case '?': case '=':
00270     case '{': case '}': case ' ': case '\t':
00271       return true;
00272     default:
00273       return false;
00274     }
00275   }
00276
00277   // ////////////////////////////////////////////////////////////////////////
```

```
00278   bool RequestParser::is_digit(int c) {
00279     return c >= '0' && c <= '9';
00280   }
00281
00282 }
```

23.211 airinv/server/RequestParser.hpp File Reference

```
#include <boost/logic/tribool.hpp>
#include <boost/tuple/tuple.hpp>
```

Classes

- class AIRINV::RequestParser

  Parser for incoming requests.

Namespaces

- namespace AIRINV

23.212 RequestParser.hpp

```
00001 #ifndef __AIRINV_SVR_REQUESTPARSER_HPP
00002 #define __AIRINV_SVR_REQUESTPARSER_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 // Boost
00009 #include <boost/logic/tribool.hpp>
00010 #include <boost/tuple/tuple.hpp>
00011
00012 namespace AIRINV {
00013
00014   struct Request;
00015
00017   class RequestParser {
00018   public:
00020     RequestParser();
00021
00023     void reset();
00024
00029     template <typename InputIterator>
00030     boost::tuple<boost::tribool, InputIterator> parse (Request& req
      ,
00031                                                        InputIterator begin,
00032                                                        InputIterator end) {
00033
00034       while (begin != end) {
00035         boost::tribool result = consume(req, *begin++);
00036         if (result || !result)
00037           return boost::make_tuple(result, begin);
00038       }
00039
00040       boost::tribool result = boost::indeterminate;
00041       return boost::make_tuple(result, begin);
00042     }
00043
00044   private:
00046     boost::tribool consume (Request& req, char input);
00047
00049     static bool is_char(int c);
00050
00052     static bool is_ctl(int c);
00053
00055     static bool is_tspecial(int c);
00056
00058     static bool is_digit(int c);
00059
00061     enum state {
00062       method_start,
```

```
00063       method,
00064       uri_start,
00065       uri,
00066       http_version_h,
00067       http_version_t_1,
00068       http_version_t_2,
00069       http_version_p,
00070       http_version_slash,
00071       http_version_major_start,
00072       http_version_major,
00073       http_version_minor_start,
00074       http_version_minor,
00075       expecting_newline_1,
00076       header_line_start,
00077       header_lws,
00078       header_name,
00079       space_before_header_value,
00080       header_value,
00081       expecting_newline_2,
00082       expecting_newline_3
00083     } state_;
00084   };
00085
00086 }
00087 #endif // __AIRINV_SVR_REQUESTPARSER_HPP
```

23.213 airinv/server/win_main.cpp File Reference

```
#include <iostream>
#include <string>
#include <boost/asio.hpp>
#include <boost/bind.hpp>
#include <boost/function.hpp>
#include <boost/lexical_cast.hpp>
#include <airinv/server/AirInvServer.hpp>
```

23.214 win_main.cpp

```
00001 //
00002 // win_main.cpp
00003 // ~~~~~~~~~~~~
00004 //
00005 // Copyright (c) 2003-2008 Christopher M. Kohlhoff (chris at kohlhoff dot com)
00006 //
00007 // Distributed under the Boost Software License, Version 1.0. (See accompanying
00008 // file LICENSE_1_0.txt or copy at http://www.boost.org/LICENSE_1_0.txt)
00009 //
00010
00011 #include <iostream>
00012 #include <string>
00013 #include <boost/asio.hpp>
00014 #include <boost/bind.hpp>
00015 #include <boost/function.hpp>
00016 #include <boost/lexical_cast.hpp>
00017 #include <airinv/server/AirInvServer.hpp>
00018
00019 #if defined(_WIN32)
00020
00021 boost::function0<void> console_ctrl_function;
00022
00023 BOOL WINAPI console_ctrl_handler(DWORD ctrl_type) {
00024   switch (ctrl_type) {
00025   case CTRL_C_EVENT:
00026   case CTRL_BREAK_EVENT:
00027   case CTRL_CLOSE_EVENT:
00028   case CTRL_SHUTDOWN_EVENT:
00029     console_ctrl_function();
00030     return TRUE;
00031   default:
00032     return FALSE;
00033   }
00034 }
00035
00036 int main(int argc, char* argv[]) {
00037
00038   try {
```

```
00039
00040     // Check command line arguments.
00041     if (argc != 5) {
00042       std::cerr << "Usage: http_server <address> <port> <threads> <doc_root>\n"
    ;
00043       std::cerr << "  For IPv4, try:\n";
00044       std::cerr << "    http_server 0.0.0.0 80 1 .\n";
00045       std::cerr << "  For IPv6, try:\n";
00046       std::cerr << "    http_server 0::0 80 1 .\n";
00047       return 1;
00048     }
00049
00050     // Initialise server.
00051     std::size_t num_threads = boost::lexical_cast<std::size_t>(argv[3]);
00052     AIRINV::AirInvServer s (argv[1], argv[2], argv[4],
      num_threads);
00053
00054     // Set console control handler to allow server to be stopped.
00055     console_ctrl_function = boost::bind(&AIRINV::AirInvServer::stop
    , &s);
00056     SetConsoleCtrlHandler(console_ctrl_handler, TRUE);
00057
00058     // Run the server until stopped.
00059     s.run();
00060
00061   } catch (std::exception& e) {
00062     std::cerr << "exception: " << e.what() << "\n";
00063   }
00064
00065   return 0;
00066 }
00067 #endif // defined(_WIN32)
```

23.215 airinv/service/AIRINV_Master_Service.cpp File Reference

```
#include <cassert>
#include <cmath>
#include <boost/make_shared.hpp>
#include <stdair/basic/BasChronometer.hpp>
#include <stdair/basic/EventType.hpp>
#include <stdair/bom/BomKeyManager.hpp>
#include <stdair/bom/EventQueue.hpp>
#include <stdair/bom/SnapshotStruct.hpp>
#include <stdair/bom/RMEventStruct.hpp>
#include <stdair/service/Logger.hpp>
#include <stdair/STDAIR_Service.hpp>
#include <airinv/basic/BasConst_AIRINV_Service.hpp>
#include <airinv/factory/FacAirinvMasterServiceContext.hpp>
#include <airinv/command/InventoryParser.hpp>
#include <airinv/command/InventoryManager.hpp>
#include <airinv/service/AIRINV_Master_ServiceContext.hpp>
#include <airinv/AIRINV_Service.hpp>
#include <airinv/AIRINV_Master_Service.hpp>
```

Namespaces

- namespace AIRINV

23.216 AIRINV_Master_Service.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <cmath>
00007 // Boost
00008 #include <boost/make_shared.hpp>
```

```
00009 // StdAir
00010 #include <stdair/basic/BasChronometer.hpp>
00011 #include <stdair/basic/EventType.hpp>
00012 #include <stdair/bom/BomKeyManager.hpp>
00013 #include <stdair/bom/EventQueue.hpp>
00014 #include <stdair/bom/SnapshotStruct.hpp>
00015 #include <stdair/bom/RMEventStruct.hpp>
00016 #include <stdair/service/Logger.hpp>
00017 #include <stdair/STDAIR_Service.hpp>
00018 // AirInv
00019 #include <airinv/basic/BasConst_AIRINV_Service.hpp
      >
00020 #include <airinv/factory/FacAirinvMasterServiceContext.hpp
      >
00021 #include <airinv/command/InventoryParser.hpp>
00022 #include <airinv/command/InventoryManager.hpp
      >
00023 #include <airinv/service/AIRINV_Master_ServiceContext.hpp
      >
00024 #include <airinv/AIRINV_Service.hpp>
00025 #include <airinv/AIRINV_Master_Service.hpp>
00026
00027 namespace AIRINV {
00028
00029   // ////////////////////////////////////////////////////////////////////
00030   AIRINV_Master_Service::AIRINV_Master_Service()
00031     : _airinvMasterServiceContext (NULL) {
00032     assert (false);
00033   }
00034
00035   // ////////////////////////////////////////////////////////////////////
00036   AIRINV_Master_Service::
00037   AIRINV_Master_Service (const AIRINV_Master_Service& iService)
00038     : _airinvMasterServiceContext (NULL) {
00039     assert (false);
00040   }
00041
00042   // ////////////////////////////////////////////////////////////////////
00043   AIRINV_Master_Service::
00044   AIRINV_Master_Service (const stdair::BasLogParams& iLogParams,
00045                          const stdair::BasDBParams& iDBParams)
00046     : _airinvMasterServiceContext (NULL) {
00047
00048     // Initialise the STDAIR service handler
00049     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00050       initStdAirService (iLogParams, iDBParams);
00051
00052     // Initialise the service context
00053     initServiceContext();
00054
00055     // Add the StdAir service context to the AIRINV service context
00056     // \note RMOL owns the STDAIR service resources here.
00057     const bool ownStdairService = true;
00058     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00059
00060     // Initialise the (remaining of the) context
00061     initSlaveAirinvService();
00062   }
00063
00064   // ////////////////////////////////////////////////////////////////////
00065   AIRINV_Master_Service::
00066   AIRINV_Master_Service (const stdair::BasLogParams& iLogParams)
00067     : _airinvMasterServiceContext (NULL) {
00068
00069     // Initialise the STDAIR service handler
00070     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00071       initStdAirService (iLogParams);
00072
00073     // Initialise the service context
00074     initServiceContext();
00075
00076     // Add the StdAir service context to the AIRINV service context
00077     // \note RMOL owns the STDAIR service resources here.
00078     const bool ownStdairService = true;
00079     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00080
00081     // Initialise the (remaining of the) context
00082     initSlaveAirinvService();
00083   }
00084
00085   // ////////////////////////////////////////////////////////////////////
00086   AIRINV_Master_Service::
00087   AIRINV_Master_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr)
00088     : _airinvMasterServiceContext (NULL) {
00089
00090     // Initialise the service context
00091     initServiceContext();
```

```
00092
00093     // Store the STDAIR service object within the (AIRINV) service context
00094     // \note AirInv does not own the STDAIR service resources here.
00095     const bool doesNotOwnStdairService = false;
00096     addStdAirService (ioSTDAIR_Service_ptr, doesNotOwnStdairService);
00097
00098     // Initialise the (remaining of the) context
00099     initSlaveAirinvService();
00100   }
00101
00102   // ////////////////////////////////////////////////////////////////////
00103   AIRINV_Master_Service::~AIRINV_Master_Service
      () {
00104     // Delete/Clean all the objects from memory
00105     finalise();
00106   }
00107
00108   // ////////////////////////////////////////////////////////////////////
00109   void AIRINV_Master_Service::finalise() {
00110     assert (_airinvMasterServiceContext != NULL);
00111     // Reset the (Boost.)Smart pointer pointing on the STDAIR_Service object.
00112     _airinvMasterServiceContext->reset();
00113   }
00114
00115   // ////////////////////////////////////////////////////////////////////
00116   void AIRINV_Master_Service::initServiceContext() {
00117     // Initialise the context
00118     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00119       FacAirinvMasterServiceContext::instance
      ().create();
00120     _airinvMasterServiceContext = &lAIRINV_Master_ServiceContext;
00121   }
00122
00123   // ////////////////////////////////////////////////////////////////////
00124   void AIRINV_Master_Service::
00125   addStdAirService (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr,
00126                     const bool iOwnStdairService) {
00127
00128     // Retrieve the AirInv Master service context
00129     assert (_airinvMasterServiceContext != NULL);
00130     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00131       *_airinvMasterServiceContext;
00132
00133     // Store the STDAIR service object within the (AIRINV) service context
00134     lAIRINV_Master_ServiceContext.setSTDAIR_Service (ioSTDAIR_Service_ptr,
00135                                                     iOwnStdairService);
00136   }
00137
00138   // ////////////////////////////////////////////////////////////////////
00139   stdair::STDAIR_ServicePtr_T AIRINV_Master_Service::
00140   initStdAirService (const stdair::BasLogParams& iLogParams,
00141                      const stdair::BasDBParams& iDBParams) {
00142
00150     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00151       boost::make_shared<stdair::STDAIR_Service> (iLogParams, iDBParams);
00152
00153     return lSTDAIR_Service_ptr;
00154   }
00155
00156   // ////////////////////////////////////////////////////////////////////
00157   stdair::STDAIR_ServicePtr_T AIRINV_Master_Service::
00158   initStdAirService (const stdair::BasLogParams& iLogParams) {
00159
00167     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00168       boost::make_shared<stdair::STDAIR_Service> (iLogParams);
00169
00170     return lSTDAIR_Service_ptr;
00171   }
00172
00173   // ////////////////////////////////////////////////////////////////////
00174   void AIRINV_Master_Service::initSlaveAirinvService() {
00175
00176     // Retrieve the AirInv Master service context
00177     assert (_airinvMasterServiceContext != NULL);
00178     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00179       *_airinvMasterServiceContext;
00180
00181     // Retrieve the StdAir service
00182     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00183       lAIRINV_Master_ServiceContext.getSTDAIR_ServicePtr();
00184     assert (lSTDAIR_Service_ptr != NULL);
00185
00195     AIRINV_ServicePtr_T lAIRINV_Service_ptr =
00196       boost::make_shared<AIRINV_Service> (lSTDAIR_Service_ptr);
00197
00198     // Store the AIRINV service object within the AIRINV Master service
      context.
```

```
00199     lAIRINV_Master_ServiceContext.setAIRINV_Service (lAIRINV_Service_ptr);
00200   }
00201
00202   // ////////////////////////////////////////////////////////////////////
00203   void AIRINV_Master_Service::
00204   parseAndLoad (const stdair::Filename_T& iInventoryInputFilename
      ) {
00205
00206     // Retrieve the AirInv Master service context
00207     if (_airinvMasterServiceContext == NULL) {
00208       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00209                                                     "has not been initialised")
      ;
00210     }
00211     assert (_airinvMasterServiceContext != NULL);
00212
00213     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00214       *_airinvMasterServiceContext;
00215
00216     // Retrieve the slave AIRINV service object from the (AIRINV)
00217     // service context
00218     AIRINV_Service& lAIRINV_Service =
00219       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00220
00221     // Delegate the file parsing and BOM building to the dedicated service
00222     lAIRINV_Service.parseAndLoad (iInventoryInputFilename);
00223   }
00224
00225   // ////////////////////////////////////////////////////////////////////
00226   void AIRINV_Master_Service::
00227   parseAndLoad (const stdair::Filename_T& iScheduleInputFilename,
00228                 const stdair::Filename_T& iODInputFilename,
00229                 const AIRRAC::YieldFilePath& iYieldFilename) {
00230
00231     // Retrieve the AirInv Master service context
00232     if (_airinvMasterServiceContext == NULL) {
00233       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00234                                                     "has not been initialised")
      ;
00235     }
00236     assert (_airinvMasterServiceContext != NULL);
00237
00238     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00239       *_airinvMasterServiceContext;
00240
00241     // Retrieve the slave AirInv service object from the (AirInv)
00242     // service context
00243     AIRINV_Service& lAIRINV_Service =
00244       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00245
00246     // Delegate the file parsing and BOM building to the dedicated service
00247     lAIRINV_Service.parseAndLoad (iScheduleInputFilename,
      iODInputFilename,
00248                                   iYieldFilename);
00249   }
00250
00251   // ////////////////////////////////////////////////////////////////////
00252   void AIRINV_Master_Service::buildSampleBom
      () {
00253
00254     // Retrieve the AirInv Master service context
00255     if (_airinvMasterServiceContext == NULL) {
00256       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00257                                                     "has not been initialised")
      ;
00258     }
00259     assert (_airinvMasterServiceContext != NULL);
00260
00261     // Retrieve the AirInv service context and whether it owns the Stdair
00262     // service
00263     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00264       *_airinvMasterServiceContext;
00265     const bool doesOwnStdairService =
00266       lAIRINV_Master_ServiceContext.getOwnStdairServiceFlag();
00267
00268     // Retrieve the StdAir service object from the (AirInv) service context
00269     stdair::STDAIR_Service& lSTDAIR_Service =
00270       lAIRINV_Master_ServiceContext.getSTDAIR_Service();
00271
00276     if (doesOwnStdairService == true) {
00277       //
00278       lSTDAIR_Service.buildSampleBom();
00279     }
00280
```

```
00289     AIRINV_Service& lAIRINV_Service =
00290       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00291     lAIRINV_Service.buildSampleBom();
00292
00300   }
00301
00302   // ////////////////////////////////////////////////////////////////////
00303   std::string AIRINV_Master_Service::
00304   jsonExport (const stdair::AirlineCode_T& iAirlineCode,
00305               const stdair::FlightNumber_T& iFlightNumber,
00306               const stdair::Date_T& iDepartureDate) const {
00307
00308     // Retrieve the AirInv Master service context
00309     if (_airinvMasterServiceContext == NULL) {
00310       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00311                                                     "has not been initialised")
      ;
00312     }
00313     assert (_airinvMasterServiceContext != NULL);
00314
00315     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00316       *_airinvMasterServiceContext;
00317
00318     // Retrieve the slave AirInv (slave) service object from
00319     // the (AirInv master) service context
00320     AIRINV_Service& lAIRINV_Service =
00321       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00322
00323     // Delegate the BOM dump to the dedicated service
00324     return lAIRINV_Service.jsonExport (iAirlineCode, iFlightNumber,
00325                                        iDepartureDate);
00326   }
00327
00328   // ////////////////////////////////////////////////////////////////////
00329   std::string AIRINV_Master_Service::
00330   list (const stdair::AirlineCode_T& iAirlineCode,
00331         const stdair::FlightNumber_T& iFlightNumber) const {
00332     std::ostringstream oFlightListStr;
00333
00334     // Retrieve the AirInv Master service context
00335     if (_airinvMasterServiceContext == NULL) {
00336       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00337                                                     "has not been initialised")
      ;
00338     }
00339     assert (_airinvMasterServiceContext != NULL);
00340
00341     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00342       *_airinvMasterServiceContext;
00343
00344     // Retrieve the slave AirInv (slave) service object from
00345     // the (AirInv master) service context
00346     AIRINV_Service& lAIRINV_Service =
00347       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00348
00349     // Delegate the BOM display to the dedicated service
00350     return lAIRINV_Service.list (iAirlineCode, iFlightNumber);
00351   }
00352
00353   // ////////////////////////////////////////////////////////////////////
00354   bool AIRINV_Master_Service::
00355   check (const stdair::AirlineCode_T& iAirlineCode,
00356          const stdair::FlightNumber_T& iFlightNumber,
00357          const stdair::Date_T& iDepartureDate) const {
00358     std::ostringstream oFlightListStr;
00359
00360     // Retrieve the AirInv Master service context
00361     if (_airinvMasterServiceContext == NULL) {
00362       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00363                                                     "has not been initialised")
      ;
00364     }
00365     assert (_airinvMasterServiceContext != NULL);
00366
00367     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00368       *_airinvMasterServiceContext;
00369
00370     // Retrieve the slave AirInv (slave) service object from
00371     // the (AirInv master) service context
00372     AIRINV_Service& lAIRINV_Service =
00373       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00374
00375     // Delegate the BOM display to the dedicated service
00376     return lAIRINV_Service.check (iAirlineCode, iFlightNumber,
```

```
      iDepartureDate);
00377   }
00378
00379   // ////////////////////////////////////////////////////////////////////
00380   std::string AIRINV_Master_Service::csvDisplay
      () const {
00381
00382     // Retrieve the AirInv Master service context
00383     if (_airinvMasterServiceContext == NULL) {
00384       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00385                                                     "has not been initialised")
      ;
00386     }
00387     assert (_airinvMasterServiceContext != NULL);
00388
00389     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00390       *_airinvMasterServiceContext;
00391
00392     // Retrieve the slave AIRINV service object from
00393     // the (AIRINV) service context
00394     AIRINV_Service& lAIRINV_Service =
00395       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00396
00397     // Delegate the BOM display to the dedicated service
00398     return lAIRINV_Service.csvDisplay();
00399   }
00400
00401   // ////////////////////////////////////////////////////////////////////
00402   std::string AIRINV_Master_Service::
00403   csvDisplay (const stdair::AirlineCode_T& iAirlineCode,
00404               const stdair::FlightNumber_T& iFlightNumber,
00405               const stdair::Date_T& iDepartureDate) const {
00406
00407     // Retrieve the AirInv Master service context
00408     if (_airinvMasterServiceContext == NULL) {
00409       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00410                                                     "has not been initialised")
      ;
00411     }
00412     assert (_airinvMasterServiceContext != NULL);
00413
00414     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00415       *_airinvMasterServiceContext;
00416
00417     // Retrieve the slave AIRINV service object from
00418     // the (AIRINV) service context
00419     AIRINV_Service& lAIRINV_Service =
00420       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00421
00422     // Delegate the BOM display to the dedicated service
00423     return lAIRINV_Service.csvDisplay (iAirlineCode, iFlightNumber,
00424                                        iDepartureDate);
00425   }
00426
00427   // ////////////////////////////////////////////////////////////////////
00428   void AIRINV_Master_Service::
00429   initSnapshotAndRMEvents (const stdair::Date_T&
      iStartDate,
00430                            const stdair::Date_T& iEndDate) {
00431
00432     // Retrieve the AirInv Master service context
00433     if (_airinvMasterServiceContext == NULL) {
00434       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00435                                                     "has not been initialised")
      ;
00436     }
00437     assert (_airinvMasterServiceContext != NULL);
00438
00439     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00440       *_airinvMasterServiceContext;
00441
00442     // Retrieve the StdAir service context
00443     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00444       lAIRINV_Master_ServiceContext.getSTDAIR_ServicePtr();
00445     assert (lSTDAIR_Service_ptr != NULL);
00446
00447     // Retrieve the event queue object instance
00448     stdair::EventQueue& lQueue = lSTDAIR_Service_ptr->getEventQueue();
00449
00450     // Initialise the snapshot events
00451     InventoryManager::initSnapshotEvents (iStartDate, iEndDate, lQueue);
00452
00453     // \todo Browse the list of inventories and itinialise the RM events of
00454     //       each inventory.
```

```
00455
00456     // Retrieve the slave AIRINV service object from the (AIRINV)
00457     // service context
00458     AIRINV_Service& lAIRINV_Service =
00459       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00460     lQueue.addStatus (stdair::EventType::RM, 0);
00461     stdair::RMEventList_T lRMEventList =
00462       lAIRINV_Service.initRMEvents (iStartDate, iEndDate);
00463     InventoryManager::addRMEventsToEventQueue (lQueue, lRMEventList);
00464   }
00465
00466   // ////////////////////////////////////////////////////////////////////
00467   void AIRINV_Master_Service::
00468   calculateAvailability (stdair::TravelSolutionStruct&
      ioTravelSolution,
00469                          const stdair::PartnershipTechnique&
      iPartnershipTechnique) {
00470
00471     // Retrieve the AirInv Master service context
00472     if (_airinvMasterServiceContext == NULL) {
00473       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00474                                                     "has not been initialised")
      ;
00475     }
00476     assert (_airinvMasterServiceContext != NULL);
00477
00478     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00479       *_airinvMasterServiceContext;
00480
00481     // Retrieve the slave AIRINV service object from the (AIRINV)
00482     // service context
00483     AIRINV_Service& lAIRINV_Service =
00484       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00485
00486     // Delegate the availability retrieval to the dedicated service
00487     stdair::BasChronometer lAvlChronometer;
00488     lAvlChronometer.start();
00489
00490     lAIRINV_Service.calculateAvailability (
      ioTravelSolution, iPartnershipTechnique);
00491
00492     // DEBUG
00493     // const double lAvlMeasure = lAvlChronometer.elapsed();
00494     // STDAIR_LOG_DEBUG ("Availability retrieval: " << lAvlMeasure << " - "
00495     //                   << lAIRINV_Master_ServiceContext.display());
00496   }
00497
00498   // ////////////////////////////////////////////////////////////////////
00499   bool AIRINV_Master_Service::sell (const
      std::string& iSegmentDateKey,
00500                                     const stdair::ClassCode_T& iClassCode,
00501                                     const stdair::PartySize_T& iPartySize) {
00502
00503     // Retrieve the AirInv Master service context
00504     if (_airinvMasterServiceContext == NULL) {
00505       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00506                                                     "has not been initialised")
      ;
00507     }
00508     assert (_airinvMasterServiceContext != NULL);
00509
00510     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00511       *_airinvMasterServiceContext;
00512
00513     // Retrieve the corresponding inventory key
00514     // const stdair::InventoryKey& lInventoryKey =
00515     // stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00516
00517     // Retrieve the slave AirInv service object from the (AirInv Master)
00518     // service context
00519     AIRINV_Service& lAIRINV_Service =
00520       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00521
00522     // Delegate the booking to the dedicated command
00523     stdair::BasChronometer lSellChronometer;
00524     lSellChronometer.start();
00525
00526     // Delegate the BOM building to the dedicated service
00527     const bool hasBeenSaleSuccessful =
00528       lAIRINV_Service.sell (iSegmentDateKey, iClassCode, iPartySize);
00529
00530     // const double lSellMeasure = lSellChronometer.elapsed();
00531
00532     // DEBUG
00533     // STDAIR_LOG_DEBUG ("Booking sell: " << lSellMeasure << " - "
```

```
00534     //                  << lAIRINV_Master_ServiceContext.display());
00535
00536     //
00537     return hasBeenSaleSuccessful;
00538   }
00539
00540   // ////////////////////////////////////////////////////////////////////
00541   bool AIRINV_Master_Service::cancel (const
      std::string& iSegmentDateKey,
00542                                       const stdair::ClassCode_T& iClassCode,
00543                                       const stdair::PartySize_T& iPartySize) {
00544
00545     // Retrieve the AirInv Master service context
00546     if (_airinvMasterServiceContext == NULL) {
00547       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00548                                                     "has not been initialised")
      ;
00549     }
00550     assert (_airinvMasterServiceContext != NULL);
00551
00552     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00553       *_airinvMasterServiceContext;
00554
00555     // Retrieve the corresponding inventory key
00556     // const stdair::InventoryKey& lInventoryKey =
00557     // stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00558
00559     // Retrieve the slave AirInv service object from the (AirInv Master)
00560     // service context
00561     AIRINV_Service& lAIRINV_Service =
00562       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00563
00564     // Delegate the booking to the dedicated command
00565     stdair::BasChronometer lCancelChronometer;
00566     lCancelChronometer.start();
00567
00568     // Delegate the BOM building to the dedicated service
00569     const bool hasBeenSaleSuccessful =
00570       lAIRINV_Service.cancel (iSegmentDateKey, iClassCode, iPartySize);
00571
00572     // const double lCancelMeasure = lCancelChronometer.elapsed();
00573
00574     // DEBUG
00575     // STDAIR_LOG_DEBUG ("Booking cancel: " << lCancelMeasure << " - "
00576     //                   << lAIRINV_Master_ServiceContext.display());
00577
00578     //
00579     return hasBeenSaleSuccessful;
00580   }
00581
00582   // ////////////////////////////////////////////////////////////////////
00583   void AIRINV_Master_Service::
00584   takeSnapshots (const stdair::SnapshotStruct& iSnapshot) {
00585
00586     // Retrieve the AirInv Master service context
00587     if (_airinvMasterServiceContext == NULL) {
00588       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00589                                                     "has not been initialised")
      ;
00590     }
00591     assert (_airinvMasterServiceContext != NULL);
00592
00593     AIRINV_Master_ServiceContext&
      lAIRINV_Master_ServiceContext =
00594       *_airinvMasterServiceContext;
00595
00596     // Retrieve the slave AIRINV service object from the (AIRINV)
00597     // service context
00598     AIRINV_Service& lAIRINV_Service =
00599       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00600
00601     // Retrieve  the snapshot time and the airline code.
00602     const stdair::DateTime_T& lSnapshotTime = iSnapshot.getSnapshotTime();
00603     const stdair::AirlineCode_T& lAirlineCode = iSnapshot.getAirlineCode();
00604
00605     lAIRINV_Service.takeSnapshots (lAirlineCode, lSnapshotTime);
00606   }
00607
00608   // ////////////////////////////////////////////////////////////////////
00609   void AIRINV_Master_Service::
00610   optimise (const stdair::RMEventStruct& iRMEvent,
00611             const stdair::ForecastingMethod& iForecastingMethod,
00612             const stdair::PartnershipTechnique& iPartnershipTechnique) {
00613
00614     // Retrieve the AirInv Master service context
00615     if (_airinvMasterServiceContext == NULL) {
```

```
00616       throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00617                                                     "has not been initialised")
    ;
00618     }
00619     assert (_airinvMasterServiceContext != NULL);
00620
00621     AIRINV_Master_ServiceContext&
    lAIRINV_Master_ServiceContext =
00622       *_airinvMasterServiceContext;
00623
00624     // Retrieve the slave AIRINV service object from the (AIRINV)
00625     // service context
00626     AIRINV_Service& lAIRINV_Service =
00627       lAIRINV_Master_ServiceContext.getAIRINV_Service();
00628
00629     // Retrieve  the snapshot time and the airline code.
00630     const stdair::DateTime_T& lRMEventTime = iRMEvent.getRMEventTime();
00631     const stdair::AirlineCode_T& lAirlineCode = iRMEvent.getAirlineCode();
00632     const stdair::KeyDescription_T& lFDDescription =
00633       iRMEvent.getFlightDateDescription();
00634
00635     lAIRINV_Service.optimise (lAirlineCode, lFDDescription,
    lRMEventTime,
00636                               iForecastingMethod, iPartnershipTechnique);
00637   }
00638 }
```

23.217 airinv/service/AIRINV_Master_ServiceContext.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <airinv/basic/BasConst_AIRINV_Service.hpp>
#include <airinv/service/AIRINV_Master_ServiceContext.hpp>
```

Namespaces

- namespace AIRINV

23.218 AIRINV_Master_ServiceContext.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // Airinv
00008 #include <airinv/basic/BasConst_AIRINV_Service.hpp
    >
00009 #include <airinv/service/AIRINV_Master_ServiceContext.hpp
    >
00010
00011 namespace AIRINV {
00012
00013   // ////////////////////////////////////////////////////////////////////
00014   AIRINV_Master_ServiceContext::AIRINV_Master_ServiceContext()
00015     : _ownStdairService (false) {
00016   }
00017
00018   // ////////////////////////////////////////////////////////////////////
00019   AIRINV_Master_ServiceContext::~AIRINV_Master_ServiceContext() {
00020   }
00021
00022   // ////////////////////////////////////////////////////////////////////
00023   const std::string AIRINV_Master_ServiceContext::shortDisplay() const {
00024     std::ostringstream oStr;
00025     oStr << "AIRINV_Master_ServiceContext -- Owns StdAir service: "
00026          << _ownStdairService;
00027     return oStr.str();
00028   }
00029
00030   // ////////////////////////////////////////////////////////////////////
00031   const std::string AIRINV_Master_ServiceContext::display() const {
00032     std::ostringstream oStr;
00033     oStr << shortDisplay();
```

```
00034     return oStr.str();
00035   }
00036
00037   // ////////////////////////////////////////////////////////////////////
00038   const std::string AIRINV_Master_ServiceContext::describe() const {
00039     return shortDisplay();
00040   }
00041
00042   // ////////////////////////////////////////////////////////////////////
00043   void AIRINV_Master_ServiceContext::reset() {
00044     if (_ownStdairService == true) {
00045       _stdairService.reset();
00046     }
00047   }
00048
00049 }
```

23.219 airinv/service/AIRINV_Master_ServiceContext.hpp File Reference

```
#include <string>
#include <boost/shared_ptr.hpp>
#include <stdair/stdair_service_types.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/service/ServiceAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

Classes

- class AIRINV::AIRINV_Master_ServiceContext

Namespaces

- namespace AIRINV

23.220 AIRINV_Master_ServiceContext.hpp

```
00001 #ifndef __AIRINV_SVC_AIRINVMASTERSERVICECONTEXT_HPP
00002 #define __AIRINV_SVC_AIRINVMASTERSERVICECONTEXT_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // Boost
00010 #include <boost/shared_ptr.hpp>
00011 // StdAir
00012 #include <stdair/stdair_service_types.hpp>
00013 #include <stdair/bom/Inventory.hpp>
00014 #include <stdair/service/ServiceAbstract.hpp>
00015 // AirInv
00016 #include <airinv/AIRINV_Types.hpp>
00017
00018 namespace AIRINV {
00019
00021   class AIRINV_Service;
00022
00026   class AIRINV_Master_ServiceContext : public
      stdair::ServiceAbstract {
00032     friend class AIRINV_Master_Service;
00033     friend class FacAirinvMasterServiceContext;
00034
00035   private:
00036     // ////////////////// Getters ////////////////////
00040     stdair::STDAIR_ServicePtr_T getSTDAIR_ServicePtr() const {
00041       return _stdairService;
00042     }
00043
00047     stdair::STDAIR_Service& getSTDAIR_Service() const {
00048       assert (_stdairService != NULL);
00049       return *_stdairService;
```

```
00050     }
00051
00055     const bool getOwnStdairServiceFlag() const {
00056       return _ownStdairService;
00057     }
00058
00063     AIRINV_Service& getAIRINV_Service() const {
00064       assert (_airinvService != NULL);
00065       return *_airinvService;
00066     }
00067
00068     // ////////////////// Setters ////////////////////
00072     void setSTDAIR_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_ServicePtr,
00073                             const bool iOwnStdairService) {
00074       _stdairService = ioSTDAIR_ServicePtr;
00075       _ownStdairService = iOwnStdairService;
00076     }
00077
00081     void setAIRINV_Service (AIRINV_ServicePtr_T
      ioAIRINV_ServicePtr) {
00082       _airinvService = ioAIRINV_ServicePtr;
00083     }
00084
00085
00086   private:
00087     // ////////////////////// Display Methods /////////////////////
00091     const std::string shortDisplay() const;
00092
00096     const std::string display() const;
00097
00101     const std::string describe() const;
00102
00103
00104   private:
00106
00109     AIRINV_Master_ServiceContext();
00113     AIRINV_Master_ServiceContext (const AIRINV_Master_ServiceContext&);
00114
00118     ~AIRINV_Master_ServiceContext();
00119
00123     void reset();
00124
00125
00126   private:
00127     // ///////////////// Children ///////////////
00131     stdair::STDAIR_ServicePtr_T _stdairService;
00132
00136     bool _ownStdairService;
00137
00138
00139   private:
00140     // ////////////// Attributes ////////////////
00144     AIRINV_ServicePtr_T _airinvService;
00145   };
00146
00147 }
00148 #endif // __AIRINV_SVC_AIRINVMASTERSERVICECONTEXT_HPP
```

23.221 airinv/service/AIRINV_Service.cpp File Reference

```
#include <cassert>
```

```
#include <boost/make_shared.hpp>
#include <stdair/basic/BasChronometer.hpp>
#include <stdair/bom/BomKeyManager.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/AirlineFeature.hpp>
#include <stdair/bom/RMEventStruct.hpp>
#include <stdair/factory/FacBomManager.hpp>
#include <stdair/service/Logger.hpp>
#include <stdair/STDAIR_Service.hpp>
#include <rmol/RMOL_Service.hpp>
#include <airrac/AIRRAC_Service.hpp>
#include <airinv/basic/BasConst_AIRINV_Service.hpp>
#include <airinv/factory/FacAirinvServiceContext.hpp>
#include <airinv/command/ScheduleParser.hpp>
#include <airinv/command/InventoryParser.hpp>
#include <airinv/command/InventoryManager.hpp>
#include <airinv/service/AIRINV_ServiceContext.hpp>
#include <airinv/AIRINV_Service.hpp>
```

Namespaces

- namespace AIRINV

23.222 AIRINV_Service.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/make_shared.hpp>
00008 // StdAir
00009 #include <stdair/basic/BasChronometer.hpp>
00010 #include <stdair/bom/BomKeyManager.hpp>
00011 #include <stdair/bom/BomManager.hpp>
00012 #include <stdair/bom/BomKeyManager.hpp>
00013 #include <stdair/bom/BomRoot.hpp>
00014 #include <stdair/bom/Inventory.hpp>
00015 #include <stdair/bom/FlightDate.hpp>
00016 #include <stdair/bom/AirlineFeature.hpp>
00017 #include <stdair/bom/RMEventStruct.hpp>
00018 #include <stdair/factory/FacBomManager.hpp>
00019 #include <stdair/service/Logger.hpp>
00020 #include <stdair/STDAIR_Service.hpp>
00021 // RMOL
00022 #include <rmol/RMOL_Service.hpp>
00023 // AirRAC
00024 #include <airrac/AIRRAC_Service.hpp>
00025 // AirInv
00026 #include <airinv/basic/BasConst_AIRINV_Service.hpp
      >
00027 #include <airinv/factory/FacAirinvServiceContext.hpp
      >
00028 #include <airinv/command/ScheduleParser.hpp>
00029 #include <airinv/command/InventoryParser.hpp>
00030 #include <airinv/command/InventoryManager.hpp
      >
00031 #include <airinv/service/AIRINV_ServiceContext.hpp
      >
00032 #include <airinv/AIRINV_Service.hpp>
00033
00034 namespace AIRINV {
00035
00036   // ////////////////////////////////////////////////////////////////////
00037   AIRINV_Service::AIRINV_Service () : _airinvServiceContext (NULL) {
00038     assert (false);
```

```
00039   }
00040
00041   // ////////////////////////////////////////////////////////////////////
00042   AIRINV_Service::AIRINV_Service (const AIRINV_Service& iService)
00043   : _airinvServiceContext (NULL) {
00044     assert (false);
00045   }
00046
00047   // ////////////////////////////////////////////////////////////////////
00048   AIRINV_Service::AIRINV_Service (const stdair::BasLogParams& iLogParams)
00049     : _airinvServiceContext (NULL) {
00050
00051     // Initialise the STDAIR service handler
00052     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00053       initStdAirService (iLogParams);
00054
00055     // Initialise the service context
00056     initServiceContext();
00057
00058     // Add the StdAir service context to the AIRINV service context
00059     // \note AIRINV owns the STDAIR service resources here.
00060     const bool ownStdairService = true;
00061     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00062
00063     // Initalise the RMOL service.
00064     initRMOLService();
00065
00066     // Initalise the AIRRAC service.
00067     initAIRRACService();
00068
00069     // Initialise the (remaining of the) context
00070     initAirinvService();
00071   }
00072
00073   // ////////////////////////////////////////////////////////////////////
00074   AIRINV_Service::AIRINV_Service (const stdair::BasLogParams& iLogParams,
00075                                   const stdair::BasDBParams& iDBParams)
00076     : _airinvServiceContext (NULL) {
00077
00078     // Initialise the STDAIR service handler
00079     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00080       initStdAirService (iLogParams, iDBParams);
00081
00082     // Initialise the service context
00083     initServiceContext();
00084
00085     // Add the StdAir service context to the AIRINV service context
00086     // \note AIRINV owns the STDAIR service resources here.
00087     const bool ownStdairService = true;
00088     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00089
00090     // Initalise the RMOL service.
00091     initRMOLService();
00092
00093     // Initalise the AIRRAC service.
00094     initAIRRACService();
00095
00096     // Initialise the (remaining of the) context
00097     initAirinvService();
00098   }
00099   // ////////////////////////////////////////////////////////////////////
00100   AIRINV_Service::
00101   AIRINV_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr)
00102     : _airinvServiceContext (NULL) {
00103
00104     // Initialise the service context
00105     initServiceContext();
00106
00107     // Store the STDAIR service object within the (AIRINV) service context
00108     // \note AirInv does not own the STDAIR service resources here.
00109     const bool doesNotOwnStdairService = false;
00110     addStdAirService (ioSTDAIR_Service_ptr, doesNotOwnStdairService);
00111
00112     // Initalise the RMOL service.
00113     initRMOLService();
00114
00115     // Initalise the AIRRAC service.
00116     initAIRRACService();
00117
00118     // Initialise the (remaining of the) context
00119     initAirinvService();
00120
00121   }
00122
00123   // ////////////////////////////////////////////////////////////////////
00124   AIRINV_Service::~AIRINV_Service() {
00125     // Delete/Clean all the objects from memory
```

```
00126     finalise();
00127   }
00128
00129   // ////////////////////////////////////////////////////////////////////
00130   void AIRINV_Service::finalise() {
00131     assert (_airinvServiceContext != NULL);
00132     // Reset the (Boost.)Smart pointer pointing on the STDAIR_Service object.
00133     _airinvServiceContext->reset();
00134   }
00135
00136   // ////////////////////////////////////////////////////////////////////
00137   void AIRINV_Service::initServiceContext() {
00138     // Initialise the context
00139     AIRINV_ServiceContext& lAIRINV_ServiceContext =
00140       FacAirinvServiceContext::instance().
      create();
00141     _airinvServiceContext = &lAIRINV_ServiceContext;
00142   }
00143
00144   // ////////////////////////////////////////////////////////////////////
00145   void AIRINV_Service::
00146   addStdAirService (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr,
00147                     const bool iOwnStdairService) {
00148
00149     // Retrieve the Airinv service context
00150     assert (_airinvServiceContext != NULL);
00151     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00152
00153     // Store the STDAIR service object within the (AIRINV) service context
00154     lAIRINV_ServiceContext.setSTDAIR_Service (ioSTDAIR_Service_ptr,
00155                                               iOwnStdairService);
00156   }
00157
00158   // ////////////////////////////////////////////////////////////////////
00159   stdair::STDAIR_ServicePtr_T AIRINV_Service::
00160   initStdAirService (const stdair::BasLogParams& iLogParams,
00161                      const stdair::BasDBParams& iDBParams) {
00162
00170     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00171       boost::make_shared<stdair::STDAIR_Service> (iLogParams, iDBParams);
00172
00173     return lSTDAIR_Service_ptr;
00174   }
00175
00176   // ////////////////////////////////////////////////////////////////////
00177   stdair::STDAIR_ServicePtr_T AIRINV_Service::
00178   initStdAirService (const stdair::BasLogParams& iLogParams) {
00179
00187     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00188       boost::make_shared<stdair::STDAIR_Service> (iLogParams);
00189
00190     return lSTDAIR_Service_ptr;
00191   }
00192
00193   // ////////////////////////////////////////////////////////////////////
00194   void AIRINV_Service::initRMOLService() {
00195
00196     // Retrieve the AirInv service context
00197     assert (_airinvServiceContext != NULL);
00198     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00199
00200     // Retrieve the StdAir service context
00201     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00202       lAIRINV_ServiceContext.getSTDAIR_ServicePtr();
00203
00211     RMOL::RMOL_ServicePtr_T lRMOL_Service_ptr =
00212       boost::make_shared<RMOL::RMOL_Service> (lSTDAIR_Service_ptr);
00213
00214     // Store the RMOL service object within the (AIRINV) service context
00215     lAIRINV_ServiceContext.setRMOL_Service (lRMOL_Service_ptr);
00216   }
00217
00218   // ////////////////////////////////////////////////////////////////////
00219   void AIRINV_Service::initAIRRACService() {
00220
00221     // Retrieve the AirInv service context
00222     assert (_airinvServiceContext != NULL);
00223     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00224
00225     // Retrieve the StdAir service context
00226     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00227       lAIRINV_ServiceContext.getSTDAIR_ServicePtr();
00228
00236     AIRRAC::AIRRAC_ServicePtr_T lAIRRAC_Service_ptr =
00237       boost::make_shared<AIRRAC::AIRRAC_Service> (lSTDAIR_Service_ptr);
00238
00239     // Store the AIRRAC service object within the (AIRINV) service context
```

```
00240     lAIRINV_ServiceContext.setAIRRAC_Service (lAIRRAC_Service_ptr);
00241   }
00242
00243   // ////////////////////////////////////////////////////////////////////
00244   void AIRINV_Service::initAirinvService() {
00245     // Do nothing at this stage. A sample BOM tree may be built by
00246     // calling the buildSampleBom() method
00247   }
00248
00249   // ////////////////////////////////////////////////////////////////////
00250   void AIRINV_Service::
00251   parseAndLoad (const stdair::Filename_T& iInventoryInputFilename
      ) {
00252
00253     // Retrieve the BOM root object.
00254     assert (_airinvServiceContext != NULL);
00255     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
      _airinvServiceContext;
00256     stdair::STDAIR_Service& lSTDAIR_Service =
00257       lAIRINV_ServiceContext.getSTDAIR_Service();
00258     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00259
00260     // Initialise the airline inventories
00261     InventoryParser::buildInventory (
      iInventoryInputFilename, lBomRoot);
00262   }
00263
00264   // ////////////////////////////////////////////////////////////////////
00265   void AIRINV_Service::
00266   parseAndLoad (const stdair::Filename_T& iScheduleInputFilename,
00267                 const stdair::Filename_T& iODInputFilename,
00268                 const AIRRAC::YieldFilePath& iYieldFilename) {
00269
00270     // Retrieve the BOM root object.
00271     assert (_airinvServiceContext != NULL);
00272     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
      _airinvServiceContext;
00273     stdair::STDAIR_Service& lSTDAIR_Service =
00274       lAIRINV_ServiceContext.getSTDAIR_Service();
00275     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00276
00277     // Initialise the airline inventories
00278     ScheduleParser::generateInventories (
      iScheduleInputFilename, lBomRoot);
00279
00280     // Parse the yield structures.
00281     AIRRAC::AIRRAC_Service& lAIRRAC_Service =
00282       lAIRINV_ServiceContext.getAIRRAC_Service();
00283     lAIRRAC_Service.parseAndLoad (iYieldFilename);
00284
00285     // Update yield values for booking classes and O&D.
00286     lAIRRAC_Service.updateYields();
00287   }
00288
00289   // ////////////////////////////////////////////////////////////////////
00290   void AIRINV_Service::buildSampleBom() {
00291
00292     // Retrieve the AirInv service context
00293     if (_airinvServiceContext == NULL) {
00294       throw stdair::NonInitialisedServiceException("The AirInv service has not
      "
00295                                                    "been initialised");
00296     }
00297     assert (_airinvServiceContext != NULL);
00298
00299     // Retrieve the AirInv service context and whether it owns the Stdair
00300     // service
00301     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
      _airinvServiceContext;
00302     const bool doesOwnStdairService =
00303       lAIRINV_ServiceContext.getOwnStdairServiceFlag();
00304
00305     // Retrieve the StdAir service object from the (AirInv) service context
00306     stdair::STDAIR_Service& lSTDAIR_Service =
00307       lAIRINV_ServiceContext.getSTDAIR_Service();
00308
00313     if (doesOwnStdairService == true) {
00314       //
00315       lSTDAIR_Service.buildSampleBom();
00316     }
00317
00328     AIRRAC::AIRRAC_Service& lAIRRAC_Service =
00329       lAIRINV_ServiceContext.getAIRRAC_Service();
00330     lAIRRAC_Service.buildSampleBom();
00331
00337     RMOL::RMOL_Service& lRMOL_Service= lAIRINV_ServiceContext.getRMOL_Service()
      ;
```

```
00338     lRMOL_Service.buildSampleBom();
00339
00365     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00366     InventoryManager::buildSimilarSegmentCabinSets
      (lBomRoot);
00367
00371     //    InventoryManager::setDefaultBidPriceVector (lBomRoot);
00372   }
00373
00374   // ////////////////////////////////////////////////////////////////////
00375   std::string AIRINV_Service::
00376   jsonExport (const stdair::AirlineCode_T& iAirlineCode,
00377               const stdair::FlightNumber_T& iFlightNumber,
00378               const stdair::Date_T& iDepartureDate) const {
00379
00380     // Retrieve the AIRINV service context
00381     if (_airinvServiceContext == NULL) {
00382       throw stdair::NonInitialisedServiceException ("The AirInv service "
00383                                                     "has not been initialised")
      ;
00384     }
00385     assert (_airinvServiceContext != NULL);
00386
00387     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
      _airinvServiceContext;
00388
00389     // Retrieve the STDAIR service object from the (AIRINV) service context
00390     stdair::STDAIR_Service& lSTDAIR_Service =
00391       lAIRINV_ServiceContext.getSTDAIR_Service();
00392
00393     // Delegate the JSON export to the dedicated service
00394     return lSTDAIR_Service.jsonExport (iAirlineCode, iFlightNumber,
00395                                        iDepartureDate);
00396   }
00397
00398   // ////////////////////////////////////////////////////////////////////
00399   std::string AIRINV_Service::
00400   list (const stdair::AirlineCode_T& iAirlineCode,
00401         const stdair::FlightNumber_T& iFlightNumber) const {
00402     std::ostringstream oFlightListStr;
00403
00404     if (_airinvServiceContext == NULL) {
00405       throw stdair::NonInitialisedServiceException ("The AirInv service "
00406                                                     "has not been initialised")
      ;
00407     }
00408     assert (_airinvServiceContext != NULL);
00409     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
      _airinvServiceContext;
00410
00411     // \todo Check that the current AIRINV_Service is actually operating for
00412     //       the given airline
00413
00414     // Retrieve the STDAIR service object from the (AirInv) service context
00415     stdair::STDAIR_Service& lSTDAIR_Service =
00416       lAIRINV_ServiceContext.getSTDAIR_Service();
00417
00418     // Delegate the BOM display to the dedicated service
00419     return lSTDAIR_Service.list (iAirlineCode, iFlightNumber);
00420   }
00421
00422   // ////////////////////////////////////////////////////////////////////
00423   bool AIRINV_Service::
00424   check (const stdair::AirlineCode_T& iAirlineCode,
00425          const stdair::FlightNumber_T& iFlightNumber,
00426          const stdair::Date_T& iDepartureDate) const {
00427     std::ostringstream oFlightListStr;
00428
00429     if (_airinvServiceContext == NULL) {
00430       throw stdair::NonInitialisedServiceException ("The AirInv service "
00431                                                     "has not been initialised")
      ;
00432     }
00433     assert (_airinvServiceContext != NULL);
00434     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
      _airinvServiceContext;
00435
00436     // \todo Check that the current AIRINV_Service is actually operating for
00437     //       the given airline
00438
00439     // Retrieve the STDAIR service object from the (AirInv) service context
00440     stdair::STDAIR_Service& lSTDAIR_Service =
00441       lAIRINV_ServiceContext.getSTDAIR_Service();
00442
00443     // Delegate the BOM display to the dedicated service
00444     return lSTDAIR_Service.check (iAirlineCode, iFlightNumber, iDepartureDate);
00445   }
```

```
00446
00447   // ////////////////////////////////////////////////////////////////////
00448   std::string AIRINV_Service::csvDisplay() const {
00449
00450     // Retrieve the AIRINV service context
00451     if (_airinvServiceContext == NULL) {
00452       throw stdair::NonInitialisedServiceException ("The AirInv service "
00453                                                     "has not been initialised")
    ;
00454     }
00455     assert (_airinvServiceContext != NULL);
00456
00457     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
    _airinvServiceContext;
00458
00459     // Retrieve the STDAIR service object from the (AirInv) service context
00460     stdair::STDAIR_Service& lSTDAIR_Service =
00461       lAIRINV_ServiceContext.getSTDAIR_Service();
00462
00463     // Delegate the BOM display to the dedicated service
00464     return lSTDAIR_Service.csvDisplay();
00465   }
00466
00467   // ////////////////////////////////////////////////////////////////////
00468   std::string AIRINV_Service::
00469   csvDisplay (const stdair::AirlineCode_T& iAirlineCode,
00470               const stdair::FlightNumber_T& iFlightNumber,
00471               const stdair::Date_T& iDepartureDate) const {
00472
00473     // Retrieve the AIRINV service context
00474     if (_airinvServiceContext == NULL) {
00475       throw stdair::NonInitialisedServiceException ("The AirInv service "
00476                                                     "has not been initialised")
    ;
00477     }
00478     assert (_airinvServiceContext != NULL);
00479
00480     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
    _airinvServiceContext;
00481
00482     // Retrieve the STDAIR service object from the (AirInv) service context
00483     stdair::STDAIR_Service& lSTDAIR_Service =
00484       lAIRINV_ServiceContext.getSTDAIR_Service();
00485
00486     // Delegate the BOM display to the dedicated service
00487     return lSTDAIR_Service.csvDisplay (iAirlineCode, iFlightNumber,
00488                                        iDepartureDate);
00489   }
00490
00491   // ////////////////////////////////////////////////////////////////////
00492   stdair::RMEventList_T AIRINV_Service::
00493   initRMEvents (const stdair::Date_T& iStartDate,
00494                 const stdair::Date_T& iEndDate) {
00495
00496     if (_airinvServiceContext == NULL) {
00497       throw stdair::NonInitialisedServiceException ("The AirInv service "
00498                                                     "has not been initialised")
    ;
00499     }
00500     assert (_airinvServiceContext != NULL);
00501     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
    _airinvServiceContext;
00502
00503     // \todo Retrieve the corresponding inventory
00504     stdair::STDAIR_Service& lSTDAIR_Service =
00505       lAIRINV_ServiceContext.getSTDAIR_Service();
00506     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00507
00508     stdair::RMEventList_T oRMEventList;
00509     const stdair::InventoryList_T& lInventoryList =
00510       stdair::BomManager::getList<stdair::Inventory> (lBomRoot);
00511     for (stdair::InventoryList_T::const_iterator itInv = lInventoryList.begin()
    ;
00512          itInv != lInventoryList.end(); ++itInv) {
00513       const stdair::Inventory* lInv_ptr = *itInv;
00514       assert (lInv_ptr != NULL);
00515
00516       InventoryManager::initRMEvents (*lInv_ptr,
    oRMEventList,
00517                                       iStartDate, iEndDate);
00518     }
00519
00520     return oRMEventList;
00521   }
00522
00523   // ////////////////////////////////////////////////////////////////////
00524   void AIRINV_Service::
```

```
00525   calculateAvailability (stdair::TravelSolutionStruct&
      ioTravelSolution,
00526                          const stdair::PartnershipTechnique&
      iPartnershipTechnique) {
00527
00528     if (_airinvServiceContext == NULL) {
00529       throw stdair::NonInitialisedServiceException ("The AirInv service "
00530                                                     "has not been initialised")
      ;
00531     }
00532     assert (_airinvServiceContext != NULL);
00533     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
      _airinvServiceContext;
00534
00535     // Retrieve the corresponding inventory.
00536     stdair::STDAIR_Service& lSTDAIR_Service =
00537       lAIRINV_ServiceContext.getSTDAIR_Service();
00538     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00539
00540     // Delegate the booking to the dedicated command
00541     stdair::BasChronometer lAvlChronometer;
00542     lAvlChronometer.start();
00543     InventoryManager::calculateAvailability
       (lBomRoot, ioTravelSolution, iPartnershipTechnique);
00544     // const double lAvlMeasure = lAvlChronometer.elapsed();
00545
00546     // DEBUG
00547     // STDAIR_LOG_DEBUG ("Availability retrieval: " << lAvlMeasure << " - "
00548     //                   << lAIRINV_ServiceContext.display());
00549   }
00550
00551   // ////////////////////////////////////////////////////////////////////
00552   bool AIRINV_Service::sell (const std::string&
      iSegmentDateKey,
00553                              const stdair::ClassCode_T& iClassCode,
00554                              const stdair::PartySize_T& iPartySize) {
00555     bool isSellSuccessful = false;
00556
00557     if (_airinvServiceContext == NULL) {
00558       throw stdair::NonInitialisedServiceException ("The AirInv service "
00559                                                     "has not been initialised")
      ;
00560     }
00561     assert (_airinvServiceContext != NULL);
00562     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
      _airinvServiceContext;
00563
00564     // \todo Check that the current AIRINV_Service is actually operating for
00565     //       the given airline (inventory key)
00566     // Retrieve the corresponding inventory key
00567     const stdair::InventoryKey& lInventoryKey =
00568       stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00569
00570     // Retrieve the root of the BOM tree
00571     stdair::STDAIR_Service& lSTDAIR_Service =
00572       lAIRINV_ServiceContext.getSTDAIR_Service();
00573     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00574
00575     // Retrieve the corresponding inventory
00576     stdair::Inventory& lInventory = stdair::BomManager::
00577       getObject<stdair::Inventory> (lBomRoot, lInventoryKey.toString());
00578
00579     // Delegate the booking to the dedicated command
00580     stdair::BasChronometer lSellChronometer; lSellChronometer.start();
00581     isSellSuccessful = InventoryManager::sell (lInventory
      , iSegmentDateKey,
00582                                                iClassCode, iPartySize);
00583     // const double lSellMeasure = lSellChronometer.elapsed();
00584
00585     // DEBUG
00586     // STDAIR_LOG_DEBUG ("Booking sell: " << lSellMeasure << " - "
00587     //                   << lAIRINV_ServiceContext.display());
00588
00589     return isSellSuccessful;
00590   }
00591
00592   // ////////////////////////////////////////////////////////////////////
00593   bool AIRINV_Service::cancel (const std::string&
      iSegmentDateKey,
00594                                const stdair::ClassCode_T& iClassCode,
00595                                const stdair::PartySize_T& iPartySize) {
00596     bool isCancellationSuccessful = false;
00597
00598     if (_airinvServiceContext == NULL) {
00599       throw stdair::NonInitialisedServiceException ("The AirInv service "
00600                                                     "has not been initialised")
      ;
```

```
00601     }
00602     assert (_airinvServiceContext != NULL);
00603     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
      _airinvServiceContext;
00604
00605     // \todo Check that the current AIRINV_Service is actually operating for
00606     //       the given airline (inventory key)
00607     // Retrieve the corresponding inventory key
00608     const stdair::InventoryKey& lInventoryKey =
00609       stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00610
00611     // Retrieve the root of the BOM tree
00612     stdair::STDAIR_Service& lSTDAIR_Service =
00613       lAIRINV_ServiceContext.getSTDAIR_Service();
00614     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00615
00616     // Retrieve the corresponding inventory
00617     stdair::Inventory& lInventory = stdair::BomManager::
00618       getObject<stdair::Inventory> (lBomRoot, lInventoryKey.toString());
00619
00620     // Delegate the booking to the dedicated command
00621     stdair::BasChronometer lCancellationChronometer;
00622     lCancellationChronometer.start();
00623     isCancellationSuccessful = InventoryManager::cancel
       (lInventory,
00624                                                          iSegmentDateKey,
00625                                                          iClassCode,iPartySize)
      ;
00626     // const double lCancellationMeasure = lCancellationChronometer.elapsed();
00627
00628     // DEBUG
00629     // STDAIR_LOG_DEBUG ("Booking cancellation: "
00630     //                   << lCancellationMeasure << " - "
00631     //                   << lAIRINV_ServiceContext.display());
00632
00633     return isCancellationSuccessful;
00634   }
00635
00636   // ////////////////////////////////////////////////////////////////////
00637   void AIRINV_Service::takeSnapshots (const
      stdair::AirlineCode_T& iAirlineCode,
00638                                       const stdair::DateTime_T& iSnapshotTime)
      {
00639
00640     if (_airinvServiceContext == NULL) {
00641       throw stdair::NonInitialisedServiceException ("The AirInv service "
00642                                                     "has not been initialised")
      ;
00643     }
00644     assert (_airinvServiceContext != NULL);
00645     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
      _airinvServiceContext;
00646
00647     // TODO: Retrieve the corresponding inventory.
00648     stdair::STDAIR_Service& lSTDAIR_Service =
00649       lAIRINV_ServiceContext.getSTDAIR_Service();
00650     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00651
00652     const stdair::InventoryList_T lInventoryList =
00653       stdair::BomManager::getList<stdair::Inventory> (lBomRoot);
00654     for (stdair::InventoryList_T::const_iterator itInv = lInventoryList.begin()
      ;
00655          itInv != lInventoryList.end(); ++itInv) {
00656       const stdair::Inventory* lInv_ptr = *itInv;
00657       assert (lInv_ptr != NULL);
00658
00659       InventoryManager::takeSnapshots (*lInv_ptr
      , iSnapshotTime);
00660     }
00661   }
00662
00663   // ////////////////////////////////////////////////////////////////////
00664   void AIRINV_Service::optimise (const
      stdair::AirlineCode_T& iAirlineCode,
00665                                  const stdair::KeyDescription_T& iFDDescription
      ,
00666                                  const stdair::DateTime_T& iRMEventTime,
00667                                  const stdair::ForecastingMethod&
      iForecastingMethod,
00668                                  const stdair::PartnershipTechnique&
      iPartnershipTechnique) {
00669     if (_airinvServiceContext == NULL) {
00670       throw stdair::NonInitialisedServiceException ("The AirInv service "
00671                                                     "has not been initialised")
      ;
00672     }
00673     assert (_airinvServiceContext != NULL);
```

```
00674     AIRINV_ServiceContext& lAIRINV_ServiceContext = *
      _airinvServiceContext;
00675
00676     // Retrieve the corresponding inventory & flight-date
00677     stdair::STDAIR_Service& lSTDAIR_Service =
00678       lAIRINV_ServiceContext.getSTDAIR_Service();
00679     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00680     stdair::Inventory& lInventory =
00681       stdair::BomManager::getObject<stdair::Inventory> (lBomRoot, iAirlineCode)
      ;
00682     stdair::FlightDate& lFlightDate =
00683       stdair::BomManager::getObject<stdair::FlightDate> (lInventory,
00684                                                          iFDDescription);
00685
00686     // Retrieve the RMOL service.
00687     RMOL::RMOL_Service& lRMOL_Service =lAIRINV_ServiceContext.getRMOL_Service()
      ;
00688
00689     // Optimise the flight-date.
00690     bool isOptimised = lRMOL_Service.optimise (lFlightDate, iRMEventTime,
00691                                                iForecastingMethod,
      iPartnershipTechnique);
00692
00693     // Update the inventory with the new controls.
00694     if (isOptimised == true) {
00695       InventoryManager::updateBookingControls (lFlightDate);
00696     }
00697   }
00698 }
```

23.223 airinv/service/AIRINV_ServiceContext.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <airinv/basic/BasConst_AIRINV_Service.hpp>
#include <airinv/service/AIRINV_ServiceContext.hpp>
```

Namespaces

- namespace AIRINV

23.224 AIRINV_ServiceContext.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // AirInv
00008 #include <airinv/basic/BasConst_AIRINV_Service.hpp
      >
00009 #include <airinv/service/AIRINV_ServiceContext.hpp
      >
00010
00011 namespace AIRINV {
00012
00013   // ////////////////////////////////////////////////////////////////////
00014   AIRINV_ServiceContext::AIRINV_ServiceContext()
00015     : _ownStdairService (false), _airlineCode (DEFAULT_AIRLINE_CODE
      ) {
00016   }
00017
00018   // ////////////////////////////////////////////////////////////////////
00019   AIRINV_ServiceContext::
00020   AIRINV_ServiceContext (const stdair::AirlineCode_T& iAirlineCode)
00021     : _ownStdairService (false), _airlineCode (iAirlineCode) {
00022   }
00023
00024   // ////////////////////////////////////////////////////////////////////
00025   AIRINV_ServiceContext::AIRINV_ServiceContext (const AIRINV_ServiceContext&)
00026     : _ownStdairService (false), _airlineCode (DEFAULT_AIRLINE_CODE
      ) {
00027   }
00028
```

```
00029   // ////////////////////////////////////////////////////////////////////
00030   AIRINV_ServiceContext::~AIRINV_ServiceContext() {
00031   }
00032
00033   // ////////////////////////////////////////////////////////////////////
00034   const std::string AIRINV_ServiceContext::shortDisplay() const {
00035     std::ostringstream oStr;
00036     oStr << "AIRINV_ServiceContext[" << _airlineCode
00037          << "] -- Owns StdAir service: " << _ownStdairService;
00038     return oStr.str();
00039   }
00040
00041   // ////////////////////////////////////////////////////////////////////
00042   const std::string AIRINV_ServiceContext::display() const {
00043     std::ostringstream oStr;
00044     oStr << shortDisplay();
00045     return oStr.str();
00046   }
00047
00048   // ////////////////////////////////////////////////////////////////////
00049   const std::string AIRINV_ServiceContext::describe() const {
00050     return shortDisplay();
00051   }
00052
00053   // ////////////////////////////////////////////////////////////////////
00054   void AIRINV_ServiceContext::reset() {
00055     if (_ownStdairService == true) {
00056       _stdairService.reset();
00057     }
00058   }
00059
00060 }
```

23.225 airinv/service/AIRINV_ServiceContext.hpp File Reference

```
#include <string>
#include <boost/shared_ptr.hpp>
#include <stdair/stdair_service_types.hpp>
#include <stdair/service/ServiceAbstract.hpp>
#include <rmol/RMOL_Types.hpp>
#include <airrac/AIRRAC_Types.hpp>
#include <airinv/AIRINV_Types.hpp>
```

Classes

- class AIRINV::AIRINV_ServiceContext

  Class holding the context of the AirInv services.

Namespaces

- namespace AIRINV

23.226 AIRINV_ServiceContext.hpp

```
00001 #ifndef __AIRINV_SVC_AIRINVSERVICECONTEXT_HPP
00002 #define __AIRINV_SVC_AIRINVSERVICECONTEXT_HPP
00003
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // Boost
00010 #include <boost/shared_ptr.hpp>
00011 // StdAir
00012 #include <stdair/stdair_service_types.hpp>
00013 #include <stdair/service/ServiceAbstract.hpp>
00014 // RMOL
00015 #include <rmol/RMOL_Types.hpp>
```

```
00016 // AIRRAC
00017 #include <airrac/AIRRAC_Types.hpp>
00018 // AirInv
00019 #include <airinv/AIRINV_Types.hpp>
00020
00021 namespace AIRINV {
00022
00026   class AIRINV_ServiceContext : public
      stdair::ServiceAbstract {
00032     friend class AIRINV_Service;
00033     friend class FacAirinvServiceContext;
00034
00035   private:
00036     // ////////////////// Getters ////////////////////
00040     stdair::AirlineCode_T getAirlineCode() const {
00041       return _airlineCode;
00042     }
00043
00047     stdair::STDAIR_ServicePtr_T getSTDAIR_ServicePtr() const {
00048       return _stdairService;
00049     }
00050
00054     stdair::STDAIR_Service& getSTDAIR_Service() const {
00055       assert (_stdairService != NULL);
00056       return *_stdairService;
00057     }
00058
00062     const bool getOwnStdairServiceFlag() const {
00063       return _ownStdairService;
00064     }
00065
00069     RMOL::RMOL_Service& getRMOL_Service() const {
00070       assert (_rmolService != NULL);
00071       return *_rmolService;
00072     }
00073
00077     AIRRAC::AIRRAC_Service& getAIRRAC_Service() const {
00078       assert (_airracService != NULL);
00079       return *_airracService;
00080     }
00081
00082
00083   private:
00084     // ////////////////// Setters ////////////////////
00088     void setAirlineCode (const stdair::AirlineCode_T& iAirlineCode) {
00089       _airlineCode = iAirlineCode;
00090     }
00091
00095     void setSTDAIR_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_ServicePtr,
00096                             const bool iOwnStdairService) {
00097       _stdairService = ioSTDAIR_ServicePtr;
00098       _ownStdairService = iOwnStdairService;
00099     }
00100
00104     void setRMOL_Service (RMOL::RMOL_ServicePtr_T ioRMOL_ServicePtr) {
00105       _rmolService = ioRMOL_ServicePtr;
00106     }
00107
00111     void setAIRRAC_Service (AIRRAC::AIRRAC_ServicePtr_T ioAIRRAC_ServicePtr) {
00112       _airracService = ioAIRRAC_ServicePtr;
00113     }
00114
00115
00116   private:
00117     // ////////////////////// Display Methods /////////////////////
00121     const std::string shortDisplay() const;
00122
00126     const std::string display() const;
00127
00131     const std::string describe() const;
00132
00133
00134   private:
00136
00139     AIRINV_ServiceContext (const stdair::AirlineCode_T&);
00143     AIRINV_ServiceContext();
00147     AIRINV_ServiceContext (const AIRINV_ServiceContext&);
00148
00152     ~AIRINV_ServiceContext();
00153
00157     void reset();
00158
00159
00160   private:
00161     // ///////////////// Children ///////////////
00165     stdair::STDAIR_ServicePtr_T _stdairService;
00166
```

```
00170     bool _ownStdairService;
00171
00175     RMOL::RMOL_ServicePtr_T _rmolService;
00176
00180     AIRRAC::AIRRAC_ServicePtr_T _airracService;
00181
00182   private:
00183     // ////////////// Attributes ////////////
00188     stdair::AirlineCode_T _airlineCode;
00189   };
00190
00191 }
00192 #endif // __AIRINV_SVC_AIRINVSERVICECONTEXT_HPP
```

23.227 airinv/service/ServiceAbstract.cpp File Reference

```
#include <airinv/service/ServiceAbstract.hpp>
```

Namespaces

- namespace AIRINV

23.228 ServiceAbstract.cpp

```
00001 // ////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////////////////////////////////
00004 // AIRINV
00005 #include <airinv/service/ServiceAbstract.hpp>
00006
00007 namespace AIRINV {
00008
00009 }
```

23.229 airinv/service/ServiceAbstract.hpp File Reference

```
#include <iosfwd>
```

Classes

- class AIRINV::ServiceAbstract

Namespaces

- namespace AIRINV

Functions

- template<class charT , class traits >
  std::basic_ostream< charT,
  traits > & operator<< (std::basic_ostream< charT, traits > &ioOut, const AIRINV::ServiceAbstract &iService)
- template<class charT , class traits >
  std::basic_istream< charT,
  traits > & operator>> (std::basic_istream< charT, traits > &ioIn, AIRINV::ServiceAbstract &ioService)

23.229.1 Function Documentation

23.229.1.1 template<class charT , class traits > std::basic_ostream<charT, traits>& operator<< (std::basic_ostream< charT, traits > & *ioOut,* const AIRINV::ServiceAbstract & *iService*) [inline]

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (p653) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line 42 of file ServiceAbstract.hpp.

23.229.1.2 template<class charT , class traits > std::basic_istream<charT, traits>& operator>> (std::basic_istream< charT, traits > & *ioIn,* AIRINV::ServiceAbstract & *ioService*) [inline]

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (pp655-657) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line 70 of file ServiceAbstract.hpp.

References AIRINV::ServiceAbstract::fromStream().

23.230 ServiceAbstract.hpp

```
00001 #ifndef __AIRINV_SVC_SERVICEABSTRACT_HPP
00002 #define __AIRINV_SVC_SERVICEABSTRACT_HPP
00003
00004 // //////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <iosfwd>
00009 //#include <sstream>
00010
00011 namespace AIRINV {
00012
00014   class ServiceAbstract {
00015   public:
00016
00018     virtual ~ServiceAbstract() {}
00019
00022     virtual void toStream (std::ostream& ioOut) const {}
00023
00026     virtual void fromStream (std::istream& ioIn) {}
00027
00028   protected:
00030     ServiceAbstract() {}
00031   };
00032 }
00033
00039 template <class charT, class traits>
00040 inline
00041 std::basic_ostream<charT, traits>&
00042 operator<< (std::basic_ostream<charT, traits>& ioOut,
00043             const AIRINV::ServiceAbstract& iService) {
00049   std::basic_ostringstream<charT,traits> ostr;
00050   ostr.copyfmt (ioOut);
00051   ostr.width (0);
00052
00053   // Fill string stream
00054   iService.toStream (ostr);
00055
00056   // Print string stream
00057   ioOut << ostr.str();
00058
00059   return ioOut;
00060 }
00061
00067 template <class charT, class traits>
00068 inline
00069 std::basic_istream<charT, traits>&
00070 operator>> (std::basic_istream<charT, traits>& ioIn,
00071             AIRINV::ServiceAbstract& ioService) {
00072   // Fill Service object with input stream
00073   ioService.fromStream (ioIn);
00074   return ioIn;
00075 }
00076
00077 #endif // __AIRINV_SVC_SERVICEABSTRACT_HPP
```

23.231 airinv/ui/cmdline/airinv.cpp File Reference

23.232 airinv.cpp

```
00001
00005 // STL
00006 #include <cassert>
00007 #include <iostream>
00008 #include <sstream>
00009 #include <fstream>
00010 #include <string>
00011 // Boost (Extended STL)
00012 #include <boost/program_options.hpp>
00013 #include <boost/tokenizer.hpp>
00014 #include <boost/regex.hpp>
00015 #include <boost/swap.hpp>
00016 #include <boost/algorithm/string/case_conv.hpp>
00017 // StdAir
00018 #include <stdair/basic/BasLogParams.hpp>
00019 #include <stdair/basic/BasDBParams.hpp>
00020 #include <stdair/service/Logger.hpp>
00021 // AirInv
00022 #include <airinv/AIRINV_Master_Service.hpp>
00023 #include <airinv/config/airinv-paths.hpp>
00024 // GNU Readline Wrapper
00025 #include <airinv/ui/cmdline/SReadline.hpp>
00026
00027 // //////// Constants //////
00031 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("airinv.log");
00032
00036 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00037                                                         "/invdump01.csv");
00041 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00042                                                        "/schedule01.csv");
00046 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00047                                                  "/ond01.csv");
00048
00052 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00053                                                    "/yieldstore01.csv");
00054
00059 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00060
00065 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00066
00070 const int K_AIRINV_EARLY_RETURN_STATUS = 99;
00071
00076 typedef std::vector<std::string> TokenList_T;
00077
00081 struct Command_T {
00082   typedef enum {
00083     NOP = 0,
00084     QUIT,
00085     HELP,
00086     LIST,
00087     DISPLAY,
00088     SELECT,
00089     SELL,
00090     LAST_VALUE
00091   } Type_T;
00092 };
00093
00094 // ///////// Parsing of Options & Configuration /////////
00095 // A helper function to simplify the main part.
00096 template<class T> std::ostream& operator<< (std::ostream& os,
00097                                             const std::vector<T>& v) {
00098   std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00099   return os;
00100 }
00101
00105 int readConfiguration (int argc, char* argv[],
00106                        bool& ioIsBuiltin, bool& ioIsForSchedule,
00107                        stdair::Filename_T& ioInventoryFilename,
00108                        stdair::Filename_T& ioScheduleInputFilename,
00109                        stdair::Filename_T& ioODInputFilename,
00110                        stdair::Filename_T& ioYieldInputFilename,
00111                        std::string& ioLogFilename) {
00112   // Default for the built-in input
00113   ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;
00114
00115   // Default for the inventory or schedule option
00116   ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00117
00118   // Declare a group of options that will be allowed only on command line
00119   boost::program_options::options_description generic ("Generic options");
00120   generic.add_options()
```

```
00121     ("prefix", "print installation prefix")
00122     ("version,v", "print version string")
00123     ("help,h", "produce help message");
00124
00125   // Declare a group of options that will be allowed both on command
00126   // line and in config file
00127
00128   boost::program_options::options_description config ("Configuration");
00129   config.add_options()
00130     ("builtin,b",
00131      "The sample BOM tree can be either built-in or parsed from an input file.
       That latter must then be given with the -i/--inventory or -s/--schedule option")
00132     ("for_schedule,f",
00133      "The BOM tree should be built from a schedule file (instead of from an
       inventory dump)")
00134     ("inventory,i",
00135      boost::program_options::value< std::string >(&ioInventoryFilename)->
      default_value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00136      "(CSV) input file for the inventory")
00137     ("schedule,s",
00138      boost::program_options::value< std::string >(&ioScheduleInputFilename)->
      default_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00139      "(CSV) input file for the schedule")
00140     ("ond,o",
00141      boost::program_options::value< std::string >(&ioODInputFilename)->
      default_value(K_AIRINV_DEFAULT_OND_FILENAME),
00142      "(CSV) input file for the O&D")
00143     ("yield,y",
00144      boost::program_options::value< std::string >(&ioYieldInputFilename)->
      default_value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00145      "(CSV) input file for the yield")
00146     ("log,l",
00147      boost::program_options::value< std::string >(&ioLogFilename)->
      default_value(K_AIRINV_DEFAULT_LOG_FILENAME),
00148      "Filename for the logs")
00149     ;
00150
00151   // Hidden options, will be allowed both on command line and
00152   // in config file, but will not be shown to the user.
00153   boost::program_options::options_description hidden ("Hidden options");
00154   hidden.add_options()
00155     ("copyright",
00156      boost::program_options::value< std::vector<std::string> >(),
00157      "Show the copyright (license)");
00158
00159   boost::program_options::options_description cmdline_options;
00160   cmdline_options.add(generic).add(config).add(hidden);
00161
00162   boost::program_options::options_description config_file_options;
00163   config_file_options.add(config).add(hidden);
00164   boost::program_options::options_description visible ("Allowed options");
00165   visible.add(generic).add(config);
00166
00167   boost::program_options::positional_options_description p;
00168   p.add ("copyright", -1);
00169
00170   boost::program_options::variables_map vm;
00171   boost::program_options::
00172     store (boost::program_options::command_line_parser (argc, argv).
00173            options (cmdline_options).positional(p).run(), vm);
00174
00175   std::ifstream ifs ("airinv.cfg");
00176   boost::program_options::store (parse_config_file (ifs, config_file_options),
00177                                  vm);
00178   boost::program_options::notify (vm);
00179
00180   if (vm.count ("help")) {
00181     std::cout << visible << std::endl;
00182     return K_AIRINV_EARLY_RETURN_STATUS;
00183   }
00184
00185   if (vm.count ("version")) {
00186     std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION
       << std::endl;
00187     return K_AIRINV_EARLY_RETURN_STATUS;
00188   }
00189
00190   if (vm.count ("prefix")) {
00191     std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00192     return K_AIRINV_EARLY_RETURN_STATUS;
00193   }
00194
00195   if (vm.count ("builtin")) {
00196     ioIsBuiltin = true;
00197   }
00198   const std::string isBuiltinStr = (ioIsBuiltin == true)?"yes":"no";
00199   std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
```

```
00200
00201   if (vm.count ("for_schedule")) {
00202     ioIsForSchedule = true;
00203   }
00204   const std::string isForScheduleStr = (ioIsForSchedule == true)?"yes":"no";
00205   std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00206             << std::endl;
00207
00208   if (ioIsBuiltin == false) {
00209
00210     if (ioIsForSchedule == false) {
00211       // The BOM tree should be built from parsing an inventory dump
00212       if (vm.count ("inventory")) {
00213         ioInventoryFilename = vm["inventory"].as< std::string >();
00214         std::cout << "Input inventory filename is: " << ioInventoryFilename
00215                   << std::endl;
00216
00217       } else {
00218         // The built-in option is not selected. However, no inventory dump
00219         // file is specified
00220         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00221                   << " -f/--for_schedule and -s/--schedule options "
00222                   << "must be specified" << std::endl;
00223       }
00224
00225     } else {
00226       // The BOM tree should be built from parsing a schedule (and O&D) file
00227       if (vm.count ("schedule")) {
00228         ioScheduleInputFilename = vm["schedule"].as< std::string >();
00229         std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00230                   << std::endl;
00231
00232       } else {
00233         // The built-in option is not selected. However, no schedule file
00234         // is specified
00235         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00236                   << " -f/--for_schedule and -s/--schedule options "
00237                   << "must be specified" << std::endl;
00238       }
00239
00240       if (vm.count ("ond")) {
00241         ioODInputFilename = vm["ond"].as< std::string >();
00242         std::cout << "Input O&D filename is: " << ioODInputFilename <<
      std::endl;
00243       }
00244
00245       if (vm.count ("yield")) {
00246         ioYieldInputFilename = vm["yield"].as< std::string >();
00247         std::cout << "Input yield filename is: " << ioYieldInputFilename <<
      std::endl;
00248       }
00249     }
00250   }
00251
00252   if (vm.count ("log")) {
00253     ioLogFilename = vm["log"].as< std::string >();
00254     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00255   }
00256
00257   return 0;
00258 }
00259
00260 // ////////////////////////////////////////////////////////////////////
00261 void initReadline (swift::SReadline& ioInputReader) {
00262
00263   // Prepare the list of my own completers
00264   std::vector<std::string> Completers;
00265
00266   // The following is supported:
00267   // - "identifiers"
00268   // - special identifier %file - means to perform a file name completion
00269   Completers.push_back ("help");
00270   Completers.push_back ("list %airline_code %flight_number");
00271   Completers.push_back ("select %airline_code %flight_number %flight_date");
00272   Completers.push_back ("display");
00273   Completers.push_back ("sell %booking_class %party_size %origin %destination")
      ;
00274   Completers.push_back ("quit");
00275
00276
00277   // Now register the completers.
00278   // Actually it is possible to re-register another set at any time
00279   ioInputReader.RegisterCompletions (Completers);
00280 }
00281
00282 // ////////////////////////////////////////////////////////////////////
00283 Command_T::Type_T extractCommand (TokenList_T& ioTokenList) {
```

```
00284   Command_T::Type_T oCommandType = Command_T::LAST_VALUE;
00285
00286   // Interpret the user input
00287   if (ioTokenList.empty() == false) {
00288     TokenList_T::iterator itTok = ioTokenList.begin();
00289     std::string lCommand (*itTok);
00290     boost::algorithm::to_lower (lCommand);
00291
00292     if (lCommand == "help") {
00293       oCommandType = Command_T::HELP;
00294
00295     } else if (lCommand == "list") {
00296       oCommandType = Command_T::LIST;
00297
00298     } else if (lCommand == "display") {
00299       oCommandType = Command_T::DISPLAY;
00300
00301     } else if (lCommand == "select") {
00302       oCommandType = Command_T::SELECT;
00303
00304     } else if (lCommand == "sell") {
00305       oCommandType = Command_T::SELL;
00306
00307     } else if (lCommand == "quit") {
00308       oCommandType = Command_T::QUIT;
00309     }
00310
00311     // Remove the first token (the command), as the corresponding information
00312     // has been extracted in the form of the returned command type enumeration
00313     ioTokenList.erase (itTok);
00314
00315   } else {
00316     oCommandType = Command_T::NOP;
00317   }
00318
00319   return oCommandType;
00320 }
00321
00322 // ////////////////////////////////////////////////////////////////////
00323 void parseFlightKey (const TokenList_T& iTokenList,
00324                      stdair::AirlineCode_T& ioAirlineCode,
00325                      stdair::FlightNumber_T& ioFlightNumber) {
00326   // Interpret the user input
00327   if (iTokenList.empty() == false) {
00328
00329     // Read the airline code
00330     TokenList_T::const_iterator itTok = iTokenList.begin();
00331     if (itTok->empty() == false) {
00332       ioAirlineCode = *itTok;
00333       boost::algorithm::to_upper (ioAirlineCode);
00334     }
00335
00336     // Read the flight-number
00337     ++itTok;
00338     if (itTok != iTokenList.end()) {
00339
00340       if (itTok->empty() == false) {
00341         try {
00342
00343           ioFlightNumber = boost::lexical_cast<stdair::FlightNumber_T> (*itTok)
    ;
00344
00345         } catch (boost::bad_lexical_cast& eCast) {
00346           std::cerr << "The flight number ('" << *itTok
00347                     << "') cannot be understood. "
00348                     << "The default value (all) is kept."
00349                     << std::endl;
00350           return;
00351         }
00352       }
00353
00354     } else {
00355       return;
00356     }
00357   }
00358 }
00359
00360 // ////////////////////////////////////////////////////////////////////
00361 void parseFlightDateKey (const TokenList_T& iTokenList,
00362                          stdair::AirlineCode_T& ioAirlineCode,
00363                          stdair::FlightNumber_T& ioFlightNumber,
00364                          stdair::Date_T& ioDepartureDate) {
00365   //
00366   const std::string kMonthStr[12] = {"Jan", "Feb", "Mar", "Apr", "May", "Jun",
00367                                      "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"};
00368   //
00369   unsigned short ioDepartureDateYear = ioDepartureDate.year();
```

```
00370   unsigned short ioDepartureDateMonth = ioDepartureDate.month();
00371   std::string ioDepartureDateMonthStr = kMonthStr[ioDepartureDateMonth-1];
00372   unsigned short ioDepartureDateDay = ioDepartureDate.day();
00373
00374   // Interpret the user input
00375   if (iTokenList.empty() == false) {
00376
00377     // Read the airline code
00378     TokenList_T::const_iterator itTok = iTokenList.begin();
00379     if (itTok->empty() == false) {
00380       ioAirlineCode = *itTok;
00381       boost::algorithm::to_upper (ioAirlineCode);
00382     }
00383
00384     // Read the flight-number
00385     ++itTok;
00386     if (itTok != iTokenList.end()) {
00387
00388       if (itTok->empty() == false) {
00389         try {
00390
00391           ioFlightNumber = boost::lexical_cast<stdair::FlightNumber_T> (*itTok)
      ;
00392
00393         } catch (boost::bad_lexical_cast& eCast) {
00394           std::cerr << "The flight number ('" << *itTok
00395                     << "') cannot be understood. "
00396                     << "The default value (all) is kept."
00397                     << std::endl;
00398           return;
00399         }
00400       }
00401
00402     } else {
00403       return;
00404     }
00405
00406     // Read the year for the departure date
00407     ++itTok;
00408     if (itTok != iTokenList.end()) {
00409
00410       if (itTok->empty() == false) {
00411         try {
00412
00413           ioDepartureDateYear = boost::lexical_cast<unsigned short> (*itTok);
00414           if (ioDepartureDateYear < 100) {
00415             ioDepartureDateYear += 2000;
00416           }
00417
00418         } catch (boost::bad_lexical_cast& eCast) {
00419           std::cerr << "The year of the flight departure date ('" << *itTok
00420                     << "') cannot be understood. The default value ("
00421                     << ioDepartureDateYear << ") is kept. " << std::endl;
00422           return;
00423         }
00424       }
00425
00426     } else {
00427       return;
00428     }
00429
00430     // Read the month for the departure date
00431     ++itTok;
00432     if (itTok != iTokenList.end()) {
00433
00434       if (itTok->empty() == false) {
00435         try {
00436
00437           const boost::regex lMonthRegex ("^(\\d{1,2})$");
00438           const bool isMonthANumber = regex_match (*itTok, lMonthRegex);
00439
00440           if (isMonthANumber == true) {
00441             const unsigned short lMonth =
00442               boost::lexical_cast<unsigned short> (*itTok);
00443             if (lMonth > 12) {
00444               throw boost::bad_lexical_cast();
00445             }
00446             ioDepartureDateMonthStr = kMonthStr[lMonth-1];
00447
00448           } else {
00449             const std::string lMonthStr (*itTok);
00450             if (lMonthStr.size() < 3) {
00451               throw boost::bad_lexical_cast();
00452             }
00453             std::string lMonthStr1 (lMonthStr.substr (0, 1));
00454             boost::algorithm::to_upper (lMonthStr1);
00455             std::string lMonthStr23 (lMonthStr.substr (1, 2));
```

```
00456             boost::algorithm::to_lower (lMonthStr23);
00457             ioDepartureDateMonthStr = lMonthStr1 + lMonthStr23;
00458           }
00459
00460         } catch (boost::bad_lexical_cast& eCast) {
00461           std::cerr << "The month of the flight departure date ('" << *itTok
00462                     << "') cannot be understood. The default value ("
00463                     << ioDepartureDateMonthStr << ") is kept. " << std::endl;
00464           return;
00465         }
00466       }
00467
00468     } else {
00469       return;
00470     }
00471
00472     // Read the day for the departure date
00473     ++itTok;
00474     if (itTok != iTokenList.end()) {
00475
00476       if (itTok->empty() == false) {
00477         try {
00478
00479           ioDepartureDateDay = boost::lexical_cast<unsigned short> (*itTok);
00480
00481         } catch (boost::bad_lexical_cast& eCast) {
00482           std::cerr << "The day of the flight departure date ('" << *itTok
00483                     << "') cannot be understood. The default value ("
00484                     << ioDepartureDateDay << ") is kept. " << std::endl;
00485           return;
00486         }
00487       }
00488
00489     } else {
00490       return;
00491     }
00492
00493     // Re-compose the departure date
00494     std::ostringstream lDepartureDateStr;
00495     lDepartureDateStr << ioDepartureDateYear << "-" << ioDepartureDateMonthStr
00496                       << "-" << ioDepartureDateDay;
00497
00498     try {
00499
00500       ioDepartureDate =
00501         boost::gregorian::from_simple_string (lDepartureDateStr.str());
00502
00503     } catch (boost::gregorian::bad_month& eCast) {
00504       std::cerr << "The flight departure date ('" << lDepartureDateStr.str()
00505                 << "') cannot be understood. The default value ("
00506                 << ioDepartureDate << ") is kept. " << std::endl;
00507       return;
00508     }
00509
00510   }
00511 }
00512
00513 // //////////////////////////////////////////////////////////////////
00514 void parseBookingClassKey (const TokenList_T& iTokenList,
00515                            stdair::ClassCode_T& ioBookingClass,
00516                            stdair::PartySize_T& ioPartySize,
00517                            stdair::AirportCode_T& ioOrigin,
00518                            stdair::AirportCode_T& ioDestination) {
00519   // Interpret the user input
00520   if (iTokenList.empty() == false) {
00521
00522     // Read the booking class
00523     TokenList_T::const_iterator itTok = iTokenList.begin();
00524     if (itTok->empty() == false) {
00525       ioBookingClass = *itTok;
00526       boost::algorithm::to_upper (ioBookingClass);
00527     }
00528
00529     // Read the party size
00530     ++itTok;
00531     if (itTok != iTokenList.end()) {
00532
00533       if (itTok->empty() == false) {
00534         try {
00535
00536           ioPartySize = boost::lexical_cast<stdair::PartySize_T> (*itTok);
00537
00538         } catch (boost::bad_lexical_cast& eCast) {
00539           std::cerr << "The party size ('" << *itTok
00540                     << "') cannot be understood. The default value ("
00541                     << ioPartySize << ") is kept." << std::endl;
00542           return;
```

```
00543         }
00544       }
00545
00546     } else {
00547       return;
00548     }
00549
00550     // Read the origin
00551     ++itTok;
00552     if (itTok != iTokenList.end()) {
00553
00554       if (itTok->empty() == false) {
00555         ioOrigin = *itTok;
00556         boost::algorithm::to_upper (ioOrigin);
00557       }
00558
00559     } else {
00560       return;
00561     }
00562
00563     // Read the destination
00564     ++itTok;
00565     if (itTok != iTokenList.end()) {
00566
00567       if (itTok->empty() == false) {
00568         ioDestination = *itTok;
00569         boost::algorithm::to_upper (ioDestination);
00570       }
00571
00572     } else {
00573       return;
00574     }
00575   }
00576 }
00577
00578 // ////////////////////////////////////////////////////////
00579 std::string toString (const TokenList_T& iTokenList) {
00580   std::ostringstream oStr;
00581
00582   // Re-create the string with all the tokens, trimmed by read-line
00583   unsigned short idx = 0;
00584   for (TokenList_T::const_iterator itTok = iTokenList.begin();
00585        itTok != iTokenList.end(); ++itTok, ++idx) {
00586     if (idx != 0) {
00587       oStr << " ";
00588     }
00589     oStr << *itTok;
00590   }
00591
00592   return oStr.str();
00593 }
00594
00595 // ////////////////////////////////////////////////////////
00596 TokenList_T extractTokenList (const TokenList_T& iTokenList,
00597                               const std::string& iRegularExpression) {
00598   TokenList_T oTokenList;
00599
00600   // Re-create the string with all the tokens (which had been trimmed
00601   // by read-line)
00602   const std::string lFullLine = toString (iTokenList);
00603
00604   // See the caller for the regular expression
00605   boost::regex expression (iRegularExpression);
00606
00607   std::string::const_iterator start = lFullLine.begin();
00608   std::string::const_iterator end = lFullLine.end();
00609
00610   boost::match_results<std::string::const_iterator> what;
00611   boost::match_flag_type flags = boost::match_default | boost::format_sed;
00612   regex_search (start, end, what, expression, flags);
00613
00614   // Put the matched strings in the list of tokens to be returned back
00615   // to the caller
00616   const unsigned short lMatchSetSize = what.size();
00617   for (unsigned short matchIdx = 1; matchIdx != lMatchSetSize; ++matchIdx) {
00618     const std::string lMatchedString (std::string (what[matchIdx].first,
00619                                                    what[matchIdx].second));
00620     //if (lMatchedString.empty() == false) {
00621     oTokenList.push_back (lMatchedString);
00622     //}
00623   }
00624
00625   // DEBUG
00626   // std::cout << "After (token list): " << oTokenList << std::endl;
00627
00628   return oTokenList;
00629 }
```

```
00630
00631 // ////////////////////////////////////////////////////////
00632 TokenList_T extractTokenListForFlight (const TokenList_T& iTokenList) {
00639   const std::string lRegEx ("^([[:alpha:]]{2,3})?"
00640                             "[[:space:]]*([[:digit:]]{1,4})?$");
00641
00642   //
00643   const TokenList_T& oTokenList = extractTokenList (iTokenList, lRegEx);
00644   return oTokenList;
00645 }
00646
00647 // ////////////////////////////////////////////////////////
00648 TokenList_T extractTokenListForFlightDate (const TokenList_T& iTokenList) {
00659   const std::string lRegEx("^([[:alpha:]]{2,3})?"
00660                            "[[:space:]]*([[:digit:]]{1,4})?"
00661                            "[/ ]*"
00662                            "([[:digit:]]{2,4})?[/-]?[[:space:]]*"
00663                            "([[:alpha:]]{3}|[[:digit:]]{1,2})?[/-]?[[:space:]]*
     "
00664                            "([[:digit:]]{1,2})?$");
00665
00666   //
00667   const TokenList_T& oTokenList = extractTokenList (iTokenList, lRegEx);
00668   return oTokenList;
00669 }
00670
00671 // ////////////////////////////////////////////////////////
00672 TokenList_T extractTokenListForClass (const TokenList_T& iTokenList) {
00681   const std::string lRegEx ("^([[:alpha:]])?"
00682                             "[[:space:]]*([[:digit:]]{1,3})?"
00683                             "[[:space:]]*([[:alpha:]]{3})?"
00684                             "[[:space:]]*([[:alpha:]]{3})?$");
00685
00686   //
00687   const TokenList_T& oTokenList = extractTokenList (iTokenList, lRegEx);
00688   return oTokenList;
00689 }
00690
00691
00692 // ///////// M A I N ////////////
00693 int main (int argc, char* argv[]) {
00694
00695   // State whether the BOM tree should be built-in or parsed from an
00696   // input file
00697   bool isBuiltin;
00698   bool isForSchedule;
00699
00700   // Input file names
00701   stdair::Filename_T lInventoryFilename;
00702   stdair::Filename_T lScheduleInputFilename;
00703   stdair::Filename_T lODInputFilename;
00704   stdair::Filename_T lYieldInputFilename;
00705
00706   // Readline history
00707   const unsigned int lHistorySize (100);
00708   const std::string lHistoryFilename ("airinv.hist");
00709   const std::string lHistoryBackupFilename ("airinv.hist.bak");
00710
00711   // Default parameters for the interactive session
00712   stdair::AirlineCode_T lLastInteractiveAirlineCode;
00713   stdair::FlightNumber_T lLastInteractiveFlightNumber;
00714   stdair::Date_T lLastInteractiveDate;
00715   stdair::AirlineCode_T lInteractiveAirlineCode;
00716   stdair::FlightNumber_T lInteractiveFlightNumber;
00717   stdair::Date_T lInteractiveDate;
00718   stdair::AirportCode_T lInteractiveOrigin;
00719   stdair::AirportCode_T lInteractiveDestination;
00720   stdair::ClassCode_T lInteractiveBookingClass;
00721   stdair::PartySize_T lInteractivePartySize;
00722
00723   // Parameters for the sale
00724   std::string lSegmentDateKey;
00725
00726   // Output log File
00727   stdair::Filename_T lLogFilename;
00728
00729   // Call the command-line option parser
00730   const int lOptionParserStatus =
00731     readConfiguration (argc, argv, isBuiltin, isForSchedule, lInventoryFilename
     ,
00732                        lScheduleInputFilename, lODInputFilename,
00733                        lYieldInputFilename, lLogFilename);
00734
00735   if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00736     return 0;
00737   }
00738
```

```
00739   // Set the log parameters
00740   std::ofstream logOutputFile;
00741   // Open and clean the log outputfile
00742   logOutputFile.open (lLogFilename.c_str());
00743   logOutputFile.clear();
00744
00745   // Initialise the inventory service
00746   const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00747   AIRINV::AIRINV_Master_Service airinvService (
      lLogParams);
00748
00749   // DEBUG
00750   STDAIR_LOG_DEBUG ("Welcome to AirInv");
00751
00752   // Check wether or not a (CSV) input file should be read
00753   if (isBuiltin == true) {
00754
00755     // Build the sample BOM tree for RMOL
00756     airinvService.buildSampleBom();
00757
00758     // Update the default parameters for the following interactive session
00759     lInteractiveAirlineCode = "BA";
00760     lInteractiveFlightNumber = 9;
00761     lInteractiveDate = stdair::Date_T (2011, 06, 10);
00762     lInteractiveBookingClass = "Q";
00763     lInteractivePartySize = 2;
00764     lInteractiveOrigin = "LHR";
00765     lInteractiveDestination = "SYD";
00766
00767   } else {
00768     if (isForSchedule == true) {
00769       // Build the BOM tree from parsing a schedule file (and O&D list)
00770       AIRRAC::YieldFilePath lYieldFilePath (lYieldInputFilename);
00771       airinvService.parseAndLoad (lScheduleInputFilename, lODInputFilename,
00772                                   lYieldFilePath);
00773
00774       // Update the default parameters for the following interactive session
00775       lInteractiveAirlineCode = "SQ";
00776       lInteractiveFlightNumber = 11;
00777       lInteractiveDate = stdair::Date_T (2010, 01, 15);
00778       lInteractiveBookingClass = "Y";
00779       lInteractivePartySize = 2;
00780       lInteractiveOrigin = "SIN";
00781       lInteractiveDestination = "BKK";
00782
00783     } else {
00784       // Build the BOM tree from parsing an inventory dump file
00785       airinvService.parseAndLoad (lInventoryFilename);
00786
00787       // Update the default parameters for the following interactive session
00788       lInteractiveAirlineCode = "SV";
00789       lInteractiveFlightNumber = 5;
00790       lInteractiveDate = stdair::Date_T (2010, 03, 11);
00791       lInteractiveBookingClass = "Y";
00792       lInteractivePartySize = 2;
00793       lInteractiveOrigin = "KBP";
00794       lInteractiveDestination = "JFK";
00795     }
00796   }
00797
00798   // Save the last state
00799   lLastInteractiveAirlineCode = lInteractiveAirlineCode;
00800   lLastInteractiveFlightNumber = lInteractiveFlightNumber;
00801   lLastInteractiveDate = lInteractiveDate;
00802
00803   // DEBUG
00804   STDAIR_LOG_DEBUG ("=====================================================");
00805   STDAIR_LOG_DEBUG ("=       Beginning of the interactive session       =");
00806   STDAIR_LOG_DEBUG ("=====================================================");
00807
00808   // Initialise the GNU readline wrapper
00809   swift::SReadline lReader (lHistoryFilename, lHistorySize);
00810   initReadline (lReader);
00811
00812   // Now we can ask user for a line
00813   std::string lUserInput;
00814   bool EndOfInput (false);
00815   Command_T::Type_T lCommandType (Command_T::NOP);
00816
00817   while (lCommandType != Command_T::QUIT && EndOfInput == false) {
00818     // Prompt
00819     std::ostringstream oPromptStr;
00820     oPromptStr << "airinv "
00821                << lInteractiveAirlineCode << lInteractiveFlightNumber
00822                << " / " << lInteractiveDate
00823                << "> ";
00824     // Call read-line, which will fill the list of tokens
```

```
00825     TokenList_T lTokenListByReadline;
00826     lUserInput = lReader.GetLine (oPromptStr.str(), lTokenListByReadline,
00827                                   EndOfInput);
00828
00829     // The history can be saved to an arbitrary file at any time
00830     lReader.SaveHistory (lHistoryBackupFilename);
00831
00832     // The end-of-input typically corresponds to a CTRL-D typed by the user
00833     if (EndOfInput) {
00834       std::cout << std::endl;
00835       break;
00836     }
00837
00838     // Interpret the user input
00839     lCommandType = extractCommand (lTokenListByReadline);
00840
00841     switch (lCommandType) {
00842
00843       // ////////////////////////////// Help ////////////////////////
00844     case Command_T::HELP: {
00845       std::cout << std::endl;
00846       std::cout << "Commands: " << std::endl;
00847       std::cout << " help" << "\t\t" << "Display this help" << std::endl;
00848       std::cout << " quit" << "\t\t" << "Quit the application" << std::endl;
00849       std::cout << " list" << "\t\t"
00850                 << "List airlines, flights and departure dates" << std::endl;
00851       std::cout << " select" << "\t\t"
00852                 << "Select a flight-date to become the current one"
00853                 << std::endl;
00854       std::cout << " display" << "\t"
00855                 << "Display the current flight-date" << std::endl;
00856       std::cout << " sell" << "\t\t"
00857                 << "Make a booking on the current flight-date" << std::endl;
00858       std::cout << std::endl;
00859       break;
00860     }
00861
00862       // ////////////////////////////// Quit ////////////////////////
00863     case Command_T::QUIT: {
00864       break;
00865     }
00866
00867       // ////////////////////////////// List ////////////////////////
00868     case Command_T::LIST: {
00869       //
00870       TokenList_T lTokenList = extractTokenListForFlight (lTokenListByReadline)
      ;
00871
00872       stdair::AirlineCode_T lAirlineCode ("all");
00873       stdair::FlightNumber_T lFlightNumber (0);
00874       // Parse the parameters given by the user, giving default values
00875       // in case the user does not specify some (or all) of them
00876       parseFlightKey (lTokenList, lAirlineCode, lFlightNumber);
00877
00878       //
00879       const std::string lFlightNumberStr = (lFlightNumber ==0)?" (all)":"";
00880       std::cout << "List of flights for "
00881                 << lAirlineCode << " " << lFlightNumber << lFlightNumberStr
00882                 << std::endl;
00883
00884       // DEBUG: Display the flight-date
00885       const std::string& lFlightDateListStr =
00886         airinvService.list (lAirlineCode, lFlightNumber);
00887
00888       if (lFlightDateListStr.empty() == false) {
00889         std::cout << lFlightDateListStr << std::endl;
00890         STDAIR_LOG_DEBUG (lFlightDateListStr);
00891
00892       } else {
00893         std::cerr << "There is no result for "
00894                   << lAirlineCode << " " << lFlightNumber << lFlightNumberStr
00895                   << ". Just type the list command without any parameter "
00896                   << "to see the flight-dates for all the airlines and for all
      "
00897                   << "the flight numbers."
00898                   << std::endl;
00899       }
00900
00901       break;
00902     }
00903
00904       // ////////////////////////////// Select ////////////////////////
00905     case Command_T::SELECT: {
00906       //
00907       TokenList_T lTokenList =
00908         extractTokenListForFlightDate (lTokenListByReadline);
00909
```

```
00910       // Check whether the user wants to select the last saved flight-date
00911       if (lTokenList.empty() == false) {
00912         // Read the booking class
00913         TokenList_T::const_iterator itTok = lTokenList.begin();
00914
00915         if (*itTok == "-") {
00916
00917           // Swap the current state with the last state
00918           boost::swap (lInteractiveAirlineCode, lLastInteractiveAirlineCode);
00919           boost::swap (lInteractiveFlightNumber, lLastInteractiveFlightNumber);
00920           boost::swap (lInteractiveDate, lLastInteractiveDate);
00921
00922           break;
00923         }
00924       }
00925
00926       // Parse the parameters given by the user, giving default values
00927       // in case the user does not specify some (or all) of them
00928       parseFlightDateKey (lTokenList, lInteractiveAirlineCode,
00929                           lInteractiveFlightNumber, lInteractiveDate);
00930
00931       // Check whether the selected flight-date is valid
00932       const bool isFlightDateValid =
00933         airinvService.check (lInteractiveAirlineCode, lInteractiveFlightNumber,
00934                              lInteractiveDate);
00935       if (isFlightDateValid == false) {
00936         std::ostringstream oFDKStr;
00937         oFDKStr << "The " << lInteractiveAirlineCode
00938                 << lInteractiveFlightNumber << " / " << lInteractiveDate
00939                 << " flight-date is not valid. Make sure it exists (e.g.,"
00940                 << " with the list command). The current flight-date is kept"
00941                 << " selected.";
00942         std::cout << oFDKStr.str() << std::endl;
00943         STDAIR_LOG_ERROR (oFDKStr.str());
00944
00945         // Restore the last state
00946         lInteractiveAirlineCode = lLastInteractiveAirlineCode;
00947         lInteractiveFlightNumber = lLastInteractiveFlightNumber;
00948         lInteractiveDate = lLastInteractiveDate;
00949
00950         break;
00951       }
00952
00953       // DEBUG: Display the flight-date selection
00954       std::ostringstream oFDKStr;
00955       oFDKStr << "Selected the " << lInteractiveAirlineCode
00956               << lInteractiveFlightNumber << " / " << lInteractiveDate
00957               << " flight-date";
00958       std::cout << oFDKStr.str() << std::endl;
00959       STDAIR_LOG_DEBUG (oFDKStr.str());
00960
00961       // Save the last state
00962       lLastInteractiveAirlineCode = lInteractiveAirlineCode;
00963       lLastInteractiveFlightNumber = lInteractiveFlightNumber;
00964       lLastInteractiveDate = lInteractiveDate;
00965
00966       break;
00967     }
00968
00969       // ////////////////////////////// Display ////////////////////////
00970     case Command_T::DISPLAY: {
00971       // DEBUG: Display the flight-date
00972       const std::string& lCSVFlightDateDump =
00973         airinvService.csvDisplay (lInteractiveAirlineCode,
00974                                   lInteractiveFlightNumber, lInteractiveDate);
00975       std::cout << lCSVFlightDateDump << std::endl;
00976       STDAIR_LOG_DEBUG (lCSVFlightDateDump);
00977
00978       break;
00979     }
00980
00981       // ////////////////////////////// Sell ////////////////////////
00982     case Command_T::SELL: {
00983       //
00984       TokenList_T lTokenList = extractTokenListForClass (lTokenListByReadline);
00985
00986       // Parse the parameters given by the user, giving default values
00987       // in case the user does not specify some (or all) of them
00988       parseBookingClassKey (lTokenList, lInteractiveBookingClass,
00989                             lInteractivePartySize,
00990                             lInteractiveOrigin, lInteractiveDestination);
00991
00992       // DEBUG: Display the flight-date before the sell
00993       const std::string& lCSVFlightDateDumpBefore =
00994         airinvService.csvDisplay (lInteractiveAirlineCode,
00995                                   lInteractiveFlightNumber, lInteractiveDate);
00996       //std::cout << lCSVFlightDateDumpBefore << std::endl;
```

```
00997       STDAIR_LOG_DEBUG (lCSVFlightDateDumpBefore);
00998
00999       // Make a booking
01000       std::ostringstream oSDKStr;
01001       oSDKStr << lInteractiveAirlineCode << ","
01002               << lInteractiveFlightNumber << ","
01003               << lInteractiveDate << ","
01004               << lInteractiveOrigin << "," << lInteractiveDestination;
01005       const std::string lSegmentDateKey (oSDKStr.str());
01006
01007       // Perform the sell
01008       const bool isSellSuccessful =
01009         airinvService.sell (lSegmentDateKey,
01010                             lInteractiveBookingClass, lInteractivePartySize);
01011
01012       // DEBUG
01013       const std::string isSellSuccessfulStr =
01014         (isSellSuccessful == true)?"Yes":"No";
01015       std::ostringstream oSaleStr;
01016       oSaleStr << "Sale ('" << lSegmentDateKey << "', "
01017                << lInteractiveBookingClass << ": " << lInteractivePartySize
01018                << ") successful? " << isSellSuccessfulStr;
01019       std::cout << oSaleStr.str() << std::endl;
01020
01021       // DEBUG
01022       STDAIR_LOG_DEBUG (oSaleStr.str());
01023
01024       // DEBUG: Display the flight-date after the sell
01025       const std::string& lCSVFlightDateDumpAfter =
01026         airinvService.csvDisplay (lInteractiveAirlineCode,
01027                                   lInteractiveFlightNumber, lInteractiveDate);
01028       //std::cout << lCSVFlightDateDumpAfter << std::endl;
01029       STDAIR_LOG_DEBUG (lCSVFlightDateDumpAfter);
01030
01031       break;
01032     }
01033
01034       // //////////////////////////// Default / No value ///////////////////////
01035     case Command_T::NOP: {
01036       break;
01037     }
01038
01039     case Command_T::LAST_VALUE:
01040     default: {
01041       // DEBUG
01042       std::ostringstream oStr;
01043       oStr << "That command is not yet understood: '" << lUserInput
01044            << "' => " << lTokenListByReadline;
01045       STDAIR_LOG_DEBUG (oStr.str());
01046       std::cout << oStr.str() << std::endl;
01047     }
01048     }
01049   }
01050
01051   // DEBUG
01052   STDAIR_LOG_DEBUG ("End of the session. Exiting.");
01053   std::cout << "End of the session. Exiting." << std::endl;
01054
01055   // Close the Log outputFile
01056   logOutputFile.close();
01057
01058   /*
01059     Note: as that program is not intended to be run on a server in
01060     production, it is better not to catch the exceptions. When it
01061     happens (that an exception is thrownded), that way we get the
01062     call stack.
01063   */
01064
01065   return 0;
01066 }
```

23.233 airinv/ui/cmdline/readline_autocomp.hpp File Reference

```
#include <string>
```

```
#include <iosfwd>
#include <cstdio>
#include <sys/types.h>
#include <sys/file.h>
#include <sys/stat.h>
#include <sys/errno.h>
#include <readline/readline.h>
#include <readline/history.h>
```

Classes

- struct COMMAND

Typedefs

- typedef int(* pt2Func)(char *)

Functions

- char * getwd ()
- char * xmalloc (size_t)
- int com_list (char *)
- int com_view (char *)
- int com_rename (char *)
- int com_stat (char *)
- int com_pwd (char *)
- int com_delete (char *)
- int com_help (char *)
- int com_cd (char *)
- int com_quit (char *)
- char * stripwhite (char *iString)
- COMMAND * find_command (char *iString)
- char * dupstr (char *iString)
- int execute_line (char *line)
- char * command_generator (char *text, int state)
- char ** fileman_completion (char *text, int start, int end)
- void initialize_readline ()
- void too_dangerous (char *caller)
- int valid_argument (char *caller, char *arg)

Variables

- COMMAND commands []
- int done
- static char syscom [1024]

23.233.1 Typedef Documentation

23.233.1.1 typedef int(* pt2Func)(char *)

Definition at line 35 of file readline_autocomp.hpp.

23.233.2 Function Documentation

23.233.2.1 char* getwd ( )

readline_autocomp.hpp – A tiny application which demonstrates how to use the GNU Readline library. This application interactively allows users to manipulate files and their modes.

Referenced by com_pwd().

23.233.2.2 char* xmalloc (size_t)

Referenced by dupstr().

23.233.2.3 void com_list (char * *arg*)

List the file(s) named in arg.

Definition at line 264 of file readline_autocomp.hpp.

23.233.2.4 int com_view (char * *arg*)

Definition at line 274 of file readline_autocomp.hpp.

References valid_argument().

23.233.2.5 int com_rename (char * *arg*)

Definition at line 284 of file readline_autocomp.hpp.

References too_dangerous().

23.233.2.6 int com_stat (char * *arg*)

Definition at line 289 of file readline_autocomp.hpp.

References valid_argument().

23.233.2.7 int com_pwd (char * *ignore*)

Definition at line 367 of file readline_autocomp.hpp.

References getwd().

Referenced by com_cd().

23.233.2.8 int com_delete (char * *arg*)

Definition at line 315 of file readline_autocomp.hpp.

References too_dangerous().

23.233.2.9 int com_help (char * *arg*)

Print out help for ARG, or for all of the commands if ARG is not present.

Definition at line 324 of file readline_autocomp.hpp.

References COMMAND::name.

23.233.2.10 int com_cd (char * *arg*)

Definition at line 356 of file readline_autocomp.hpp.

References com_pwd().

23.233.2.11 int com_quit (char * *arg*)

Definition at line 381 of file readline_autocomp.hpp.

23.233.2.12 char * stripwhite (char * *string*)

Strip whitespace from the start and end of STRING. Return a pointer into STRING.

Definition at line 152 of file readline_autocomp.hpp.

23.233.2.13 COMMAND * find_command (char * *name*)

Look up NAME as the name of a command, and return a pointer to that command. Return a NULL pointer if NAME isn't a command name.

Definition at line 136 of file readline_autocomp.hpp.

References COMMAND::name.

Referenced by execute_line().

23.233.2.14 char* dupstr (char * *iString*)

Duplicate a string

Definition at line 85 of file readline_autocomp.hpp.

References xmalloc().

Referenced by command_generator().

23.233.2.15 int execute_line (char * *line*)

Execute a command line.

Definition at line 94 of file readline_autocomp.hpp.

References find_command(), and COMMAND::func.

23.233.2.16 char * command_generator (char * *text,* int *state*)

Generator function for command completion. STATE lets us know whether to start from scratch; without any state (i.e. STATE == 0), then we start at the top of the list.

Definition at line 222 of file readline_autocomp.hpp.

References dupstr().

Referenced by fileman_completion().

23.233.2.17 char ** fileman_completion (char * *text,* int *start,* int *end*)

Attempt to complete on the contents of TEXT. START and END bound the region of rl_line_buffer that contains the word to complete. TEXT is the word to complete. We can use the entire contents of rl_line_buffer in case we want to do some simple parsing. Return the array of matches, or NULL if there aren't any.

Definition at line 200 of file readline_autocomp.hpp.

References command_generator().

Referenced by initialize_readline().

23.233.2.18 void initialize_readline ( )

Tell the GNU Readline library how to complete. We want to try to complete on command names if this is the first word in the line, or on filenames if not.

Definition at line 185 of file readline_autocomp.hpp.

References fileman_completion().

23.233.2.19 void too_dangerous (char * *caller*)

Definition at line 387 of file readline_autocomp.hpp.

Referenced by com_delete(), and com_rename().

23.233.2.20 int valid_argument (char * *caller,* char * *arg*)

Definition at line 395 of file readline_autocomp.hpp.

Referenced by com_stat(), and com_view().

23.233.3 Variable Documentation

23.233.3.1 COMMAND commands[ ]

Initial value:

```
{
  { "cd", (*com_cd)(), "Change to directory DIR" },
  { "delete", com_delete, "Delete FILE" },
  { "help", com_help, "Display this text" },
  { "?", com_help, "Synonym for `help'" },
  { "list", com_list, "List files in DIR" },
  { "ls", com_list, "Synonym for `list'" },
  { "pwd", com_pwd, "Print the current working directory" },
  { "quit", com_quit, "Quit using airinv" },
  { "rename", com_rename, "Rename FILE to NEWNAME" },
  { "stat", com_stat, "Print out statistics on FILE" },
  { "view", com_view, "View the contents of FILE" },
  { (char*) NULL, (pt2Func) NULL, (char*) NULL }
}
```

Definition at line 58 of file readline_autocomp.hpp.

23.233.3.2 int done

When non-zero, this global means the user is done using this program.

Definition at line 80 of file readline_autocomp.hpp.

23.233.3.3 char syscom[1024] [static]

String to pass to system(). This is for the LIST, VIEW and RENAME commands.

Definition at line 259 of file readline_autocomp.hpp.

23.234 readline_autocomp.hpp

```
00001
00006 #ifndef __AIRINV_READLINE_AUTOCOMP_HPP
00007 #define __AIRINV_READLINE_AUTOCOMP_HPP
00008
00009 // STL
00010 #include <string>
00011 #include <iosfwd>
00012 #include <cstdio>
00013 #include <sys/types.h>
00014 #include <sys/file.h>
00015 #include <sys/stat.h>
00016 #include <sys/errno.h>
00017
00018 #include <readline/readline.h>
00019 #include <readline/history.h>
00020
00021 extern char* getwd();
00022 extern char* xmalloc (size_t);
00023
00024 /* The names of functions that actually do the manipulation. */
```

```
00025 int com_list (char*);
00026 int com_view (char*);
00027 int com_rename (char*);
00028 int com_stat (char*);
00029 int com_pwd (char*);
00030 int com_delete (char*);
00031 int com_help (char*);
00032 int com_cd (char*);
00033 int com_quit (char*);
00034
00035 typedef int (*pt2Func) (char*);
00036
00041 typedef struct {
00045   char const* name;
00046
00050   pt2Func *func;
00051
00055   char *doc;
00056 } COMMAND;
00057
00058 COMMAND commands[] = {
00059   { "cd", (*com_cd)(), "Change to directory DIR" },
00060   { "delete", com_delete, "Delete FILE" },
00061   { "help", com_help, "Display this text" },
00062   { "?", com_help, "Synonym for `help'" },
00063   { "list", com_list, "List files in DIR" },
00064   { "ls", com_list, "Synonym for `list'" },
00065   { "pwd", com_pwd, "Print the current working directory" },
00066   { "quit", com_quit, "Quit using airinv" },
00067   { "rename", com_rename, "Rename FILE to NEWNAME" },
00068   { "stat", com_stat, "Print out statistics on FILE" },
00069   { "view", com_view, "View the contents of FILE" },
00070   { (char*) NULL, (pt2Func) NULL, (char*) NULL }
00071 };
00072
00073 // Forward declarations
00074 char* stripwhite (char* iString);
00075 COMMAND* find_command (char* iString);
00076
00080 int done;
00081
00085 char* dupstr (char* iString) {
00086   char* r = xmalloc (std::strlen (iString) + 1);
00087   strcpy (r, iString);
00088   return r;
00089 }
00090
00094 int execute_line (char* line) {
00095   register int i;
00096   COMMAND* command;
00097   char* word;
00098
00099   /* Isolate the command word. */
00100   i = 0;
00101   while (line[i] && whitespace (line[i])) {
00102     i++;
00103   }
00104   word = line + i;
00105
00106   while (line[i] && !whitespace (line[i])) {
00107     i++;
00108   }
00109
00110   if (line[i]) {
00111     line[i++] = '\0';
00112   }
00113
00114   command = find_command (word);
00115
00116   if (!command) {
00117     std::cerr << word << ": No such command for airinv." << std::endl;
00118     return -1;
00119   }
00120
00121   /* Get argument to command, if any. */
00122   while (whitespace (line[i])) {
00123     i++;
00124   }
00125
00126   word = line + i;
00127
00128   /* Call the function. */
00129   return (*(command->func)) (word);
00130 }
00131
00136 COMMAND* find_command (char* name) {
00137   register int i;
```

```
00138
00139   for (i = 0; commands[i].name; i++) {
00140     if (strcmp (name, commands[i].name) == 0) {
00141       return (&commands[i]);
00142     }
00143   }
00144
00145   return (COMMAND*) NULL;
00146 }
00147
00152 char* stripwhite (char* string) {
00153   register char *s, *t;
00154
00155   for (s = string; whitespace (*s); s++) {
00156   }
00157
00158   if (*s == 0) {
00159     return s;
00160   }
00161
00162   t = s + strlen (s) - 1;
00163   while (t > s && whitespace (*t)) {
00164     t--;
00165   }
00166   *++t = '\0';
00167
00168   return s;
00169 }
00170
00171 /* ********************************************************************** */
00172 /*                                                                        */
00173 /*                  Interface to Readline Completion                      */
00174 /*                                                                        */
00175 /* ********************************************************************** */
00176
00177 char* command_generator (char* text, int state);
00178 char** fileman_completion (char* text, int start, int end);
00179
00185 void initialize_readline() {
00186   /* Allow conditional parsing of the ~/.inputrc file. */
00187   rl_readline_name = "airinv";
00188
00189   /* Tell the completer that we want a crack first. */
00190   rl_attempted_completion_function = (rl_completion_func_t*) fileman_completion
    ;
00191 }
00192
00200 char** fileman_completion (char* text, int start, int end) {
00201   char **matches;
00202
00203   matches = (char**) NULL;
00204
00210   if (start == 0) {
00211     matches = completion_matches (text, command_generator);
00212   }
00213
00214   return matches;
00215 }
00216
00222 char* command_generator (char* text, int state) {
00223   static int list_index, len;
00224   char* name;
00225
00231   if (!state) {
00232     list_index = 0;
00233     len = strlen (text);
00234   }
00235
00236   /* Return the next name which partially matches from the command list. */
00237   while (name = commands[list_index].name) {
00238     ++list_index;
00239
00240     if (strncmp (name, text, len) == 0) {
00241       return dupstr (name);
00242     }
00243   }
00244
00245   /* If no names matched, then return NULL. */
00246   return (char*) NULL;
00247 }
00248
00249 /* ********************************************************************** */
00250 /*                                                                        */
00251 /*                        airinv Commands                                 */
00252 /*                                                                        */
00253 /* ********************************************************************** */
00254
```

```
00259 static char syscom[1024];
00260
00264 void com_list (char* arg) {
00265   if (!arg) {
00266     arg = "";
00267   }
00268
00269   std::ostringstream oStr;
00270   oStr << "ls -FClg " << arg;
00271   return system (oStr.c_str());
00272 }
00273
00274 int com_view (char* arg) {
00275   if (!valid_argument ("view", arg)) {
00276     return 1;
00277   }
00278
00279   std::ostringstream oStr;
00280   oStr << "more " << arg;
00281   return system (syscom);
00282 }
00283
00284 int com_rename (char* arg) {
00285   too_dangerous ("rename");
00286   return 1;
00287 }
00288
00289 int com_stat (char* arg) {
00290   struct stat finfo;
00291
00292   if (!valid_argument ("stat", arg)) {
00293     return 1;
00294   }
00295
00296   if (stat (arg, &finfo) == -1) {
00297     perror (arg);
00298     return 1;
00299   }
00300
00301   std::cout << "Statistics for `" << arg << "':" << std::endl;
00302
00303   const std::string lPluralEnd1 = (finfo.st_nlink == 1) ? "" : "s";
00304   const std::string lPluralEnd2 = (finfo.st_size == 1) ? "" : "s";
00305   std::cout << arg << " has "
00306             << finfo.st_nlink << " link" << lPluralEnd1 << ", and is "
00307             << finfo.st_size << " byte" << lPluralEnd2 << " in length."
00308             << std::endl;
00309   std::cout << " Inode Last Change at: " << ctime (&finfo.st_ctime) <<
      std::endl;
00310   std::cout << " Last access at: " << ctime (&finfo.st_atime) << std::endl;
00311   std::cout << " Last modified at: " << ctime (&finfo.st_mtime) << std::endl;
00312   return 0;
00313 }
00314
00315 int com_delete (char* arg) {
00316   too_dangerous ("delete");
00317   return 1;
00318 }
00319
00324 int com_help (char* arg) {
00325   register int i;
00326   int printed = 0;
00327
00328   for (i = 0; commands[i].name; i++) {
00329     if (!*arg || (strcmp (arg, commands[i].name) == 0)) {
00330       printf ("%s\t\t%s.\n", commands[i].name, commands[i].doc);
00331       printed++;
00332     }
00333   }
00334
00335   if (!printed) {
00336     printf ("No commands match `%s'.  Possibilties are:\n", arg);
00337
00338     for (i = 0; commands[i].name; i++) {
00339       /* Print in six columns. */
00340       if (printed == 6) {
00341         printed = 0;
00342         printf ("\n");
00343       }
00344
00345       printf ("%s\t", commands[i].name);
00346       printed++;
00347     }
00348
00349     if (printed)
00350       printf ("\n");
00351   }
```

```
00352   return 0;
00353 }
00354
00355 /* Change to the directory ARG. */
00356 int com_cd (char* arg) {
00357   if (chdir (arg) == -1) {
00358     perror (arg);
00359     return 1;
00360   }
00361
00362   com_pwd ("");
00363   return 0;
00364 }
00365
00366 /* Print out the current working directory. */
00367 int com_pwd (char* ignore) {
00368   char dir[1024], *s;
00369
00370   s = getwd (dir);
00371   if (s == 0) {
00372     printf ("Error getting pwd: %s\n", dir);
00373     return 1;
00374   }
00375
00376   printf ("Current directory is %s\n", dir);
00377   return 0;
00378 }
00379
00380 /* The user wishes to quit using this program.  Just set DONE non-zero. */
00381 int com_quit (char* arg) {
00382   done = 1;
00383   return 0;
00384 }
00385
00386 /* Function which tells you that you can't do this. */
00387 void too_dangerous (char* caller) {
00388   fprintf (stderr,
00389            "%s: Too dangerous for me to distribute.  Write it yourself.\n",
00390            caller);
00391 }
00392
00393 /* Return non-zero if ARG is a valid argument for CALLER, else print
00394  *    an error message and return zero. */
00395 int valid_argument (char* caller, char* arg) {
00396   if (!arg || !*arg) {
00397     fprintf (stderr, "%s: Argument required.\n", caller);
00398     return 0;
00399   }
00400
00401   return 1;
00402 }
00403
00404 #endif // _AIRINV_READLINE_AUTOCOMP_HPP
```

23.235 airinv/ui/cmdline/SReadline.hpp File Reference

C++ wrapper around libreadline.

```
#include <cstdio>
#include <readline/readline.h>
#include <readline/history.h>
#include <readline/keymaps.h>
#include <string>
#include <fstream>
#include <vector>
#include <stdexcept>
#include <map>
#include <boost/algorithm/string/trim.hpp>
#include <boost/tokenizer.hpp>
#include <boost/function.hpp>
```

Classes

- class swift::SKeymap

The readline keymap wrapper.

- class swift::SReadline

  The readline library wrapper.

Namespaces

- namespace swift

  The wrapper namespace.

23.235.1 Detailed Description

C++ wrapper around libreadline. Supported: editing, history, custom completers, keymaps. Attention: implementation is not thread safe! It is mainly because the readline library provides pure C interface and has many calls for an "atomic" completion operation

Definition in file SReadline.hpp.

23.236 SReadline.hpp

```
00001
00011 //
00012 // Date:      17 December 2005
00013 //            03 April    2006
00014 //            20 April    2006
00015 //            07 May      2006
00016 //
00017 // Copyright (c) Sergey Satskiy 2005 - 2006
00018 //               <sergesatsky@yahoo.com>
00019 //
00020 // Permission to copy, use, modify, sell and distribute this software
00021 // is granted provided this copyright notice appears in all copies.
00022 // This software is provided "as is" without express or implied
00023 // warranty, and with no claim as to its suitability for any purpose.
00024 //
00025
00026 #ifndef SREADLINE_H
00027 #define SREADLINE_H
00028
00029 #include <cstdio>
00030
00031 #include <readline/readline.h>
00032 #include <readline/history.h>
00033 #include <readline/keymaps.h>
00034
00035 #include <string>
00036 #include <fstream>
00037 #include <vector>
00038 #include <stdexcept>
00039 #include <map>
00040
00041 #include <boost/algorithm/string/trim.hpp>
00042 #include <boost/tokenizer.hpp>
00043 #include <boost/function.hpp>
00044
00045
00050 namespace {
00054   typedef std::vector<std::string> TokensStorage;
00055
00059   typedef std::vector<TokensStorage> CompletionsStorage;
00060
00064   typedef boost::function<int (int, int)> KeyCallback;
00065
00069   typedef std::map<int, KeyCallback> KeysBind;
00070
00074   const size_t DefaultHistoryLimit (64);
00075
00079   CompletionsStorage Completions;
00080
00084   TokensStorage Tokens;
00085
00089   std::map<Keymap, KeysBind> Keymaps;
00090
00094   bool KeymapWasSetup (false);
00095
00099   Keymap Earlykeymap (0);
```

```
00100
00101
00108   char* Generator (const char* text, int State);
00109
00110
00118   char** UserCompletion (const char* text, int start, int end);
00119
00120
00128   int KeyDispatcher (int Count, int Key);
00129
00130
00135   int StartupHook (void);
00136
00137
00145   template <typename  Container>
00146   bool AreTokensEqual (const Container& Pattern, const Container& Input) {
00147     if (Input.size() > Pattern.size()) {
00148       return false;
00149     }
00150
00151     typename Container::const_iterator k (Pattern.begin());
00152     typename Container::const_iterator j (Input.begin());
00153     for ( ; j != Input.end(); ++k, ++j) {
00154       const std::string lPattern = *k;
00155       if (lPattern == "%file") {
00156         continue;
00157       }
00158
00159       const std::string lInput = *j;
00160       if (lPattern != lInput) {
00161         return false;
00162       }
00163     }
00164     return true;
00165   }
00166
00167   // See description near the prototype
00168   template <typename  ContainerType>
00169   void SplitTokens (const std::string& Source, ContainerType& Container) {
00170     typedef boost::tokenizer<boost::char_separator<char> > TokenizerType;
00171
00172     // Set of token separators
00173     boost::char_separator<char> Separators (" \t\n");
00174     // Tokens provider
00175     TokenizerType Tokenizer (Source, Separators);
00176
00177     Container.clear();
00178     for (TokenizerType::const_iterator k (Tokenizer.begin());
00179          k != Tokenizer.end(); ++k) {
00180       // Temporary storage for the token, in order to trim that latter
00181       std::string SingleToken (*k);
00182
00183       boost::algorithm::trim (SingleToken);
00184       Container.push_back (SingleToken);
00185     }
00186   }
00187
00188   // See description near the prototype
00189   char** UserCompletion (const char* text, int start, int end) {
00190     // No default completion at all
00191     rl_attempted_completion_over = 1;
00192
00193     if (Completions.empty() == true) {
00194       return NULL;
00195     }
00196
00197     // Memorise all the previous tokens
00198     std::string PreInput (rl_line_buffer, start);
00199     SplitTokens (PreInput, Tokens);
00200
00201     // Detect whether we should call the standard file name completer
00202     // or a custom one
00203     bool FoundPretender (false);
00204
00205     for (CompletionsStorage::const_iterator k (Completions.begin());
00206          k != Completions.end(); ++k) {
00207       const TokensStorage& lTokenStorage = *k;
00208       if (AreTokensEqual (lTokenStorage, Tokens) == false) {
00209         continue;
00210       }
00211
00212       if (lTokenStorage.size() > Tokens.size()) {
00213         FoundPretender = true;
00214         if (lTokenStorage [Tokens.size()] == "%file") {
00215           // Standard file name completer - called for the "%file" keyword
00216           return rl_completion_matches (text, rl_filename_completion_function);
00217         }
```

```
00218       }
00219     }
00220
00221     if (FoundPretender) {
00222       return rl_completion_matches (text, Generator);
00223     }
00224     return NULL;
00225   }
00226
00227   // See description near the prototype
00228   char* Generator (const char* text, int State) {
00229     static int Length;
00230     static CompletionsStorage::const_iterator Iterator;
00231
00232     if ( State == 0 ) {
00233       Iterator = Completions.begin();
00234       Length = strlen (text);
00235     }
00236
00237     for ( ; Iterator != Completions.end(); ++Iterator) {
00238       const TokensStorage& lCompletion = *Iterator;
00239       if (AreTokensEqual (lCompletion, Tokens) == false) {
00240         continue;
00241       }
00242
00243       if (lCompletion.size() > Tokens.size()) {
00244         if (lCompletion [Tokens.size()] == "%file") {
00245           continue;
00246         }
00247
00248         const char* lCompletionCharStr (lCompletion [Tokens.size()].c_str());
00249         if (strncmp (text, lCompletionCharStr, Length) == 0) {
00250           // Readline will free the allocated memory
00251           const size_t lCompletionSize = strlen (lCompletionCharStr) + 1;
00252           char* NewString (static_cast<char*> (malloc (lCompletionSize)));
00253           strcpy (NewString, lCompletionCharStr);
00254
00255           ++Iterator;
00256
00257           return NewString;
00258         }
00259       }
00260     }
00261
00262     return NULL;
00263   }
00264
00265
00266   // See the description near the prototype
00267   int KeyDispatcher  (int Count, int  Key ) {
00268     std::map< Keymap, KeysBind >::iterator Set (Keymaps.find (rl_get_keymap()))
      ;
00269     if (Set == Keymaps.end()) {
00270       // Most probably it happens bacause the header was
00271       // included into many compilation units and the
00272       // keymap setting calls were made in different files.
00273       // This is the problem of "global" data.
00274       // The storage of all the registered keymaps is in anonymous
00275       // namespace.
00276       throw std::runtime_error ("Error selecting a keymap.");
00277     }
00278
00279     (Set->second)[Key] (Count, Key);
00280     return 0;
00281   }
00282
00283   // See the description near the prototype
00284   int StartupHook (void) {
00285     if (KeymapWasSetup) {
00286       rl_set_keymap (Earlykeymap);
00287     }
00288     return 0;
00289   }
00290
00291 } // Anonymous namespace
00292
00293
00299 namespace swift {
00300
00307   class SKeymap {
00308   private:
00309     // Readline keymap
00310     Keymap keymap;
00311
00312   public:
00319     explicit SKeymap (bool PrintableBound = false) : keymap (NULL) {
00320       if (PrintableBound == true) {
```

```
00321         // Printable characters are bound
00322         keymap = rl_make_keymap();
00323
00324       } else {
00325         // Empty keymap
00326         keymap = rl_make_bare_keymap();
00327       }
00328
00329       if (keymap == NULL) {
00330         throw std::runtime_error ("Cannot allocate keymap.");
00331       }
00332
00333       // Register a new keymap in the global list
00334       Keymaps [keymap] = KeysBind();
00335     }
00336
00342     explicit SKeymap (Keymap Pattern) : keymap (rl_copy_keymap (Pattern)
    ) {
00343       if ( keymap == NULL ) {
00344         throw std::runtime_error( "Cannot allocate keymap." );
00345       }
00346
00347       // Register a new keymap in the global list
00348       Keymaps [keymap] = KeysBind();
00349     }
00350
00354     ~SKeymap() {
00355       // Deregister the keymap
00356       Keymaps.erase (keymap);
00357       rl_discard_keymap (keymap);
00358     }
00359
00366     void Bind (int  Key, KeyCallback  Callback) {
00367       Keymaps [keymap][Key] = Callback;
00368
00369       if (rl_bind_key_in_map (Key, KeyDispatcher, keymap) != 0) {
00370         // Remove from the map just bound key
00371         Keymaps [keymap].erase (Key);
00372         throw std::runtime_error ("Invalid key.");
00373       }
00374     }
00375
00381     void Unbind (int  Key) {
00382       rl_unbind_key_in_map (Key, keymap);
00383       Keymaps [keymap].erase (Key);
00384     }
00385
00386     // void Bind (const std::string& Sequence, boost::function<int (int,
    int)>);
00387     // void Unbind (std::string&  Sequence);
00388
00389   public:
00395     SKeymap (const SKeymap& rhs) {
00396       if (this == &rhs) {
00397         return;
00398       }
00399       keymap = rl_copy_keymap (rhs.keymap);
00400     }
00401
00407     SKeymap& operator= (const SKeymap& rhs) {
00408       if (this == &rhs) {
00409         return *this;
00410       }
00411       keymap = rl_copy_keymap (rhs.keymap);
00412       return *this;
00413     }
00414
00415     friend class SReadline;
00416   };
00417
00424   class SReadline {
00425   public:
00431     SReadline (const size_t Limit = DefaultHistoryLimit)
00432       : HistoryLimit (Limit), HistoryFileName (""),
00433         OriginalCompletion (rl_attempted_completion_function) {
00434       rl_startup_hook = StartupHook;
00435       rl_attempted_completion_function = UserCompletion;
00436       using_history();
00437     }
00438
00446     SReadline (const std::string&  historyFileName,
00447                const size_t Limit = DefaultHistoryLimit)
00448       : HistoryLimit (Limit), HistoryFileName (historyFileName),
00449         OriginalCompletion (rl_attempted_completion_function) {
00450       rl_startup_hook = StartupHook;
00451       rl_attempted_completion_function = UserCompletion;
00452       using_history();
```

```
00453       LoadHistory (HistoryFileName);
00454     }
00455
00460     ~SReadline() {
00461       rl_attempted_completion_function = OriginalCompletion;
00462       SaveHistory (HistoryFileName);
00463     }
00464
00471     std::string GetLine (const std::string& Prompt) {
00472       bool Unused;
00473       return GetLine (Prompt, Unused);
00474     }
00475
00484     template <typename  Container>
00485     std::string GetLine (const std::string& Prompt, Container&
      ReadTokens) {
00486       bool Unused;
00487       return GetLine (Prompt, ReadTokens, Unused);
00488     }
00489
00499     template <typename  Container>
00500     std::string GetLine (const std::string& Prompt, Container&
      ReadTokens,
00501                          bool& BreakOut) {
00502       std::string Input (GetLine (Prompt, BreakOut));
00503       SplitTokens (Input, ReadTokens);
00504       return Input;
00505     }
00506
00507
00515     std::string GetLine (const std::string& Prompt, bool& BreakOut) {
00516       BreakOut = true;
00517
00518       char* ReadLine (readline (Prompt.c_str()));
00519       if (ReadLine == NULL) {
00520         return std::string();
00521       }
00522
00523       // It's OK
00524       BreakOut = false;
00525       std::string Input (ReadLine);
00526       free (ReadLine); ReadLine = NULL;
00527
00528       boost::algorithm::trim (Input);
00529       if (Input.empty() == false) {
00530         if (history_length == 0
00531             || Input != history_list()[ history_length - 1 ]->line) {
00532           add_history (Input.c_str());
00533
00534           if (history_length >= static_cast<int> (HistoryLimit)) {
00535             stifle_history (HistoryLimit);
00536           }
00537         }
00538       }
00539
00540       return Input;
00541     }
00542
00543
00549     template <typename ContainerType>
00550     void GetHistory (ContainerType&  Container) {
00551       for (int k (0); k < history_length; ++k ) {
00552         Container.push_back (history_list()[k]->line);
00553       }
00554     }
00555
00562     bool SaveHistory (std::ostream& OS) {
00563       if (!OS) {
00564         return false;
00565       }
00566
00567       for (int k (0); k < history_length; ++k) {
00568         OS << history_list()[ k ]->line << std::endl;
00569       }
00570       return true;
00571     }
00572
00579     bool SaveHistory (const std::string&  FileName) {
00580       if (FileName.empty() == true) {
00581         return false;
00582       }
00583
00584       std::ofstream OS (FileName.c_str());
00585       return SaveHistory (OS);
00586     }
00587
00592     void ClearHistory() {
```

```
00593       clear_history();
00594     }
00595
00602     bool LoadHistory (std::istream& IS) {
00603       if (!IS) {
00604         return false;
00605       }
00606
00607       ClearHistory();
00608       std::string OneLine;
00609
00610       while (!getline (IS, OneLine).eof()) {
00611         boost::algorithm::trim( OneLine );
00612         if ((history_length == 0)
00613             || OneLine != history_list()[history_length - 1]->line) {
00614           add_history (OneLine.c_str());
00615         }
00616       }
00617       stifle_history (HistoryLimit);
00618       return true;
00619     }
00620
00627     bool LoadHistory (const std::string&  FileName) {
00628       if (FileName.empty() == true) {
00629         return false;
00630       }
00631
00632       std::ifstream IS (FileName.c_str());
00633       return LoadHistory (IS);
00634     }
00635
00655     template <typename  ContainerType>
00656     void RegisterCompletions (const ContainerType& Container
      ) {
00657       Completions.clear();
00658       for (typename ContainerType::const_iterator k (Container.begin());
00659            k != Container.end(); ++k) {
00660         std::vector<std::string> OneLine;
00661         const std::string& kStr = static_cast<std::string> (*k);
00662
00663         SplitTokens (kStr, OneLine);
00664         Completions.push_back (OneLine);
00665       }
00666     }
00667
00673     void SetKeymap (SKeymap& NewKeymap) {
00674       rl_set_keymap (NewKeymap.keymap);
00675       KeymapWasSetup = true;
00676       Earlykeymap = NewKeymap.keymap;
00677     }
00678
00679
00680   private:
00681     // ///////////////////////////// Attributes ////////////////////////
00685     const size_t HistoryLimit;
00686
00690     const std::string HistoryFileName;
00691
00695     rl_completion_func_t* OriginalCompletion;
00696   };
00697
00698 }; // namespace swift
00699
00700 #endif
00701
```

23.237 doc/local/authors.doc File Reference

23.238 doc/local/codingrules.doc File Reference

23.239 doc/local/copyright.doc File Reference

23.240 doc/local/documentation.doc File Reference

23.241 doc/local/features.doc File Reference

23.242 doc/local/help_wanted.doc File Reference

23.243 doc/local/howto_release.doc File Reference

23.244 doc/local/index.doc File Reference

23.245 doc/local/installation.doc File Reference

23.246 doc/local/linking.doc File Reference

23.247 doc/local/test.doc File Reference

23.248 doc/local/users_guide.doc File Reference

23.249 doc/local/verification.doc File Reference

23.250 doc/tutorial/tutorial.doc File Reference

23.251 test/airinv/InventoryTestSuite.cpp File Reference

23.252 InventoryTestSuite.cpp

```
00001
00005 // ////////////////////////////////////////////////////////////////////
00006 // Import section
00007 // ////////////////////////////////////////////////////////////////////
00008 // STL
00009 #include <sstream>
00010 #include <fstream>
00011 #include <string>
00012 // Boost Unit Test Framework (UTF)
00013 #define BOOST_TEST_DYN_LINK
00014 #define BOOST_TEST_MAIN
00015 #define BOOST_TEST_MODULE InventoryTestSuite
00016 #include <boost/test/unit_test.hpp>
00017 // StdAir
00018 #include <stdair/basic/BasLogParams.hpp>
00019 #include <stdair/basic/BasDBParams.hpp>
00020 #include <stdair/basic/BasFileMgr.hpp>
00021 #include <stdair/bom/TravelSolutionStruct.hpp>
00022 #include <stdair/bom/BookingRequestStruct.hpp>
00023 #include <stdair/service/Logger.hpp>
00024 #include <stdair/stdair_exceptions.hpp>
00025 // Airinv
00026 #include <airinv/AIRINV_Types.hpp>
00027 #include <airinv/AIRINV_Master_Service.hpp>
00028 #include <airinv/config/airinv-paths.hpp>
00029
00030 namespace boost_utf = boost::unit_test;
00031
00032 // (Boost) Unit Test XML Report
00033 std::ofstream utfReportStream ("InventoryTestSuite_utfresults.xml");
00034
00038 struct UnitTestConfig {
00040   UnitTestConfig() {
00041     boost_utf::unit_test_log.set_stream (utfReportStream);
00042     boost_utf::unit_test_log.set_format (boost_utf::XML);
00043     boost_utf::unit_test_log.set_threshold_level (boost_utf::log_test_units);
00044     //boost_utf::unit_test_log.set_threshold_level
       (boost_utf::log_successful_tests);
00045   }
00046
00048   ~UnitTestConfig() {
00049   }
00050 };
00051
00052 // ////////////////////////////////////////////////////////////////////
00056 bool testInventoryHelper (const unsigned short iTestFlag,
00057                           const stdair::Filename_T& iInventoryInputFilename,
00058                           const stdair::Filename_T& iScheduleInputFilename,
00059                           const stdair::Filename_T& iODInputFilename,
00060                           const stdair::Filename_T& iYieldInputFilename,
00061                           const bool isBuiltin,
00062                           const bool isForSchedule) {
00063
00064   // Output log File
```

```
00065   std::ostringstream oStr;
00066   oStr << "InventoryTestSuite_" << iTestFlag << ".log";
00067   const stdair::Filename_T lLogFilename (oStr.str());
00068
00069   // Set the log parameters
00070   std::ofstream logOutputFile;
00071   // Open and clean the log outputfile
00072   logOutputFile.open (lLogFilename.c_str());
00073   logOutputFile.clear();
00074
00075   // Initialise the AirInv service object
00076   const bool lForceMultipleInit = true;
00077   stdair::BasLogParams lLogParams (stdair::LOG::DEBUG,
00078                                    logOutputFile,
00079                                    lForceMultipleInit);
00080
00081   // Initialise the inventory service
00082   AIRINV::AIRINV_Master_Service airinvService (
      lLogParams);
00083
00084   // Parameters for the sale
00085   std::string lSegmentDateKey;
00086   stdair::ClassCode_T lClassCode;
00087   const stdair::PartySize_T lPartySize (2);
00088
00089   // Check wether or not a (CSV) input file should be read
00090   if (isBuiltin == true) {
00091
00092     // Build the default sample BOM tree (filled with inventories) for AirInv
00093    airinvService.buildSampleBom();
00094
00095    // Define a specific segment-date key for the sample BOM tree
00096    lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
00097    lClassCode = "Q";
00098
00099   } else {
00100
00101     if (isForSchedule == true) {
00102       // Build the BOM tree from parsing a schedule file (and O&D list)
00103       AIRRAC::YieldFilePath lYieldFilePath (iYieldInputFilename);
00104       airinvService.parseAndLoad (iScheduleInputFilename, iODInputFilename,
00105                                   lYieldFilePath);
00106
00107       // Define a specific segment-date key for the schedule-based inventory
00108       lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
00109       lClassCode = "Y";
00110
00111     } else {
00112
00113       // Build the BOM tree from parsing an inventory dump file
00114       airinvService.parseAndLoad (iInventoryInputFilename);
00115
00116       // Define a specific segment-date key for the inventory parsed file
00117       //const std::string lSegmentDateKey ("SV, 5, 2010-03-11, KBP, JFK,
       08:00:00");
00118       lSegmentDateKey =  "SV, 5, 2010-03-11, KBP, JFK, 08:00:00";
00119       lClassCode = "J";
00120     }
00121
00122   }
00123
00124   // Make a booking
00125   const bool hasSaleBeenSuccessful =
00126     airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);
00127
00128   // DEBUG: Display the list of travel solutions
00129   const std::string& lCSVDump = airinvService.csvDisplay();
00130   STDAIR_LOG_DEBUG (lCSVDump);
00131
00132   // Close the log file
00133   logOutputFile.close();
00134
00135   if (hasSaleBeenSuccessful == false) {
00136     STDAIR_LOG_DEBUG ("No sale can be made for '" << lSegmentDateKey
00137                       << "'");
00138   }
00139
00140   return hasSaleBeenSuccessful;
00141
00142 }
00143
00144 // ///////////////// Main: Unit Test Suite //////////////
00145
00146 // Set the UTF configuration (re-direct the output to a specific file)
00147 BOOST_GLOBAL_FIXTURE (UnitTestConfig);
00148
00149 // Start the test suite
```

```
00150 BOOST_AUTO_TEST_SUITE (master_test_suite)
00151
00152
00155 BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell) {
00156
00157   // Input file name
00158   const stdair::Filename_T lInventoryInputFilename (STDAIR_SAMPLE_DIR
00159                                                     "/invdump01.csv");
00160
00161   // State whether the BOM tree should be built-in or parsed from an input file
00162   const bool isBuiltin = false;
00163   // State whether the BOM tree should be built from a schedule file (instead
      of from an inventory dump)
00164   const bool isForSchedule = false;
00165
00166   // Try sell a default segment.
00167   bool hasTestBeenSuccessful = false;
00168   BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
00169                         testInventoryHelper (0, lInventoryInputFilename,
00170                                              " ", " ", " ", isBuiltin,
     isForSchedule));
00171   BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
00172
00173 }
00174
00178 BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_built_in) {
00179
00180   // State whether the BOM tree should be built-in or parsed from an input file
00181   const bool isBuiltin = true;
00182   // State whether the BOM tree should be built from a schedule file (instead
      of from an inventory dump)
00183   const bool isForSchedule = false;
00184
00185   // Try sell a default segment.
00186   bool hasTestBeenSuccessful = false;
00187   BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
00188                         testInventoryHelper (1, " ", " ", " ", " ",
00189                                              isBuiltin, isForSchedule));
00190   BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
00191
00192 }
00193
00197 BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_schedule) {
00198
00199   // Input file names
00200   const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00201                                                   "/schedule01.csv");
00202   const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00203                                              "/ond01.csv");
00204   const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00205                                                 "/yieldstore01.csv");
00206
00207   // State whether the BOM tree should be built-in or parsed from an input file
00208   const bool isBuiltin = false;
00209   // State whether the BOM tree should be built from a schedule file (instead
      of from an inventory dump)
00210   const bool isForSchedule = true;
00211
00212   // Try sell a default segment.
00213   bool hasTestBeenSuccessful = false;
00214   BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
00215                         testInventoryHelper (2, " ",
00216                                              lScheduleInputFilename,
00217                                              lODInputFilename,
00218                                              lYieldInputFilename,
00219                                              isBuiltin, isForSchedule));
00220   BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
00221
00222 }
00223
00228 BOOST_AUTO_TEST_CASE (airinv_error_inventory_input_file) {
00229
00230   // Inventory input file name
00231   const stdair::Filename_T lMissingInventoryFilename (STDAIR_SAMPLE_DIR
00232                                                       "/missingFile.csv");
00233
00234   // State whether the BOM tree should be built-in or parsed from an input file
00235   const bool isBuiltin = false;
00236   // State whether the BOM tree should be built from a schedule file (instead
      of from an inventory dump)
00237   const bool isForSchedule = false;
00238
00239   // Try sell a default segment.
00240   BOOST_CHECK_THROW (testInventoryHelper (3, lMissingInventoryFilename,
00241                                           " ", " ", " ", isBuiltin,
     isForSchedule),
00242                      AIRINV::InventoryInputFileNotFoundException
```

```
    );
00243
00244 }
00245
00250 BOOST_AUTO_TEST_CASE (airinv_error_schedule_input_file) {
00251
00252   // Schedule input file name
00253   const stdair::Filename_T lMissingScheduleFilename (STDAIR_SAMPLE_DIR
00254                                                      "/missingFile.csv");
00255
00256   // State whether the BOM tree should be built-in or parsed from an input file
00257   const bool isBuiltin = false;
00258   // State whether the BOM tree should be built from a schedule file (instead
      of from an inventory dump)
00259   const bool isForSchedule = true;
00260
00261   // Try sell a default segment.
00262   BOOST_CHECK_THROW (testInventoryHelper (4, " ", lMissingScheduleFilename,
00263                                           " ", " ", isBuiltin, isForSchedule),
00264                      AIRINV::ScheduleInputFileNotFoundException
    );
00265
00266 }
00267
00272 BOOST_AUTO_TEST_CASE (airinv_error_yield_input_file) {
00273
00274   // Input file names
00275   const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00276                                                    "/schedule01.csv");
00277   const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00278                                              "/ond01.csv");
00279   const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00280                                                 "/missingFile.csv");
00281
00282   // State whether the BOM tree should be built-in or parsed from an input file
00283   const bool isBuiltin = false;
00284   // State whether the BOM tree should be built from a schedule file (instead
      of from an inventory dump)
00285   const bool isForSchedule = true;
00286
00287   // Try sell a default segment.
00288   BOOST_CHECK_THROW (testInventoryHelper (5, " ",
00289                                           lScheduleInputFilename,
00290                                           lODInputFilename,
00291                                           lYieldInputFilename,
00292                                           isBuiltin, isForSchedule),
00293                      AIRRAC::YieldInputFileNotFoundException);
00294
00295 }
00296
00301 BOOST_AUTO_TEST_CASE (airinv_error_flight_date_duplication) {
00302
00303   // Input file names
00304   const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00305                                                    "/scheduleError01.csv");
00306   const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00307                                              "/ond01.csv");
00308   const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00309                                                 "/missingFile.csv");
00310
00311   // State whether the BOM tree should be built-in or parsed from an input file
00312   const bool isBuiltin = false;
00313   // State whether the BOM tree should be built from a schedule file (instead
      of from an inventory dump)
00314   const bool isForSchedule = true;
00315
00316   // Try sell a default segment.
00317   BOOST_CHECK_THROW (testInventoryHelper (6, " ",
00318                                           lScheduleInputFilename,
00319                                           lODInputFilename,
00320                                           lYieldInputFilename,
00321                                           isBuiltin, isForSchedule),
00322                      AIRINV::FlightDateDuplicationException
    );
00323
00324 }
00325
00330 BOOST_AUTO_TEST_CASE (airinv_error_schedule_parsing_failed) {
00331
00332   // Input file names
00333   const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00334                                                    "/scheduleError02.csv");
00335   const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00336                                              "/ond01.csv");
00337   const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00338                                                 "/yieldstore01.csv");
00339
```

```
00340   // State whether the BOM tree should be built-in or parsed from an input file
00341   const bool isBuiltin = false;
00342   // State whether the BOM tree should be built from a schedule file (instead
       of from an inventory dump)
00343   const bool isForSchedule = true;
00344
00345   // Try sell a default segment.
00346   BOOST_CHECK_THROW (testInventoryHelper (7, " ",
00347                                           lScheduleInputFilename,
00348                                           lODInputFilename,
00349                                           lYieldInputFilename,
00350                                           isBuiltin, isForSchedule),
00351                      AIRINV::ScheduleFileParsingFailedException
      );
00352
00353 }
00354
00355 // End the test suite
00356 BOOST_AUTO_TEST_SUITE_END()
00357
00358
```

23.253 test/airinv/InventoryTestSuite.hpp File Reference

```
#include <iosfwd>
#include <cppunit/extensions/HelperMacros.h>
```

Classes

- class InventoryTestSuite

Functions

- CPPUNIT_TEST_SUITE_REGISTRATION (InventoryTestSuite)

23.253.1 Function Documentation

23.253.1.1 CPPUNIT_TEST_SUITE_REGISTRATION (InventoryTestSuite)

23.254 InventoryTestSuite.hpp

```
00001 // STL
00002 #include <iosfwd>
00003 // CPPUNIT
00004 #include <cppunit/extensions/HelperMacros.h>
00005
00007 class InventoryTestSuite : public CppUnit::TestFixture {
00008   CPPUNIT_TEST_SUITE (InventoryTestSuite);
00009   CPPUNIT_TEST (simpleInventory);
00010   //  CPPUNIT_TEST (errorCase);
00011   CPPUNIT_TEST_SUITE_END ();
00012 public:
00013
00015   void simpleInventory();
00016
00018   //  void errorCase ();
00019
00021   InventoryTestSuite ();
00022
00023 private:
00025   void simpleInventoryHelper();
00026
00027 protected:
00028   std::stringstream _describeKey;
00029 };
00030
00031 CPPUNIT_TEST_SUITE_REGISTRATION (
      InventoryTestSuite);
```

Index