SEvMgr

0.2.0

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1.6 About SEvMgr

SEvMgr is a C++ library of discrete event queue management classes and functions, exclusively targeting simulation purposes. N

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

SEvMgr 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 SEvMgr 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 SEvMgr.

2 People

2.1 Project Admins

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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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of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL.  It also counts
as the successor of the GNU Library Public License, version 2, hence
the version number 2.1.]
```

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4.3.2 END OF TERMS AND CONDITIONS

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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.

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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 SEvMgr 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 SEvMgr 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.
```

```
 *
 * --------------------------------------------------------------------------
 *
 * SEvMgr - 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 SEvMgr is given below sorted in different categories. Many more features and functions exist and for these we refer to the reference documentation.

6.1   Booking management

 • Booking and cancellation requests

6.2   Revenue Management notification

 • Forecast and Optimisation notification requests

6.3   Setting simulation break-points

- Simulation break-points

6.4   Other features

- CSV input file parsing

- Memory handling

7   Make a Difference

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

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

- Start using SEvMgr

- Tell your friends about SEvMgr 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 SEvMgr discussion forums on SourceForge. - If you know the answer to a question, help others to overcome their SEvMgr 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 SEvMgr to new platforms. If you manage to compile SEvMgr on a new platform, then tell us how you did it.

- Send us your code. If you have a good SEvMgr compatible code, which you can release under the LGPLv2.1, and you think it should be included in SEvMgr, then send it to us.

- Become an SEvMgr developer. Send us an e-mail and tell what you can do for SEvMgr.

8   Make a new release

8.1 Introduction

This document describes briefly the recommended procedure of releasing a new version of SEvMgr 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://sevmgr.git.sourceforge.net/gitroot/sevmgr/sevmgr sevmgrgit
cd sevmgrgit
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/sevmgrgit
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 sevmgr.spec
```

8.4 Commit and publish the release branch

Commit the new release:

```
cd ~/dev/sim/sevmgrgit
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/sevmgrgit
git checkout trunk
vi ChangeLog
vi sevmgr.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/sevmgrgit
git checkout 0.5.0
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=/home/user/dev/deliveries/sevmgr-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, `sevmgr-0.5.0.tar.gz` and `sevmgr-0.5.0.tar.bz2`.

8.7   Generation the RPM packages

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

```
cd ~/dev/sim/sevmgrgit
git checkout 0.5.0
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=/home/user/dev/deliveries/sevmgr-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 sevmgr.spec ~/dev/packages/SPECS \
  && cp sevmgr-0.5.0.tar.bz2 ~/dev/packages/SOURCES
cd ~/dev/packages/SPECS
rpmbuild -ba sevmgr.spec
rpmlint -i ../SPECS/sevmgr.spec ../SRPMS/sevmgr-0.5.0-1.fc15.src.rpm \
  ../RPMS/noarch/sevmgr-* ../RPMS/i686/sevmgr-*
```

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 SEvMgr'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, `sevmgr-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/sevmgrgit
git checkout 0.5.0
rsync -aiv doc/html/ doc/latex/refman.pdf joe,sevmgr@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 `sevmgr-announce@lists.-sourceforge.net` (see `https://lists.sourceforge.net/lists/listinfo/sevmgr-announce` for the archives)

9 Installation

9.1 Table of Contents

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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 sevmgr-devel sevmgr-doc
```

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

9.3 SEvMgr Requirements

SEvMgr 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 SEvMgr.

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 `CMakeLists.txt' is used to create the `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
```

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=-
PREFIX', 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=PREFIX' 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=PREFIX' 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 'CONFI-
G_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=${INSTALL_BASEDIR}/sevmgr-0.5.0 \
 -DWITH_STDAIR_PREFIX=${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 'sevmgrlib' to CXX
-- Test 'InventoryTestSuite' to be built with 'InventoryTestSuite.cpp'
--
-- ==============================================================
-- ------------------------------
-- ---     Project Information    ---
-- ------------------------------
-- PROJECT_NAME ................... : sevmgr
-- PACKAGE_PRETTY_NAME ............ : SEvMgr
-- PACKAGE ....................... : sevmgr
-- PACKAGE_NAME .................. : SEVMGR
-- PACKAGE_BRIEF ................. : C++ Simulation-Oriented Discrete Event Management Library
-- PACKAGE_VERSION .............. : 0.5.0
-- GENERIC_LIB_VERSION ........... : 0.5.0
-- GENERIC_LIB_SOVERSION ......... : 0.5
--
-- ------------------------------
-- ---      Build Configuration    ---
-- ------------------------------
-- Modules to build .............. : airrac;rmol;sevmgr
-- Libraries to build/install ..... : airraclib;rmollib;sevmgrlib
-- Binaries to build/install ...... : airrac;rmol;sevmgr_parseInventory;sevmgr
-- Modules to test ............... : sevmgr
-- Binaries to test .............. : InventoryTestSuitetst
--
-- * Module ...................... : sevmgr
--    + Layers to build ........... : .;basic;bom;factory;command;service
--    + Dependencies on other layers : airraclib;rmollib
--    + Libraries to build/install . : sevmgrlib
--    + Executables to build/install : sevmgr_parseInventory;sevmgr
--    + 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/sevmgr/sevmgrgithub/config/
-- CMAKE_INSTALL_PREFIX .......... : /home/dan/dev/deliveries/sevmgr-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/sevmgr-0.5.0/lib64
-- INSTALL_BIN_DIR ............... : /home/dan/dev/deliveries/sevmgr-0.5.0/bin
-- INSTALL_INCLUDE_DIR ........... : /home/dan/dev/deliveries/sevmgr-0.5.0/include
-- INSTALL_DATA_DIR .............. : /home/dan/dev/deliveries/sevmgr-0.5.0/share
-- INSTALL_SAMPLE_DIR ............ : /home/dan/dev/deliveries/sevmgr-0.5.0/share/sevmgr/samples
-- INSTALL_DOC ................... : ON
--
-- ------------------------------
```

```
-- ---   Packaging Configuration  ---
-- -------------------------------
-- CPACK_PACKAGE_CONTACT ......... : Denis Arnaud <denis_arnaud - at - users dot sourceforge dot n
-- CPACK_PACKAGE_VENDOR .......... : Denis Arnaud
-- CPACK_PACKAGE_VERSION ......... : 0.5.0
-- CPACK_PACKAGE_DESCRIPTION_FILE . : /home/dan/dev/sim/sevmgr/sevmgrgithub/README
-- CPACK_RESOURCE_FILE_LICENSE .... : /home/dan/dev/sim/sevmgr/sevmgrgithub/COPYING
-- CPACK_GENERATOR ............... : TBZ2
-- CPACK_DEBIAN_PACKAGE_DEPENDS ... :
-- CPACK_SOURCE_GENERATOR ........ : TBZ2;TGZ
-- CPACK_SOURCE_PACKAGE_FILE_NAME . : sevmgr-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;files
--   - Boost required libraries ... : optimized;/usr/lib64/libboost_regex-mt.so;debug;/usr/lib64/li
--
-- * 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/sevmgr/sevmgrgithub/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_sevmgr
[  0%] Built target hdr_cfg_airrac
[ 13%] Built target hdr_cfg_rmol
[ 98%] Built target sevmgrlib
[100%] Built target InventoryTestSuitetst
Scanning dependencies of target check_sevmgrtst
Test project /home/dan/dev/sim/sevmgr/sevmgrgithub/build/test/sevmgr
    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_sevmgrtst
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/sevmgrgit
rm -rf build && mkdir build
cd build
```

to remove everything.

10 Linking with SEvMgr

10.1 Table of Contents

- Introduction

- Dependencies

- Using the pkg-config command

- Using the sevmgr-config script

- M4 macro for the GNU Autotools

- Using SEvMgr with dynamic linking

10.2   Introduction

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

10.3   Dependencies

The SEvMgr 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`).
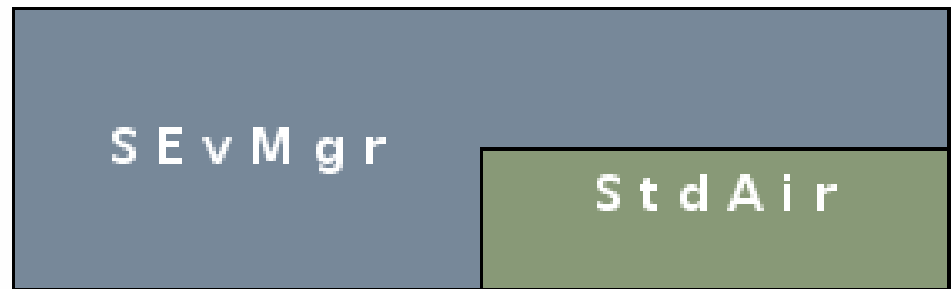
Figure 1: SEvMgr Dependencies

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 SEvMgr based program `my_-prog.cpp`, you should use the following command:

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

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

10.5   Using the sevmgr-config script

SEvMgr provides a shell script called `sevmgr-config`, which is installed by default in `$prefix/bin` (`/usr/local/bin`) directory. It can be used to simplify compilation and linking of SEvMgr 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++ `sevmgr-config --cflags` -o my_prog_opt my_prog.cpp `sevmgr-config --libs`
```

A list of `sevmgr-config` options can be obtained by typing:

```
sevmgr-config --help
```

If the `sevmgr-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 SEvMgr, namely 'sevmgr.m4', which can be found in, e.g., '/usr/share/aclocal'. When used by a 'configure' script, thanks to he `AM_PATH-_SEvMgr` macro (specified in the M4 macro file), the following Makefile variables are then defined:

- `SEvMgr_VERSION` (e.g., defined to 0.23.0)

- `SEvMgr_CFLAGS` (e.g., defined to `-I${prefix}/include`)

- `SEvMgr_LIBS` (e.g., defined to `-L${prefix}/lib -lsevmgr`)

10.7 Using SEvMgr with dynamic linking

When using static linking some of the library routines in SEvMgr 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 SEvMgr library file during your program execution. If you install the SEvMgr library using a non-standard prefix, the `LD_LIBRARY_P-ATH'` environment variable might be used to inform the linker of the dynamic library location, e.g.:

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

12.3 Get Started

12.3.1 Get the SEvMgr library

Clone locally the full Git project:

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

12.3.2 Build the SEvMgr project

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

```
cd ~/dev/sim/sevmgrgit
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=~/dev/deliveries/sevmgr-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 SEvMgr project, the following commands run the tests:

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

As a result, you should obtain a similar report:

```
[  0%] Built target hdr_cfg_sevmgr
[ 96%] Built target sevmgrlib
[100%] Built target AirlineScheduleTestSuitetst
Scanning dependencies of target check_sevmgrtst
Test project /home/dan/dev/sim/sevmgr/sevmgrgithub/build/test/sevmgr
    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_sevmgrtst
Scanning dependencies of target check
[100%] Built target check
```

12.3.4 Install the SEvMgr Project (Binaries, Documentation)

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

```
cd ~/dev/sim/sevmgrgit
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/sevmgr-0.5.0
```

To generate the SEvMgr project documentation, the commands are:

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

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

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

12.4 Input file of SEvMgr 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 `SEVMGR::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

Generated on Tue Feb 14 2012 00:16:21 for SEvMgr by Doxygen

- – 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 StdAir project.

12.5 The schedule BOM Tree

The schedule-related Business Object Model (BOM) tree is a structure allowing to store all the `SEVMGR::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 SEvMgr 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 SEVMGR::S-EVMGR_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 SEVMGR::SEVMGR_-Service::buildSampleBom() method:

```
void buildSampleBom();
```

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

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::sevmgr.cpp` program:

When the default BOM tree is used (`-b/--builtin` option of the main program sevmgr.cpp), the schedule BOM tree display (for now, corresponding to schedule01.csv parsed by SEVMGR::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,
*****************************************
*****************************************
FlightDate: SQ11, 2010-Jan-22
*****************************************
*****************************************
Leg-Dates:
----------
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,
*****************************************
*****************************************
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,
*****************************************
*****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****************************************
*****************************************
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,
*****************************************
*****************************************
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,
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     0, 0, 0, 0, 0,
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*****************************************
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,
*****************************************
*****************************************
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-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,
*****************************************
*****************************************
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
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*****************************************
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:
     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,
*****************************************
*****************************************
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:
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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-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,
******************************************
******************************************
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:
--------
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,
******************************************
******************************************
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
******************************************
******************************************
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,
******************************************
******************************************
LegCabins:
----------
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:
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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,
*****************************************
*****************************************
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:
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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,
*****************************************
*****************************************
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,
*****************************************
*****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****************************************
*****************************************
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,
*****************************************
*****************************************
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
*****************************************
*****************************************
Leg-Dates:
----------
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,
*****************************************
*****************************************
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,
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,
*******************************************
*******************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*******************************************
*******************************************
SegmentCabins:
--------------
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,
*******************************************
*******************************************
FlightDate: SQ11, 2010-Jan-29
*******************************************
*******************************************
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,
*******************************************
*******************************************
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,
*******************************************
*******************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*******************************************
*******************************************
SegmentCabins:
--------------
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,
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        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,
*****************************************
*****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****************************************
*****************************************
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,
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*****************************************
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,
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*****************************************
*****************************************
FlightDate: SQ11, 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,
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,
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:
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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,
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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-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
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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-03, SIN-BKK, 2010-Feb-03, 08:20:00, 2010-Feb-03, 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-03, SIN-BKK 2010-Feb-03, 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-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:
-----------
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,
******************************************
******************************************
FlightDate: SQ11, 2010-Feb-04
******************************************
******************************************
Leg-Dates:
----------
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,
******************************************
******************************************
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,
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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-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,
      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,
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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:
--------------
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:
----------
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:
--------------
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,
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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,
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******************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
******************************************
******************************************
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,
******************************************
******************************************
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, 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-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,
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, 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-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,
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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-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:
----------
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, 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-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:
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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-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
*******************************************
*******************************************
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,
*******************************************
*******************************************
LegCabins:
----------
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:
--------
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,
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*******************************************
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,
*****************************************
*****************************************
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
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*****************************************
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,
*****************************************
*****************************************
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-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
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      , 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-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
*****************************************
*****************************************
Leg-Dates:
----------
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:
----------
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,
*****************************************
*****************************************
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-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
*****************************************
*****************************************
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:
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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-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,
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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-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,
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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-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:
--------------
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:
----------
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:
--------
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-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,
*****************************************
*****************************************
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:
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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,
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,
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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-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,
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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-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
*****************************************
*****************************************
Leg-Dates:
----------
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
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*****************************************
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,
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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-26, SIN-BKK 2010-Feb-26, 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,
*******************************************
*******************************************
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,
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*******************************************
FlightDate: SQ11, 2010-Feb-27
*******************************************
*******************************************
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      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,
*******************************************
*******************************************
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-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,
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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-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,
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*******************************************
FlightDate: SQ11, 2010-Feb-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-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,
********************************************
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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-28, SIN-BKK 2010-Feb-28, 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-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:
----------
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,
********************************************
********************************************
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:
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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-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,
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FlightDate: SQ12, 2010-Jan-16
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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,
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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-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:
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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,
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:
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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-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:
--------------
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:
--------------
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,
*******************************************
*******************************************
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, 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-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:
----------
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:
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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-Jan-21, SIN-HND 2010-Jan-21, 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-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,
*******************************************
*******************************************
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,
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FlightDate: SQ12, 2010-Jan-23
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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-23, SIN-HND, 2010-Jan-23, 09:20:00, 2010-Jan-23, 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-23, SIN-HND 2010-Jan-23, 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-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
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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,
*******************************************
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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-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,
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*******************************************
Subclasses:
-----------
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-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,
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*****************************************
FlightDate: SQ12, 2010-Jan-25
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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,
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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-25, SIN-HND 2010-Jan-25, 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-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,
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
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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-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,
*****************************************
*****************************************
SegmentCabins:
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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,
*****************************************
*****************************************
FlightDate: SQ12, 2010-Jan-27
*****************************************
*****************************************
Leg-Dates:
----------
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,
*****************************************
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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-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:
--------
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,
*****************************************
*****************************************
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:
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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-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
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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,
*****************************************
*****************************************
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:
----------
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:
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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-Jan-30, SIN-HND 2010-Jan-30, 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-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,
*****************************************
*****************************************
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, 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-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,
*****************************************
*****************************************
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:
----------
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,
*******************************************
*******************************************
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,
*******************************************
*******************************************
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,
*******************************************
*******************************************
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,
*******************************************
*******************************************
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-Feb-02, SIN-HND 2010-Feb-02, Y, 1, Y, 200 (0), 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,
*****************************************
*****************************************
LegCabins:
----------
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
     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,
*****************************************
*****************************************
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,
*****************************************
*****************************************
Buckets:
--------
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****************************************
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SegmentCabins:
--------------
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
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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,
*******************************************
*******************************************
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-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,
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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-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,
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FlightDate: SQ12, 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,
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,
*******************************************
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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-07, SIN-HND 2010-Feb-07, 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:
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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,
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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-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
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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-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:
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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-08, SIN-HND 2010-Feb-08, 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-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,
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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-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:
      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-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:
--------------
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:
-----------
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,
      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:
     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-10, SIN-HND 2010-Feb-10, 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-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:
-----------
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,
     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:
     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-11, SIN-HND 2010-Feb-11, 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:
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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:
-----------
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
     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,
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        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,
        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:
        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-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:
--------------
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:
        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-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,
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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,
     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:
     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-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:
     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-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,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, 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-16
*******************************************
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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-16, SIN-HND, 2010-Feb-16, 09:20:00, 2010-Feb-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-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:
--------------
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:
----------
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-17, SIN-HND, 2010-Feb-17, 09:20:00, 2010-Feb-17, 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-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:
--------
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-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,
      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:
      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-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:
      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-19, SIN-HND 2010-Feb-19, 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-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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*****************************************
*****************************************
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:
----------
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,
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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
*******************************************
*******************************************
Leg-Dates:
----------
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,
*******************************************
*******************************************
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,
*****************************************
*****************************************
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,
*****************************************
*****************************************
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:
--------
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
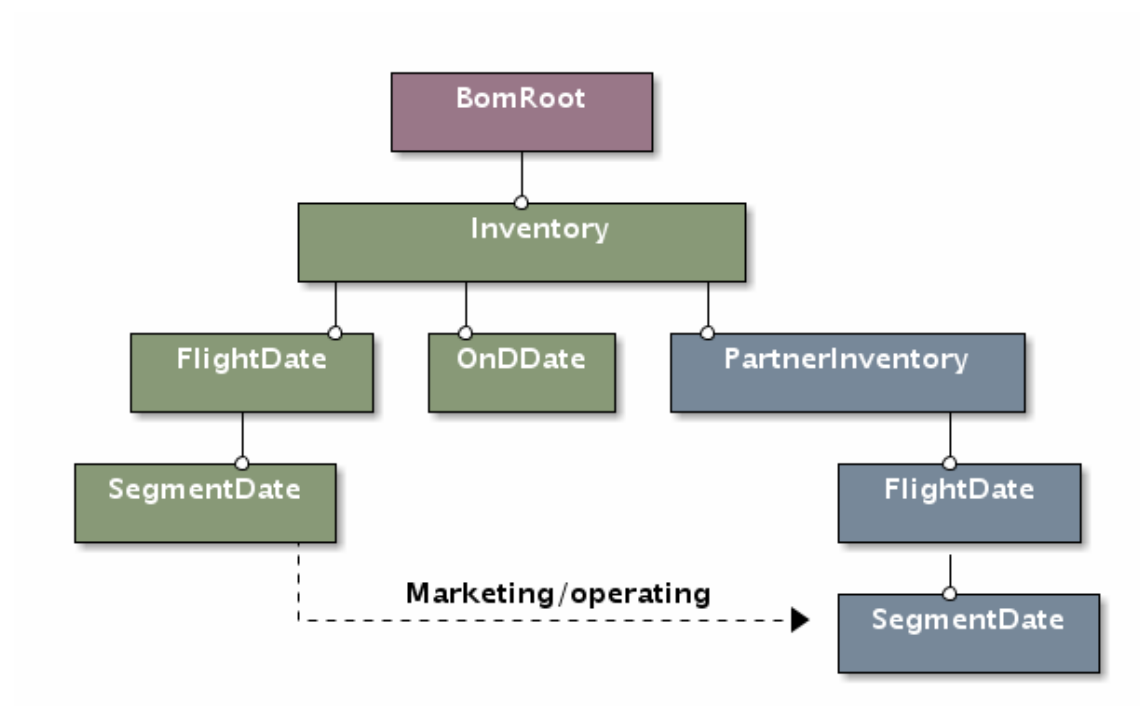
Figure 2: SEvMgr BOM tree

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

12.6.1   Airline Network BOM Tree

- `SEVMGR::ReachableUniverse`

- `SEVMGR::OriginDestinationSet`

- `SEVMGR::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 SEvMgr aims at calculating a list of `travel solutions` for every incoming `booking request`.

13 Supported Systems

13.1 Table of Contents

13.2 Introduction

This page is intended to provide a list of SEvMgr supported systems, i.e. the systems on which configuration, installation and testing process of the SEvMgr 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 SEvMgr library on a system not mentioned below, please let us know, so we could update this database.

14   SEvMgr Supported Systems (Previous Releases)

14.1   SEvMgr 3.9.1

14.2   SEvMgr 3.9.0

14.3   SEvMgr 3.8.1

15   Tutorials

15.1   Table of Contents

- Preparing the AirSched Project for Development
- Your first networkBuilde
    - Summary of the different steps
    - Result of the Batch Program
- Network building with an input file
    - How to build a network input file?
    - Building the BOM tree with an input file
    - Result of the Batch Program

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 `Air-Sched` 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::CmdBom-Manager.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 Use Sevmgr elements

```cpp
 */
// //////////////////////////////////////////////////////////////////////
// Import section
// //////////////////////////////////////////////////////////////////////
// STL
#include <sstream>
#include <fstream>
#include <map>
#include <cmath>
// Boost Unit Test Framework (UTF)
#define BOOST_TEST_DYN_LINK
#define BOOST_TEST_MAIN
#define BOOST_TEST_MODULE EventQueueManagementTest
#include <boost/test/unit_test.hpp>
// StdAir
#include <stdair/stdair_basic_types.hpp>
#include <stdair/basic/BasLogParams.hpp>
#include <stdair/basic/BasDBParams.hpp>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/basic/ProgressStatusSet.hpp>
#include <stdair/bom/EventStruct.hpp>
#include <stdair/bom/EventQueue.hpp>
#include <stdair/bom/BookingRequestStruct.hpp>
#include <stdair/service/Logger.hpp>
// SEvMgr
#include <sevmgr/SEVMGR_Service.hpp>
#include <sevmgr/config/sevmgr-paths.hpp>

namespace boost_utf = boost::unit_test;
```

```cpp
// (Boost) Unit Test XML Report
std::ofstream utfReportStream ("EventQueueManagementTestSuite_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() {
  }
};

// Specific type definitions
typedef std::pair<stdair::Count_T, stdair::Count_T> NbOfEventsPair_T;
typedef std::map<const stdair::DemandStreamKeyStr_T,
                 NbOfEventsPair_T> NbOfEventsByDemandStreamMap_T;

// /////////////// 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 (sevmgr_simple_simulation_test) {

  // Input file name
  const stdair::Filename_T lInputFilename (STDAIR_SAMPLE_DIR "/demand01.csv");

  // Check that the file path given as input corresponds to an actual file
  const bool doesExistAndIsReadable =
    stdair::BasFileMgr::doesExistAndIsReadable (lInputFilename);
  BOOST_CHECK_MESSAGE (doesExistAndIsReadable == true,
                       "The '" << lInputFilename
                       << "' input file can not be open and read");

  // Output log File
  const stdair::Filename_T lLogFilename ("EventQueueManagementTestSuite.log");

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

  // Initialise the Sevmgr service object
  const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
  SEVMGR::SEVMGR_Service sevmgrService (lLogParams);

  sevmgrService.buildSampleBom();

  sevmgrService.reset();

  // DEBUG
  STDAIR_LOG_DEBUG ("End of the simulation");

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

// End the test suite
BOOST_AUTO_TEST_SUITE_END()

/*!
```

17 Directory Hierarchy

17.1 Directories

This directory hierarchy is sorted roughly, but not completely, alphabetically:

18 Namespace Index

18.1 Namespace List

Here is a list of all namespaces with brief descriptions:

19 Class Index

19.1 Class Hierarchy

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

20 Class Index

20.1 Class List

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

21 File Index

21.1 File List

Here is a list of all files with brief descriptions:

22   Directory Documentation

22.1   sevmgr/basic/ Directory Reference

Files

- file [BasConst.cpp]()
- file [BasConst_EventQueueManager.hpp]()
- file [BasConst_SEVMGR_Service.hpp]()
- file [BasParserTypes.hpp]()

22.2 sevmgr/batches/ Directory Reference

Files

- file [sevmgr_demo.cpp]()

22.3 sevmgr/ui/cmdline/ Directory Reference

Files

- file [readline_autocomp.hpp]()
- file [sevmgr.cpp]()
- file [SReadline.hpp]()

  C++ wrapper around libreadline.

22.4 sevmgr/command/ Directory Reference

Files

- file [EventQueueManager.cpp]()
- file [EventQueueManager.hpp]()

22.5 sevmgr/config/ Directory Reference

Files

- file [sevmgr-paths.hpp]()
- file [sevmgr-paths.hpp.in]()

22.6 sevmgr/factory/ Directory Reference

Files

- file [FacSEVMGRServiceContext.cpp]()
- file [FacSEVMGRServiceContext.hpp]()

22.7   sevmgr/python/ Directory Reference

Files

- file [pysevmgr.cpp](#)

22.8   sevmgr/service/ Directory Reference

Files

- file [SEVMGR_Service.cpp](#)
- file [SEVMGR_ServiceContext.cpp](#)
- file [SEVMGR_ServiceContext.hpp](#)

22.9   test/sevmgr/ Directory Reference

Files

- file [EventQueueManagementTestSuite.cpp](#)

22.10   sevmgr/ Directory Reference

Directories

- directory [basic](#)
- directory [batches](#)
- directory [command](#)
- directory [config](#)
- directory [factory](#)
- directory [python](#)
- directory [service](#)
- directory [ui](#)

Files

- file [SEVMGR_Exceptions.hpp](#)
- file [SEVMGR_Service.hpp](#)
- file [SEVMGR_Types.hpp](#)

22.11   test/ Directory Reference

Directories

- directory [sevmgr](#)

22.12 sevmgr/ui/ Directory Reference

Directories

- directory cmdline

23   Namespace Documentation

23.1   SEVMGR Namespace Reference

Classes

- class EventQueueManager

  Utility class for Demand and DemandStream objects.
- class FacSEVMGRServiceContext
- struct PYEventQueueManager
- class SEVMGR_ServiceContext

  Class holding the context of the Sevmgr services.
- class SEvMgrException
- class SEVMGR_Service

  class holding the services related to Travel Demand Generation.

Typedefs

- 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 boost::shared_ptr < [SEVMGR_Service]() > [SEVMGR_ServicePtr_T]()

23.1.1 Typedef Documentation

23.1.1.1 typedef char SEVMGR::char_t

Definition at line 31 of file [BasParserTypes.hpp]().

23.1.1.2 typedef boost::spirit::classic::file_iterator<char_t> SEVMGR::iterator_t

Definition at line 35 of file [BasParserTypes.hpp]().

23.1.1.3 typedef boost::spirit::classic::scanner<iterator_t> SEVMGR::scanner_t

Definition at line 36 of file [BasParserTypes.hpp]().

23.1.1.4 typedef boost::spirit::classic::rule<scanner_t> SEVMGR::rule_t

Definition at line 37 of file [BasParserTypes.hpp]().

23.1.1.5 typedef boost::spirit::classic::int_parser<unsigned int, 10, 1, 1> SEVMGR::int1_p_t

1-digit-integer parser

Definition at line 45 of file [BasParserTypes.hpp]().

23.1.1.6 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 2, 2> SEVMGR::uint2_p_t

2-digit-integer parser

Definition at line 48 of file [BasParserTypes.hpp]().

23.1.1.7 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 2> SEVMGR::uint1_2_p_t

Up-to-2-digit-integer parser

Definition at line 51 of file [BasParserTypes.hpp]().

23.1.1.8 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 3> SEVMGR::uint1_3_p_t

Up-to-3-digit-integer parser

Definition at line 54 of file [BasParserTypes.hpp]().

23.1.1.9 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 4, 4> SEVMGR::uint4_p_t

4-digit-integer parser

Definition at line 57 of file BasParserTypes.hpp.

23.1.1.10 typedef boost::spirit::classic::uint_parser⟨**unsigned int, 10, 1, 4**⟩
SEVMGR::uint1_4_p_t

Up-to-4-digit-integer parser

Definition at line 60 of file BasParserTypes.hpp.

23.1.1.11 typedef boost::spirit::classic::chset⟨**char_t**⟩ **SEVMGR::chset_t**

character set

Definition at line 63 of file BasParserTypes.hpp.

23.1.1.12 typedef boost::spirit::classic::impl::loop_traits⟨**chset_t, unsigned int, unsigned int**⟩**::type SEVMGR::repeat_p_t**

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

Definition at line 69 of file BasParserTypes.hpp.

23.1.1.13 typedef boost::spirit::classic::bounded⟨**uint2_p_t, unsigned int**⟩
SEVMGR::bounded2_p_t

Bounded-number-of-integers parser

Definition at line 72 of file BasParserTypes.hpp.

23.1.1.14 typedef boost::spirit::classic::bounded⟨**uint1_2_p_t, unsigned int**⟩
SEVMGR::bounded1_2_p_t

Definition at line 73 of file BasParserTypes.hpp.

23.1.1.15 typedef boost::spirit::classic::bounded⟨**uint1_3_p_t, unsigned int**⟩
SEVMGR::bounded1_3_p_t

Definition at line 74 of file BasParserTypes.hpp.

23.1.1.16 typedef boost::spirit::classic::bounded⟨**uint4_p_t, unsigned int**⟩
SEVMGR::bounded4_p_t

Definition at line 75 of file BasParserTypes.hpp.

23.1.1.17 typedef boost::spirit::classic::bounded⟨**uint1_4_p_t, unsigned int**⟩
SEVMGR::bounded1_4_p_t

Definition at line 76 of file BasParserTypes.hpp.

23.1.1.18 typedef boost::shared_ptr⟨**SEVMGR_Service**⟩
SEVMGR::SEVMGR_ServicePtr_T

(Smart) Pointer on the SEvMgr service handler.

Definition at line 15 of file SEVMGR_Types.hpp.

23.2   stdair Namespace Reference

23.3   swift Namespace Reference

The wrapper namespace.

Classes

- class SKeymap

    The readline keymap wrapper.
- class SReadline

    The readline library wrapper.

23.3.1   Detailed Description

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

24   Class Documentation

24.1   std::allocator Class Reference

STL class.

24.1.1   Detailed Description

STL class.

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

24.2   std::auto␣ptr Class Reference
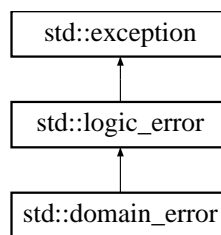
STL class.

24.2.1   Detailed Description

STL class.

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

24.3   std::bad␣alloc Class Reference

STL class.

Inheritance diagram for std::bad_alloc:

```
┌─────────────────┐
│  std::exception │
└─────────────────┘
         ▲
         │
┌─────────────────┐
│  std::bad_alloc │
└─────────────────┘
```
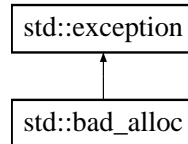
24.3.1 Detailed Description

STL class.

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

24.4 std::bad_cast Class Reference

STL class.

Inheritance diagram for std::bad_cast:

```
┌─────────────────┐
│  std::exception │
└─────────────────┘
         ▲
         │
┌─────────────────┐
│  std::bad_cast  │
└─────────────────┘
```
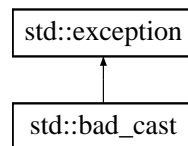
24.4.1 Detailed Description

STL class.

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

24.5 std::bad_exception Class Reference

STL class.

Inheritance diagram for std::bad_exception:

```
┌───────────────────┐
│   std::exception  │
└───────────────────┘
          ▲
          │
┌───────────────────┐
│ std::bad_exception│
└───────────────────┘
```
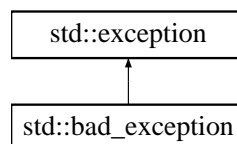
24.5.1   Detailed Description

STL class.

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

24.6   std::bad␣typeid Class Reference

STL class.

Inheritance diagram for std::bad_typeid:
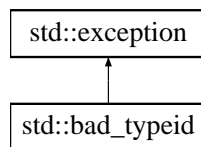
24.6.1   Detailed Description

STL class.

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

24.7   std::basic␣fstream Class Reference

STL class.

Inheritance diagram for std::basic_fstream:
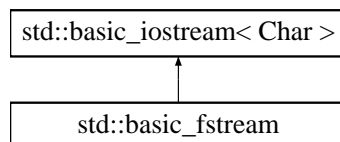
24.7.1   Detailed Description

STL class.

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

24.8   std::basic␣ifstream Class Reference

STL class.

Inheritance diagram for std::basic_ifstream:
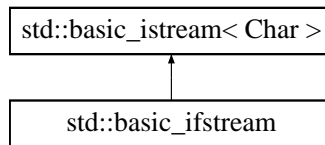
24.8.1   Detailed Description

STL class.

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

24.9   std::basic_ios Class Reference

STL class.

Inheritance diagram for std::basic_ios:
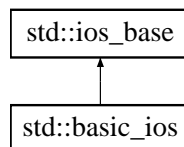
24.9.1   Detailed Description

STL class.

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

24.10   std::basic_iostream Class Reference

STL class.

Inheritance diagram for std::basic_iostream:
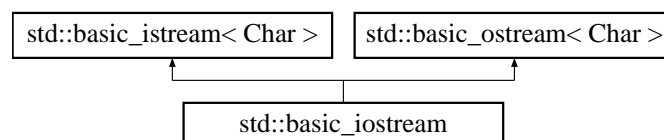
24.10.1   Detailed Description

STL class.

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

24.11 std::basic_istream Class Reference

STL class.

Inheritance diagram for std::basic_istream:
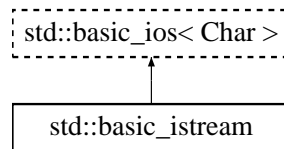
24.11.1 Detailed Description

STL class.

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

24.12 std::basic_istringstream Class Reference

STL class.

Inheritance diagram for std::basic_istringstream:
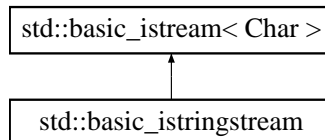
24.12.1 Detailed Description

STL class.

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

24.13 std::basic_ofstream Class Reference

STL class.

Inheritance diagram for std::basic_ofstream:

std::basic_ostream< Char >
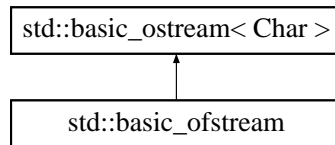
std::basic_ofstream

24.13.1   Detailed Description

STL class.

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

24.14   std::basic_ostream Class Reference

STL class.

Inheritance diagram for std::basic_ostream:

std::basic_ios< Char >
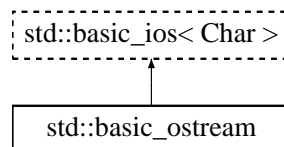
std::basic_ostream

24.14.1   Detailed Description

STL class.

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

24.15   std::basic_ostringstream Class Reference

STL class.

Inheritance diagram for std::basic_ostringstream:

std::basic_ostream< Char >

std::basic_ostringstream
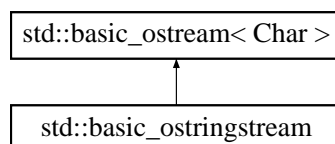
24.15.1   Detailed Description

STL class.

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

24.16   std::basic_string Class Reference

STL class.

Classes

- class const_iterator

    STL iterator class.
- class const_reverse_iterator

    STL iterator class.
- class iterator

    STL iterator class.
- class reverse_iterator

    STL iterator class.

24.16.1   Detailed Description

STL class.

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

24.17   std::basic_stringstream Class Reference

STL class.

Inheritance diagram for std::basic_stringstream:
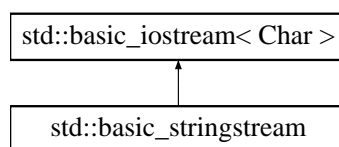
24.17.1   Detailed Description

STL class.

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

24.18   std::bitset Class Reference

STL class.

24.18.1   Detailed Description

STL class.

The documentation for this class was generated from the following file:
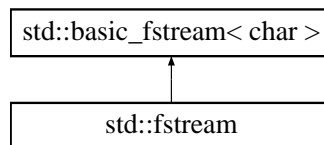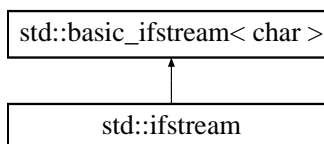
24.19   CmdAbstract Class Reference

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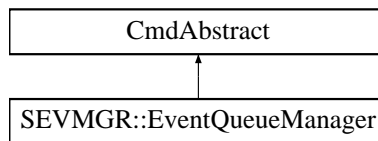
The documentation for this class was generated from the following file:

- sevmgr/command/EventQueueManager.hpp

24.20   COMMAND Struct Reference

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

Public Attributes

- char const ∗ name
- pt2Func ∗ func
- char ∗ doc

24.20.1   Detailed Description

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

24.20.2   Member Data Documentation

24.20.2.1   char const∗ COMMAND::name

User printable name of the function.

Definition at line 45 of file readline_autocomp.hpp.

Referenced by find_command(), and com_help().

24.20.2.2 pt2Func∗ COMMAND::func

Function to call to do the job.

Definition at line 50 of file readline_autocomp.hpp.

Referenced by execute_line().

24.20.2.3 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:

- sevmgr/ui/cmdline/readline_autocomp.hpp

24.21 std::complex Class Reference

STL class.

24.21.1 Detailed Description

STL class.

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

24.22 std::list::const_iterator Class Reference

STL iterator class.

24.22.1 Detailed Description

STL iterator class.

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

24.23 std::map::const_iterator Class Reference

STL iterator class.

24.23.1 Detailed Description

STL iterator class.

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

24.24   std::multimap::const_iterator Class Reference

STL iterator class.

24.24.1   Detailed Description

STL iterator class.

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

24.25   std::set::const_iterator Class Reference

STL iterator class.

24.25.1   Detailed Description

STL iterator class.

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

24.26   std::multiset::const_iterator Class Reference

STL iterator class.
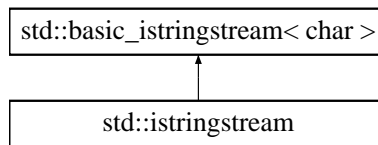
24.26.1   Detailed Description

STL iterator class.

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

24.27   std::basic_string::const_iterator Class Reference

STL iterator class.

24.27.1   Detailed Description

STL iterator class.

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

24.28   std::vector::const_iterator Class Reference

STL iterator class.

24.28.1   Detailed Description

STL iterator class.

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

24.29   std::string::const iterator Class Reference

STL iterator class.

24.29.1   Detailed Description

STL iterator class.

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

24.30   std::wstring::const iterator Class Reference

STL iterator class.

24.30.1   Detailed Description

STL iterator class.

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

24.31   std::deque::const iterator Class Reference

STL iterator class.

24.31.1   Detailed Description

STL iterator class.

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

24.32   std::map::const reverse iterator Class Reference

STL iterator class.

24.32.1   Detailed Description

STL iterator class.

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

24.33 std::list::const_reverse_iterator Class Reference

STL iterator class.

24.33.1 Detailed Description

STL iterator class.

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

24.34 std::multimap::const_reverse_iterator Class Reference

STL iterator class.

24.34.1 Detailed Description

STL iterator class.

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

24.35 std::set::const_reverse_iterator Class Reference

STL iterator class.

24.35.1 Detailed Description

STL iterator class.

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

24.36 std::multiset::const_reverse_iterator Class Reference

STL iterator class.

24.36.1 Detailed Description

STL iterator class.

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

24.37 std::basic_string::const_reverse_iterator Class Reference

STL iterator class.

24.37.1   Detailed Description

STL iterator class.

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

24.38   std::vector::const̲reverse̲iterator Class Reference

STL iterator class.

24.38.1   Detailed Description

STL iterator class.

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

24.39   std::string::const̲reverse̲iterator Class Reference

STL iterator class.

24.39.1   Detailed Description

STL iterator class.

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

24.40   std::wstring::const̲reverse̲iterator Class Reference

STL iterator class.

24.40.1   Detailed Description

STL iterator class.

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

24.41   std::deque::const̲reverse̲iterator Class Reference

STL iterator class.

24.41.1   Detailed Description

STL iterator class.

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

24.42   std::deque Class Reference

STL class.

Classes

- class const_iterator

  STL iterator class.
- class const_reverse_iterator

  STL iterator class.
- class iterator

  STL iterator class.
- class reverse_iterator

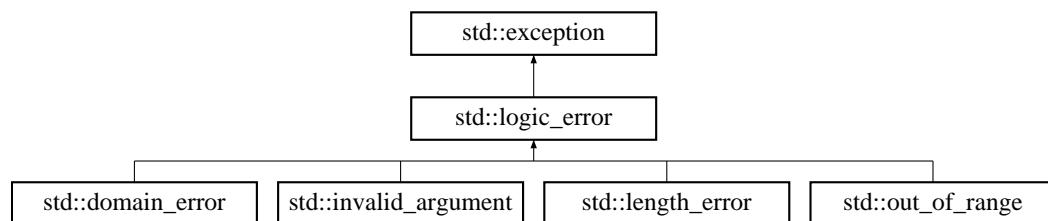 *STL iterator class.*

24.42.1   Detailed Description

STL class.

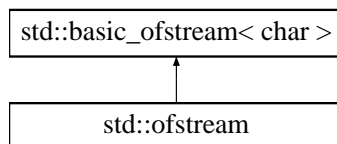The documentation for this class was generated from the following files:

24.43   std::domain_error Class Reference

STL class.

Inheritance diagram for std::domain_error:

24.43.1   Detailed Description

STL class.

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

24.44   SEVMGR::EventQueueManager Class Reference

Utility class for Demand and DemandStream objects.

`#include <sevmgr/command/EventQueueManager.hpp>`

Inheritance diagram for SEVMGR::EventQueueManager:

```
┌─────────────────────────────┐
│         CmdAbstract          │
└─────────────────────────────┘
               ▲
┌─────────────────────────────┐
│  SEVMGR::EventQueueManager   │
└─────────────────────────────┘
```
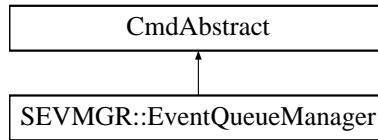
Friends

 • class SEVMGR_Service

24.44.1 Detailed Description

Utility class for Demand and DemandStream objects.

24.44.2 Friends And Related Function Documentation

24.44.2.1 friend class SEVMGR_Service `[friend]`

Definition at line 25 of file EventQueueManager.hpp.

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

 • sevmgr/command/EventQueueManager.hpp
 • sevmgr/command/EventQueueManager.cpp

24.45 std::exception Class Reference

STL class.

Inheritance diagram for std::exception:

```
                              ┌──────────────┐
                              │std::exception│
                              └──────────────┘
   ┌──────────┬──────────┬──────────────┬──────────────┬──────────────┬────────────────────────────┐
┌────────────┐┌────────────┐┌───────────────┐┌─────────────┐┌────────────────┐┌──────────────┐      ┌────────────────┐
│std::bad_alloc││std::bad_cast││std::bad_exception││std::bad_typeid││std::ios_base::failure││std::logic_error│      │std::runtime_error│
└────────────┘└────────────┘└───────────────┘└─────────────┘└────────────────┘└──────────────┘      └────────────────┘
                                       ┌──────────────┬──────────────┬──────────────┐      ┌──────────────┬──────────────┬──────────────┐
                                  ┌──────────────┐┌────────────────┐┌──────────────┐┌──────────────┐┌────────────────┐┌──────────────┐┌────────────────┐
                                  │std::domain_error││std::invalid_argument││std::length_error││std::out_of_range││std::overflow_error││std::range_error││std::underflow_error│
                                  └──────────────┘└────────────────┘└──────────────┘└──────────────┘└────────────────┘└──────────────┘└────────────────┘
```
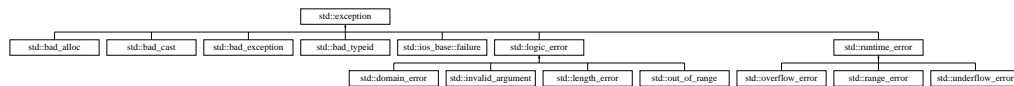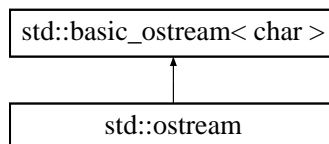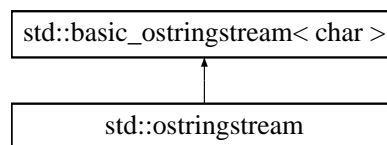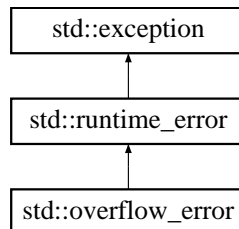
24.45.1 Detailed Description

STL class.

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

24.46 FacServiceAbstract Class Reference

Inheritance diagram for FacServiceAbstract:

```
┌─────────────────────────────────────┐
│         FacServiceAbstract          │
└─────────────────────────────────────┘
                   ▲
                   │
┌─────────────────────────────────────┐
│   SEVMGR::FacSEVMGRServiceContext   │
└─────────────────────────────────────┘
```
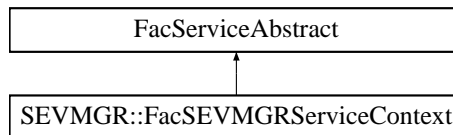
The documentation for this class was generated from the following file:

- sevmgr/factory/FacSEVMGRServiceContext.hpp

24.47 SEVMGR::FacSEVMGRServiceContext Class Reference

```
#include <sevmgr/factory/FacSEVMGRServiceContext.hpp>
```

Inheritance diagram for SEVMGR::FacSEVMGRServiceContext:

```
┌─────────────────────────────────────┐
│         FacServiceAbstract          │
└─────────────────────────────────────┘
                   ▲
                   │
┌─────────────────────────────────────┐
│   SEVMGR::FacSEVMGRServiceContext   │
└─────────────────────────────────────┘
```
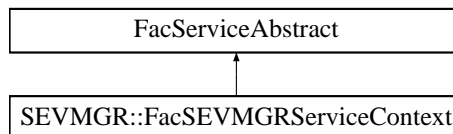
Public Member Functions

- ∼FacSEVMGRServiceContext ()
- SEVMGR_ServiceContext & create ()

Static Public Member Functions

- static FacSEVMGRServiceContext & instance ()

Protected Member Functions

- FacSEVMGRServiceContext ()

24.47.1 Detailed Description

Factory for Bucket.

24.47.2   Constructor & Destructor Documentation

24.47.2.1   SEVMGR::FacSEVMGRServiceContext::∼FacSEVMGRServiceContext ( )

Destructor.

The Destruction put the _instance to NULL in order to be clean for the next FacSEVM-GRServiceContext::instance().

Definition at line 17 of file FacSEVMGRServiceContext.cpp.

24.47.2.2   SEVMGR::FacSEVMGRServiceContext::FacSEVMGRServiceContext ( )
          `[inline, protected]`

Default Constructor.

This constructor is protected in order to ensure the singleton pattern.

Definition at line 42 of file FacSEVMGRServiceContext.hpp.

Referenced by instance().

24.47.3   Member Function Documentation

24.47.3.1   FacSEVMGRServiceContext & SEVMGR::FacSEVMGRServiceContext::instance (
) `[static]`

Provide the unique instance.

The singleton is instantiated when first used

Returns

    FacSEVMGRServiceContext&

Definition at line 22 of file FacSEVMGRServiceContext.cpp.

References FacSEVMGRServiceContext().

24.47.3.2   SEVMGR_ServiceContext & SEVMGR::FacSEVMGRServiceContext::create ( )

Create a new SEVMGR_ServiceContext object.

This new object is added to the list of instantiated objects.

Returns

    SEVMGR_ServiceContext& The newly created object.

Definition at line 34 of file FacSEVMGRServiceContext.cpp.

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

- sevmgr/factory/FacSEVMGRServiceContext.hpp
- sevmgr/factory/FacSEVMGRServiceContext.cpp

24.48 std::ios␣base::failure Class Reference

STL class.

Inheritance diagram for std::ios_base::failure:

```
┌─────────────────┐
│  std::exception  │
└─────────────────┘
         ▲
         │
┌─────────────────────┐
│ std::ios_base::failure │
└─────────────────────┘
```
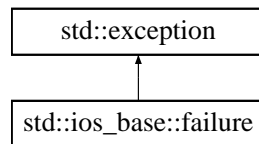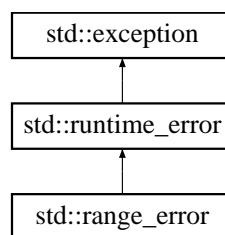
24.48.1 Detailed Description

STL class.

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

24.49 std::fstream Class Reference

STL class.

Inheritance diagram for std::fstream:

```
┌──────────────────────────┐
│ std::basic_fstream< char > │
└──────────────────────────┘
             ▲
             │
   ┌─────────────────┐
   │   std::fstream    │
   └─────────────────┘
```

24.49.1 Detailed Description

STL class.

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

24.50 std::ifstream Class Reference

STL class.

Inheritance diagram for std::ifstream:

```
┌──────────────────────────┐
│ std::basic_ifstream< char > │
└──────────────────────────┘
             ▲
             │
   ┌─────────────────┐
   │   std::ifstream   │
   └─────────────────┘
```

24.50.1 Detailed Description

STL class.

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

24.51 std::invalid_argument Class Reference

STL class.

Inheritance diagram for std::invalid_argument:
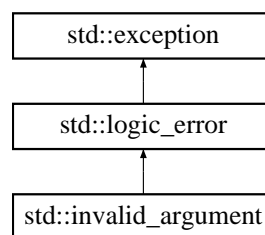
24.51.1 Detailed Description

STL class.

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

24.52 std::ios Class Reference

STL class.

Inheritance diagram for std::ios:
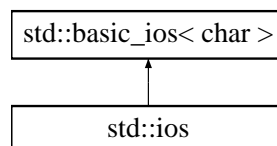
24.52.1 Detailed Description

STL class.

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

24.53   std::ios_base Class Reference

STL class.

Inheritance diagram for std::ios_base:
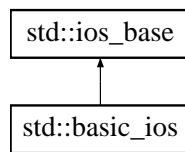
Classes

- class failure

    STL class.

24.53.1   Detailed Description

STL class.

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

24.54   std::istream Class Reference

STL class.

Inheritance diagram for std::istream:
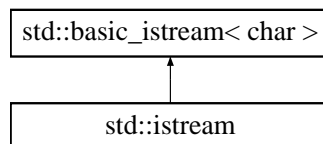
24.54.1   Detailed Description

STL class.

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

24.55   std::istringstream Class Reference

STL class.

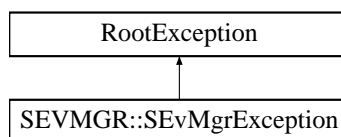Inheritance diagram for std::istringstream:

```
std::basic_istringstream< char >
```

```
std::istringstream
```

24.55.1   Detailed Description

STL class.

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

24.56   std::list::iterator Class Reference

STL iterator class.

24.56.1   Detailed Description

STL iterator class.

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

24.57   std::deque::iterator Class Reference

STL iterator class.

24.57.1   Detailed Description

STL iterator class.

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

24.58   std::multimap::iterator Class Reference

STL iterator class.

24.58.1   Detailed Description

STL iterator class.

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

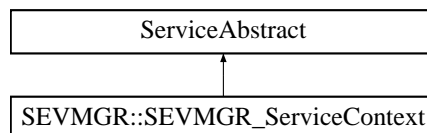## 24.59   std::set::iterator Class Reference

STL iterator class.

24.59.1   Detailed Description

STL iterator class.

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

24.60   std::multiset::iterator Class Reference

STL iterator class.

24.60.1   Detailed Description

STL iterator class.

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

24.61   std::basic_string::iterator Class Reference

STL iterator class.

24.61.1   Detailed Description

STL iterator class.

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

24.62   std::vector::iterator Class Reference

STL iterator class.

24.62.1   Detailed Description

STL iterator class.

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

24.63   std::string::iterator Class Reference

STL iterator class.

24.63.1 Detailed Description

STL iterator class.

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

24.64 std::map::iterator Class Reference

STL iterator class.

24.64.1 Detailed Description

STL iterator class.

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

24.65 std::wstring::iterator Class Reference

STL iterator class.

24.65.1 Detailed Description

STL iterator class.

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

24.66 std::length_error Class Reference

STL class.

Inheritance diagram for std::length_error:
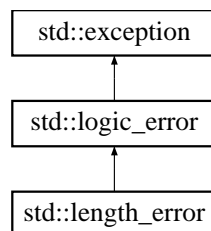
24.66.1 Detailed Description

STL class.

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

24.67   std::list Class Reference

STL class.

Classes

- class const_iterator

    STL iterator class.
- class const_reverse_iterator

    STL iterator class.
- class iterator

    STL iterator class.
- class reverse_iterator

    STL iterator class.

24.67.1   Detailed Description

STL class.

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

24.68   std::logic_error Class Reference

STL class.

Inheritance diagram for std::logic_error:

24.68.1   Detailed Description

STL class.

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

24.69   std::map Class Reference

STL class.

Classes

- class const_iterator

  STL iterator class.

- class const_reverse_iterator

  STL iterator class.

- class iterator

  STL iterator class.

- class reverse_iterator

  STL iterator class.

24.69.1   Detailed Description

STL class.

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

24.70   std::multimap Class Reference

STL class.

Classes

- class const_iterator

  STL iterator class.

- class const_reverse_iterator

  STL iterator class.

- class iterator

  STL iterator class.

- class reverse_iterator

  STL iterator class.

24.70.1   Detailed Description

STL class.

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

24.71   std::multiset Class Reference

STL class.

Classes

- class [const_iterator](#)

  STL iterator class.

- class [const_reverse_iterator](#)

  STL iterator class.

- class [iterator](#)

  STL iterator class.

- class [reverse_iterator](#)

  STL iterator class.

24.71.1   Detailed Description

STL class.

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

24.72   std::ofstream Class Reference

STL class.

Inheritance diagram for std::ofstream:

24.72.1   Detailed Description

STL class.

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

24.73   std::ostream Class Reference

STL class.

Inheritance diagram for std::ostream:

24.73.1   Detailed Description

STL class.

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

24.74   std::ostringstream Class Reference

STL class.

Inheritance diagram for std::ostringstream:

```
┌─────────────────────────────────┐
│ std::basic_ostringstream< char > │
└─────────────────────────────────┘
                  ▲
                  │
┌─────────────────────────────────┐
│        std::ostringstream        │
└─────────────────────────────────┘
```

24.74.1   Detailed Description

STL class.

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

24.75   std::out_of_range Class Reference

STL class.

Inheritance diagram for std::out_of_range:

```
┌──────────────────┐
│  std::exception  │
└──────────────────┘
          ▲
          │
┌──────────────────┐
│ std::logic_error │
└──────────────────┘
          ▲
          │
┌──────────────────┐
│ std::out_of_range │
└──────────────────┘
```
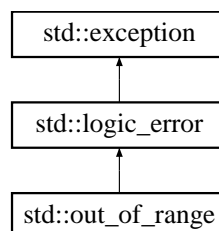
24.75.1   Detailed Description

STL class.

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

24.76 std::overflow_error Class Reference

STL class.

Inheritance diagram for std::overflow_error:

```
┌─────────────────────┐
│    std::exception    │
└─────────────────────┘
           ▲
           │
┌─────────────────────┐
│  std::runtime_error  │
└─────────────────────┘
           ▲
           │
┌─────────────────────┐
│  std::overflow_error │
└─────────────────────┘
```

24.76.1 Detailed Description

STL class.

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

24.77 std::priority_queue Class Reference

STL class.

24.77.1 Detailed Description

STL class.

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

24.78 SEVMGR::PYEventQueueManager Struct Reference

Public Member Functions

- std::string sevmgr ()
- PYEventQueueManager ()
- PYEventQueueManager (const PYEventQueueManager &iPYEventQueue-Manager)
- ∼PYEventQueueManager ()
- bool init (const std::string &iLogFilepath, const std::string &iDBUser, const std-::string &iDBPasswd, const std::string &iDBHost, const std::string &iDBPort, const std::string &iDBDBName)

24.78.1 Constructor & Destructor Documentation

24.78.1.1 SEVMGR::PYEventQueueManager::PYEventQueueManager ( ) `[inline]`

Default constructor.

Definition at line 76 of file pysevmgr.cpp.

24.78.1.2 SEVMGR::PYEventQueueManager::PYEventQueueManager (const PYEventQueueManager & *iPYEventQueueManager* **)** `[inline]`

Default copy constructor.

Definition at line 80 of file pysevmgr.cpp.

24.78.1.3 SEVMGR::PYEventQueueManager::∼PYEventQueueManager ( ) `[inline]`

Default constructor.

Definition at line 86 of file pysevmgr.cpp.

24.78.2 Member Function Documentation

24.78.2.1 std::string SEVMGR::PYEventQueueManager::sevmgr ( ) `[inline]`

Wrapper around the travel demand generation use case.

Definition at line 25 of file pysevmgr.cpp.

References SEVMGR::SEVMGR_Service::buildSampleBom().

Referenced by BOOST_PYTHON_MODULE().

24.78.2.2 bool SEVMGR::PYEventQueueManager::init (const std::string & *iLogFilepath,* **const std::string &** *iDBUser,* **const std::string &** *iDBPasswd,* **const std::string &** *iDBHost,* **const std::string &** *iDBPort,* **const std::string &** *iDBDBName* **)** `[inline]`

Wrapper around the search use case.

Definition at line 92 of file pysevmgr.cpp.

Referenced by BOOST_PYTHON_MODULE().

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

- sevmgr/python/pysevmgr.cpp

24.79 std::queue Class Reference

STL class.

24.79.1 Detailed Description

STL class.

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

24.80 std::range_error Class Reference

STL class.

Inheritance diagram for std::range_error:

24.80.1 Detailed Description

STL class.

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

24.81 std::vector::reverse_iterator Class Reference

STL iterator class.

24.81.1 Detailed Description

STL iterator class.

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

24.82 std::list::reverse_iterator Class Reference

STL iterator class.

24.82.1 Detailed Description

STL iterator class.

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

24.83   std::map::reverse_iterator Class Reference

STL iterator class.

24.83.1   Detailed Description

STL iterator class.

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

24.84   std::deque::reverse_iterator Class Reference

STL iterator class.

24.84.1   Detailed Description

STL iterator class.

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

24.85   std::wstring::reverse_iterator Class Reference

STL iterator class.

24.85.1   Detailed Description

STL iterator class.

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

24.86   std::basic_string::reverse_iterator Class Reference

STL iterator class.

24.86.1   Detailed Description

STL iterator class.

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

24.87   std::multimap::reverse_iterator Class Reference

STL iterator class.

24.87.1   Detailed Description

STL iterator class.

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

24.88   std::set::reverse␣iterator Class Reference

STL iterator class.

24.88.1   Detailed Description

STL iterator class.

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

24.89   std::multiset::reverse␣iterator Class Reference

STL iterator class.

24.89.1   Detailed Description

STL iterator class.

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

24.90   std::string::reverse␣iterator Class Reference

STL iterator class.

24.90.1   Detailed Description

STL iterator class.

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

24.91   RootException Class Reference

Inheritance diagram for RootException:

```
┌─────────────────────────────┐
│        RootException        │
└─────────────────────────────┘
               ▲
               │
┌─────────────────────────────┐
│   SEVMGR::SEvMgrException    │
└─────────────────────────────┘
```

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

- sevmgr/SEVMGR_Exceptions.hpp

24.92   std::runtime_error Class Reference

STL class.

Inheritance diagram for std::runtime_error:

```
                        ┌─────────────────┐
                        │  std::exception  │
                        └─────────────────┘
                                 ▲
                                 │
                        ┌─────────────────┐
                        │ std::runtime_error │
                        └─────────────────┘
                                 ▲
               ┌─────────────────┼─────────────────┐
    ┌──────────────────┐ ┌──────────────────┐ ┌──────────────────┐
    │ std::overflow_error │ │ std::range_error  │ │ std::underflow_error │
    └──────────────────┘ └──────────────────┘ └──────────────────┘
```
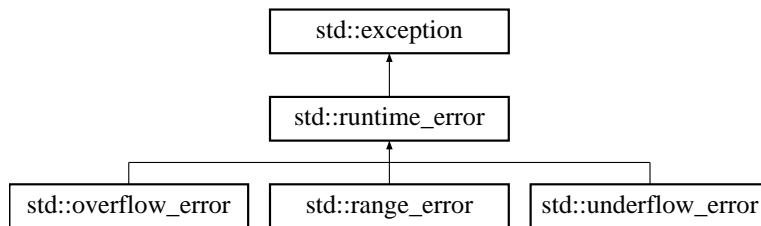
24.92.1   Detailed Description

STL class.

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

24.93   ServiceAbstract Class Reference

Inheritance diagram for ServiceAbstract:

```
            ┌──────────────────────────────┐
            │       ServiceAbstract        │
            └──────────────────────────────┘
                          ▲
                          │
            ┌──────────────────────────────┐
            │ SEVMGR::SEVMGR_ServiceContext │
            └──────────────────────────────┘
```

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

- sevmgr/service/SEVMGR_ServiceContext.hpp

24.94   std::set Class Reference

STL class.

Classes

- class const_iterator

    STL iterator class.
- class const_reverse_iterator

    STL iterator class.
- class iterator

    STL iterator class.
- class reverse_iterator

    STL iterator class.

24.94.1   Detailed Description

STL class.

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

24.95   SEVMGR::SEVMGR_Service Class Reference

class holding the services related to Travel Demand Generation.

```
#include <sevmgr/SEVMGR_Service.hpp>
```

Public Member Functions

- SEVMGR_Service (const stdair::BasLogParams &, const stdair::BasDBParams &)

    Constructor.
- SEVMGR_Service (const stdair::BasLogParams &)
- SEVMGR_Service (stdair::STDAIR_ServicePtr_T)
- ∼SEVMGR_Service ()
- void buildSampleBom ()
- stdair::ProgressStatusSet popEvent (stdair::EventStruct &) const
- bool isQueueDone () const
- void reset () const
- std::string csvDisplay () const

24.95.1   Detailed Description

class holding the services related to Travel Demand Generation.

24.95.2 Constructor & Destructor Documentation

24.95.2.1 SEVMGR::SEVMGR_Service::SEVMGR_Service (const stdair::BasLogParams &
iLogParams, const stdair::BasDBParams & iDBParams)

Constructor.

The initSevmgrService() 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 39 of file SEVMGR_Service.cpp.

24.95.2.2 SEVMGR::SEVMGR_Service::SEVMGR_Service (const stdair::BasLogParams &
iLogParams)

Constructor.

The initSevmgrService() 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 60 of file SEVMGR_Service.cpp.

24.95.2.3 SEVMGR::SEVMGR_Service::SEVMGR_Service (stdair::STDAIR_ServicePtr_T
ioSTDAIR_Service_ptr)

Constructor.

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

Moreover, as no reference on any output stream is given, neither any database access
parameter 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 in-
stance, when the SEVMGR_Service is itself being initialised by another library service
such as DSIM_Service).

Parameters

stdair::STD-AIR_-ServicePtr_-T	Handler on the STDAIR_Service.

Definition at line 81 of file SEVMGR_Service.cpp.

24.95.2.4   SEVMGR::SEVMGR_Service::∼SEVMGR_Service (   )

Destructor.

Definition at line 97 of file SEVMGR_Service.cpp.

24.95.3   Member Function Documentation

24.95.3.1   void SEVMGR::SEVMGR_Service::buildSampleBom (   )

Build a sample BOM tree.

Definition at line 171 of file SEVMGR_Service.cpp.

Referenced by main(), and SEVMGR::PYEventQueueManager::sevmgr().

24.95.3.2   stdair::ProgressStatusSet SEVMGR::SEVMGR_Service::popEvent (stdair::EventStruct & *ioEventStruct*) const

Pop the next coming (in time) event, and remove it from the event queue.

- The next coming (in time) event corresponds to the event having the earliest date-time stamp. In other words, it is the first/front element of the event queue.

- That (first) event/element is then removed from the event queue

- The progress status is updated for the corresponding demand stream.

Returns

> stdair::EventStruct A copy of the event structure, which comes first in time from within the event queue.

Definition at line 215 of file SEVMGR_Service.cpp.

24.95.3.3   bool SEVMGR::SEVMGR_Service::isQueueDone (   ) const

States whether the event queue has reached the end.

For now, that method states whether the event queue is empty.

Definition at line 233 of file SEVMGR_Service.cpp.

24.95.3.4   void SEVMGR::SEVMGR_Service::reset (   ) const

Reset the context of the demand streams for another demand generation without having to reparse the demand input file.

Definition at line 255 of file SEVMGR_Service.cpp.

24.95.3.5   std::string SEVMGR::SEVMGR_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 191 of file SEVMGR_Service.cpp.

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

- sevmgr/SEVMGR_Service.hpp
- sevmgr/service/SEVMGR_Service.cpp

24.96   SEVMGR::SEVMGR_ServiceContext Class Reference

Class holding the context of the Sevmgr services.

`#include <sevmgr/service/SEVMGR_ServiceContext.hpp>`

Inheritance diagram for SEVMGR::SEVMGR_ServiceContext:
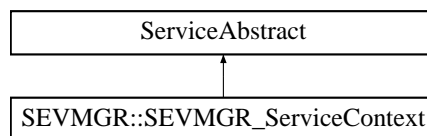
Friends

- class SEVMGR_Service
- class FacSEVMGRServiceContext

24.96.1   Detailed Description

Class holding the context of the Sevmgr services.

24.96.2   Friends And Related Function Documentation

24.96.2.1   friend class SEVMGR_Service `[friend]`

The SEVMGR_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 27 of file SEVMGR_ServiceContext.hpp.

24.96.2.2   friend class FacSEVMGRServiceContext `[friend]`

Definition at line 28 of file SEVMGR_ServiceContext.hpp.

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

- sevmgr/service/SEVMGR_ServiceContext.hpp
- sevmgr/service/SEVMGR_ServiceContext.cpp

24.97   SEVMGR::SEvMgrException Class Reference

`#include <sevmgr/SEVMGR_Exceptions.hpp>`

Inheritance diagram for SEVMGR::SEvMgrException:

```
        ┌─────────────────────────┐
        │      RootException       │
        └─────────────────────────┘
                     ▲
        ┌─────────────────────────┐
        │ SEVMGR::SEvMgrException   │
        └─────────────────────────┘
```
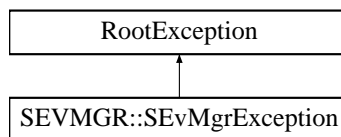
Public Member Functions

- SEvMgrException (const std::string &iWhat)

24.97.1   Detailed Description

Root exception for the Sevmgr component

24.97.2   Constructor & Destructor Documentation

24.97.2.1   SEVMGR::SEvMgrException::SEvMgrException (const std::string & *iWhat*) `[inline]`

Constructor.

Definition at line 23 of file SEVMGR_Exceptions.hpp.

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

- sevmgr/SEVMGR_Exceptions.hpp

24.98   swift::SKeymap Class Reference

The readline keymap wrapper.

```
#include <sevmgr/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

24.98.1   Detailed Description

The readline keymap wrapper.

Attention: It is not thread safe! Supports: key binding, key unbinding

24.98.2   Constructor & Destructor Documentation

24.98.2.1   swift::SKeymap::SKeymap (bool *PrintableBound =* false) [inline, explicit]

Creates a new keymap.

Parameters

Printable-Bound	if true - the printable characters are bound if false - the keymap is empty

Definition at line 319 of file SReadline.hpp.

24.98.2.2   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.

24.98.2.3   swift::SKeymap::∼SKeymap ( ) `[inline]`

Frees the allocated keymap.

Definition at line 354 of file SReadline.hpp.

24.98.2.4   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.

24.98.3   Member Function Documentation

24.98.3.1   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.

24.98.3.2   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.

24.98.3.3   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.

24.98.4   Friends And Related Function Documentation

24.98.4.1   friend class SReadline `[friend]`

Definition at line 415 of file SReadline.hpp.

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

- sevmgr/ui/cmdline/SReadline.hpp

24.99   swift::SReadline Class Reference

The readline library wrapper.

```
#include <sevmgr/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=DefaultHistory-Limit)

    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.

24.99.1   Detailed Description

The readline library wrapper.

Attention: It is not thread safe! Supports: editing, history, custom completers

24.99.2   Constructor & Destructor Documentation

24.99.2.1   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.

24.99.2.2   swift::SReadline::SReadline (const std::string & *historyFileName,* const size_t *Limit* = `DefaultHistoryLimit`) `[inline]`

Constructs the object, sets the completion function, loads history.

Parameters

historyFile-Name	File name to load history from
Limit	History size

Definition at line 446 of file SReadline.hpp.

References LoadHistory().

24.99.2.3   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().

24.99.3   Member Function Documentation

24.99.3.1   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().

24.99.3.2   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().

24.99.3.3   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().

24.99.3.4   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.

24.99.3.5   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.

24.99.3.6   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 ~SReadline(), and SaveHistory().

24.99.3.7   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().

24.99.3.8   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().

24.99.3.9   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 SReadline(), and LoadHistory().

24.99.3.10   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().

24.99.3.11   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.

24.99.3.12   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:

- sevmgr/ui/cmdline/SReadline.hpp

24.100   std::stack Class Reference

STL class.

24.100.1   Detailed Description

STL class.

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

24.101   std::string Class Reference
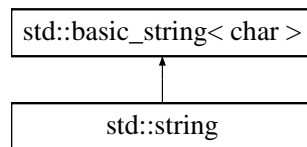
STL class.

Inheritance diagram for std::string:

Classes

- class [const_iterator]

    STL iterator class.

- class [const_reverse_iterator]

    STL iterator class.

- class [iterator]

    STL iterator class.

- class [reverse_iterator]

    STL iterator class.

24.101.1   Detailed Description

STL class.

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

24.102   std::stringstream Class Reference

STL class.

Inheritance diagram for std::stringstream:
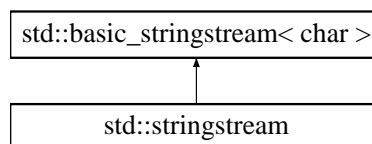
24.102.1   Detailed Description

STL class.

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

24.103   std::underflow_error Class Reference

STL class.

Inheritance diagram for std::underflow_error:

```
┌─────────────────────┐
│   std::exception    │
└─────────────────────┘
          ▲
          │
┌─────────────────────┐
│  std::runtime_error │
└─────────────────────┘
          ▲
          │
┌─────────────────────┐
│ std::underflow_error│
└─────────────────────┘
```
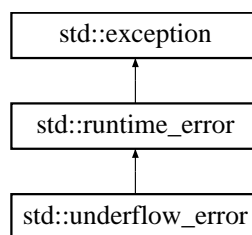
24.103.1   Detailed Description

STL class.

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

24.104   std::valarray Class Reference

STL class.

24.104.1   Detailed Description

STL class.

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

24.105   std::vector Class Reference

STL class.

Classes

- class const_iterator

    STL iterator class.
- class const_reverse_iterator

STL iterator class.

- class iterator

    STL iterator class.

- class reverse_iterator

    STL iterator class.

24.105.1 Detailed Description

STL class.

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

24.106   std::wfstream Class Reference

STL class.

Inheritance diagram for std::wfstream:

```
┌─────────────────────────────┐
│ std::basic_fstream< wchar_t >│
└─────────────────────────────┘
               ▲
               │
┌─────────────────────────────┐
│        std::wfstream         │
└─────────────────────────────┘
```
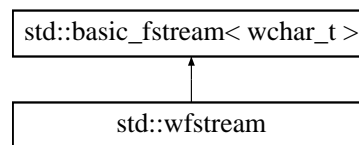
24.106.1 Detailed Description

STL class.

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

24.107   std::wifstream Class Reference

STL class.

Inheritance diagram for std::wifstream:

```
┌─────────────────────────────┐
│ std::basic_ifstream< wchar_t >│
└─────────────────────────────┘
               ▲
               │
┌─────────────────────────────┐
│        std::wifstream        │
└─────────────────────────────┘
```
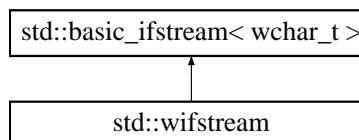
24.107.1 Detailed Description

STL class.

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

24.108   std::wios Class Reference

STL class.

Inheritance diagram for std::wios:
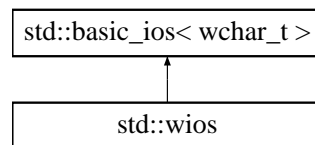
24.108.1   Detailed Description

STL class.

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

24.109   std::wistream Class Reference

STL class.

Inheritance diagram for std::wistream:
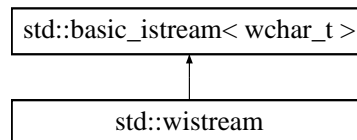
24.109.1   Detailed Description

STL class.

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

24.110   std::wistringstream Class Reference

STL class.

Inheritance diagram for std::wistringstream:

std::basic_istringstream< wchar_t >

std::wistringstream

24.110.1 Detailed Description

STL class.

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

24.111 std::wofstream Class Reference

STL class.

Inheritance diagram for std::wofstream:

std::basic_ofstream< wchar_t >

std::wofstream
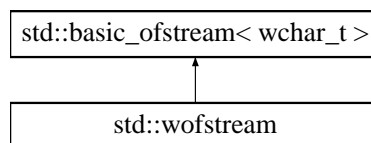
24.111.1 Detailed Description

STL class.

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

24.112 std::wostream Class Reference

STL class.

Inheritance diagram for std::wostream:

std::basic_ostream< wchar_t >
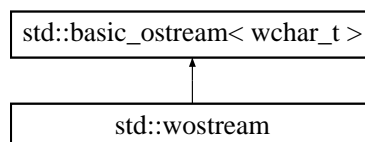
std::wostream

24.112.1 Detailed Description

STL class.

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

24.113 std::wostringstream Class Reference

STL class.

Inheritance diagram for std::wostringstream:
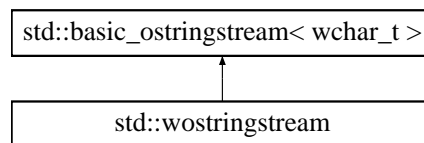
24.113.1 Detailed Description

STL class.

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

24.114 std::wstring Class Reference
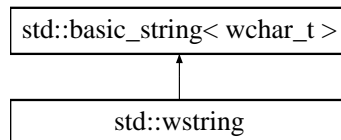
STL class.

Inheritance diagram for std::wstring:

Classes

- class const_iterator

    STL iterator class.

- class const_reverse_iterator

    STL iterator class.

- class iterator

    STL iterator class.

- class reverse_iterator

    STL iterator class.

24.114.1   Detailed Description

STL class.

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

24.115   std::wstringstream Class Reference

STL class.

Inheritance diagram for std::wstringstream:
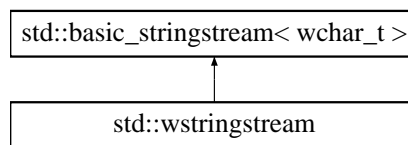
24.115.1   Detailed Description

STL class.

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

25   File Documentation

25.1   doc/local/authors.doc File Reference

25.2   doc/local/codingrules.doc File Reference

25.3   doc/local/copyright.doc File Reference

25.4   doc/local/documentation.doc File Reference

25.5   doc/local/features.doc File Reference

25.6   doc/local/help_wanted.doc File Reference

25.7   doc/local/howto_release.doc File Reference

25.8   doc/local/index.doc File Reference

25.9   doc/local/installation.doc File Reference

25.10   doc/local/linking.doc File Reference

25.11   doc/local/test.doc File Reference

25.12   doc/local/users₋guide.doc File Reference

25.13   doc/local/verification.doc File Reference

25.14   doc/tutorial/tutorial.doc File Reference

25.15   sevmgr/basic/BasConst.cpp File Reference

```
#include <stdair/basic/BasConst_General.hpp>        #include
<sevmgr/basic/BasConst_SEVMGR_Service.hpp>#include <sevmgr/basic/-
BasConst_EventQueueManager.hpp>
```

Namespaces

- namespace SEVMGR

25.16   BasConst.cpp

```
00001 // //////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////
00004 // StdAir
00005 #include <stdair/basic/BasConst_General.hpp>
00006 // Sevmgr
00007 #include <sevmgr/basic/BasConst_SEVMGR_Service.hpp>
00008 #include <sevmgr/basic/BasConst_EventQueueManager.hpp>
00009
00010 namespace SEVMGR {
00011
00013   // const std::string DEFAULT_SEVMGR_SERVICE_NAME = "sevmgr";
00014
00016   // extern const std::string DEFAULT_EVENT_QUEUE_KEY;
00017
00018 }
```

25.17   sevmgr/basic/BasConst₋EventQueueManager.hpp File Reference

```
#include <string>
```

Namespaces

- namespace SEVMGR

25.18   BasConst₋EventQueueManager.hpp

```
00001 #ifndef __SEVMGR_BAS_BASCONST_EVENTQUEUEMANAGER_HPP
```

```
00002 #define __SEVMGR_BAS_BASCONST_EVENTQUEUEMANAGER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <string>
00009
00010 namespace SEVMGR {
00011
00013   // extern const std::string DEFAULT_EVENT_QUEUE_KEY;
00014
00015 }
00016 #endif // __SEVMGR_BAS_BASCONST_EVENTQUEUEMANAGER_HPP
```

25.19   sevmgr/basic/BasConst_SEVMGR_Service.hpp File Reference

```
#include <string>
```

Namespaces

- namespace SEVMGR

25.20   BasConst_SEVMGR_Service.hpp

```
00001 #ifndef __SEVMGR_BAS_BASCONST_SEVMGR_SERVICE_HPP
00002 #define __SEVMGR_BAS_BASCONST_SEVMGR_SERVICE_HPP
00003
00004 // //////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////
00007 #include <string>
00008
00009 namespace SEVMGR {
00010
00012   // extern const std::string DEFAULT_SEVMGR_SERVICE_NAME;
00013
00014 }
00015 #endif // __SEVMGR_BAS_BASCONST_SEVMGR_SERVICE_HPP
```

25.21   sevmgr/basic/BasParserTypes.hpp File Reference

```
#include <string>#include <boost/spirit/home/classic/core.-
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>
```

Namespaces

- namespace SEVMGR

Typedefs

- typedef char SEVMGR::char_t
- typedef boost::spirit::classic::file_iterator < char_t > SEVMGR::iterator_t
- typedef boost::spirit::classic::scanner < iterator_t > SEVMGR::scanner_t
- typedef boost::spirit::classic::rule < scanner_t > SEVMGR::rule_t
- typedef boost::spirit::classic::int_parser < unsigned int, 10, 1, 1 > SEVMGR-::int1_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 2, 2 > SEVMGR-::uint2_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 2 > SEVMGR-::uint1_2_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 3 > SEVMGR-::uint1_3_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 4, 4 > SEVMGR-::uint4_p_t
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 4 > SEVMGR-::uint1_4_p_t
- typedef boost::spirit::classic::chset < char_t > SEVMGR::chset_t
- typedef boost::spirit::classic::impl::loop_traits < chset_t, unsigned int, unsigned int >::type SEVMGR::repeat_p_t
- typedef boost::spirit::classic::bounded < uint2_p_t, unsigned int > SEVMGR-::bounded2_p_t
- typedef boost::spirit::classic::bounded < uint1_2_p_t, unsigned int > SEVMGR-::bounded1_2_p_t
- typedef boost::spirit::classic::bounded < uint1_3_p_t, unsigned int > SEVMGR-::bounded1_3_p_t
- typedef boost::spirit::classic::bounded < uint4_p_t, unsigned int > SEVMGR-::bounded4_p_t
- typedef boost::spirit::classic::bounded < uint1_4_p_t, unsigned int > SEVMGR-::bounded1_4_p_t

25.22 BasParserTypes.hpp

```
00001 #ifndef __SEVMGR_BAS_BASCOMPARSERTYPES_HPP
00002 #define __SEVMGR_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 SEVMGR {
```

```
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 // __SEVMGR_BAS_BASCOMPARSERTYPES_HPP
```

25.23 sevmgr/batches/sevmgr_demo.cpp File Reference

#include <cassert> #include <sstream> #include <fstream> ×
#include <vector> #include <list> #include <string> ×
#include <boost/program_options.hpp> #include <stdair/stdair-
_basic_types.hpp> #include <stdair/basic/ProgressStatus-
Set.hpp> #include <stdair/bom/EventStruct.hpp> #include
<stdair/bom/EventQueue.hpp>   #include <stdair/bom/Bom-
Display.hpp> #include <stdair/service/Logger.hpp> #include

`<sevmgr/SEVMGR_Service.hpp>` `#include <sevmgr/config/sevmgr-paths.-hpp>`

Functions

- const stdair::Filename_T K_SEVMGR_DEFAULT_LOG_FILENAME ("sevmgr-demo.log")
- int readConfiguration (int argc, char *argv[], stdair::Filename_T &ioLogFilename)
- int main (int argc, char *argv[])

Variables

- const int K_SEVMGR_EARLY_RETURN_STATUS = 99

25.23.1   Function Documentation

25.23.1.1   const stdair::Filename_T K_SEVMGR_DEFAULT_LOG_FILENAME ("sevmgr_demo.log")

Default name and location for the log file.

Referenced by readConfiguration().

25.23.1.2   int readConfiguration (int argc, char * argv[], stdair::Filename_T & ioLogFilename)

Read and parse the command line options.

Definition at line 35 of file sevmgr_demo.cpp.

References K_SEVMGR_DEFAULT_LOG_FILENAME(), K_SEVMGR_EARLY_RET-URN_STATUS, PACKAGE_NAME, PACKAGE_VERSION, and PREFIXDIR.

Referenced by main().

25.23.1.3   int main (int argc, char * argv[])

Definition at line 109 of file sevmgr_demo.cpp.

References readConfiguration(), K_SEVMGR_EARLY_RETURN_STATUS, and SEV-MGR::SEVMGR_Service::buildSampleBom().

25.23.2   Variable Documentation

25.23.2.1   const int K_SEVMGR_EARLY_RETURN_STATUS = 99

Early return status (so that it can be differentiated from an error).

Definition at line 30 of file sevmgr_demo.cpp.

Referenced by readConfiguration(), and main().

25.24 sevmgr_demo.cpp

```
00001 // //////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 #include <fstream>
00008 #include <vector>
00009 #include <list>
00010 #include <string>
00011 //  //// Boost (Extended STL) ////
00012 // Boost Program Options
00013 #include <boost/program_options.hpp>
00014 // StdAir
00015 #include <stdair/stdair_basic_types.hpp>
00016 #include <stdair/basic/ProgressStatusSet.hpp>
00017 #include <stdair/bom/EventStruct.hpp>
00018 #include <stdair/bom/EventQueue.hpp>
00019 #include <stdair/bom/BomDisplay.hpp>
00020 #include <stdair/service/Logger.hpp>
00021 // SEvMgr
00022 #include <sevmgr/SEVMGR_Service.hpp>
00023 #include <sevmgr/config/sevmgr-paths.hpp>
00024
00025 // ///////// Constants //////
00027 const stdair::Filename_T K_SEVMGR_DEFAULT_LOG_FILENAME ("sevmgr_demo.log");
00028
00030 const int K_SEVMGR_EARLY_RETURN_STATUS = 99;
00031
00032
00033 // ///////// Parsing of Options & Configuration /////////
00035 int readConfiguration (int argc, char* argv[],
00036                        stdair::Filename_T& ioLogFilename) {
00037
00038   // Declare a group of options that will be allowed only on command line
00039   boost::program_options::options_description generic ("Generic options");
00040   generic.add_options()
00041     ("prefix", "print installation prefix")
00042     ("version,v", "print version string")
00043     ("help,h", "produce help message");
00044
00045   // Declare a group of options that will be allowed both on command
00046   // line and in config file
00047   boost::program_options::options_description config ("Configuration");
00048   config.add_options()
00049     ("log,l",
00050      boost::program_options::value< std::string >(&ioLogFilename)->
    default_value(K_SEVMGR_DEFAULT_LOG_FILENAME),
00051      "Filepath for the logs")
00052     ;
00053
00054   // Hidden options, will be allowed both on command line and
00055   // in config file, but will not be shown to the user.
00056   boost::program_options::options_description hidden ("Hidden options");
00057   hidden.add_options()
00058     ("copyright",
00059      boost::program_options::value< std::vector<std::string> >(),
00060      "Show the copyright (license)");
00061
00062   boost::program_options::options_description cmdline_options;
00063   cmdline_options.add(generic).add(config).add(hidden);
00064
00065   boost::program_options::options_description config_file_options;
00066   config_file_options.add(config).add(hidden);
00067
00068   boost::program_options::options_description visible ("Allowed options");
00069   visible.add(generic).add(config);
00070
00071   boost::program_options::positional_options_description p;
00072   p.add ("copyright", -1);
00073
```

```
00074    boost::program_options::variables_map vm;
00075    boost::program_options::
00076       store (boost::program_options::command_line_parser (argc, argv).
00077                  options (cmdline_options).positional(p).run(), vm);
00078
00079    std::ifstream ifs ("sevmgr.cfg");
00080    boost::program_options::store (parse_config_file (ifs, config_file_options),
00081                                   vm);
00082    boost::program_options::notify (vm);
00083
00084    if (vm.count ("help")) {
00085       std::cout << visible << std::endl;
00086       return K_SEVMGR_EARLY_RETURN_STATUS;
00087    }
00088
00089    if (vm.count ("version")) {
00090       std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION << std::endl;
00091       return K_SEVMGR_EARLY_RETURN_STATUS;
00092    }
00093
00094    if (vm.count ("prefix")) {
00095       std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00096       return K_SEVMGR_EARLY_RETURN_STATUS;
00097    }
00098
00099    if (vm.count ("log")) {
00100       ioLogFilename = vm["log"].as< std::string >();
00101       std::cout << "Log filename is: " << ioLogFilename << std::endl;
00102    }
00103
00104    return 0;
00105 }
00106
00107
00108 // /////////////// M A I N //////////////////
00109 int main (int argc, char* argv[]) {
00110
00111    // Output log File
00112    stdair::Filename_T lLogFilename;
00113
00114    // Call the command-line option parser
00115    const int lOptionParserStatus = readConfiguration (argc, argv, lLogFilename);
00116
00117    if (lOptionParserStatus == K_SEVMGR_EARLY_RETURN_STATUS) {
00118       return 0;
00119    }
00120
00121    // Set the log parameters
00122    std::ofstream logOutputFile;
00123    // Open and clean the log outputfile
00124    logOutputFile.open (lLogFilename.c_str());
00125    logOutputFile.clear();
00126
00127    // Set up the log parameters
00128    const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00129
00133    SEVMGR::SEVMGR_Service sevmgrService (lLogParams);
00134
00135    // Build a sample BOM tree (empty for now)
00136    sevmgrService.buildSampleBom();
00137
00138    // Close the Log outputFile
00139    logOutputFile.close();
00140
00141    /*
00142      Note: as that program is not intended to be run on a server in
00143      production, it is better not to catch the exceptions. When it
00144      happens (that an exception is throwned), that way we get the
00145      call stack.
00146    */
00147
00148    return 0;
00149 }
```

25.25   sevmgr/command/EventQueueManager.cpp File Reference

#include <cassert> #include <stdair/basic/ProgressStatus-
Set.hpp> #include <stdair/bom/BomManager.hpp> #include
<stdair/bom/EventStruct.hpp> #include <stdair/bom/Event-
Queue.hpp> #include <stdair/service/Logger.hpp> #include
<sevmgr/command/EventQueueManager.hpp>

Namespaces

- namespace SEVMGR

25.26   EventQueueManager.cpp

```
00001 // //////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/basic/ProgressStatusSet.hpp>
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/EventStruct.hpp>
00010 #include <stdair/bom/EventQueue.hpp>
00011 #include <stdair/service/Logger.hpp>
00012 // SEvMgr
00013 #include <sevmgr/command/EventQueueManager.hpp>
00014
00015 namespace SEVMGR {
00016
00017   // //////////////////////////////////////////////////////////////////
00018   void EventQueueManager::
00019   buildSampleBom (stdair::EventQueue& ioEventQueue) {
00020   }
00021
00022   // //////////////////////////////////////////////////////////////////
00023   void EventQueueManager::reset (stdair::EventQueue& ioEventQueue) {
00024
00028     ioEventQueue.reset();
00029   }
00030
00031 }
```

25.27   sevmgr/command/EventQueueManager.hpp File Reference

#include <stdair/stdair_basic_types.hpp> #include <stdair/command/-
CmdAbstract.hpp> #include <sevmgr/SEVMGR_Types.hpp>

Classes

- class SEVMGR::EventQueueManager

    Utility class for Demand and DemandStream objects.

Namespaces

- namespace stdair
- namespace SEVMGR

25.28   EventQueueManager.hpp

```
00001 #ifndef __SEVMGR_CMD_EVENTQUEUEMANAGER_HPP
00002 #define __SEVMGR_CMD_EVENTQUEUEMANAGER_HPP
00003
00004 // //////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/command/CmdAbstract.hpp>
00010 // SEvMgr
00011 #include <sevmgr/SEVMGR_Types.hpp>
00012
00013 // Forward declarations
00014 namespace stdair {
00015   class EventQueue;
00016   struct ProgressStatusSet;
00017 }
00018
00019 namespace SEVMGR {
00020
00024   class EventQueueManager : public stdair::CmdAbstract {
00025     friend class SEVMGR_Service;
00026
00027   private:
00028     // ///////// Business methodes //////////
00032     static void buildSampleBom (stdair::EventQueue&);
00033
00039     static void reset (stdair::EventQueue&);
00040   };
00041
00042 }
00043 #endif // __SEVMGR_CMD_EVENTQUEUEMANAGER_HPP
```

25.29   sevmgr/config/sevmgr-paths.hpp File Reference

Defines

- #define PACKAGE "sevmgr"
- #define PACKAGE_NAME "SEVMGR"
- #define PACKAGE_VERSION "0.2.0"
- #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/sevmgr-0.2.0"

- #define MANDIR "/usr/share/man"
- #define INFODIR "/usr/share/info"
- #define HTMLDIR "/usr/share/doc/sevmgr-0.2.0/html"
- #define PDFDIR "/usr/share/doc/sevmgr-0.2.0/html"
- #define STDAIR_SAMPLE_DIR "/usr/share/stdair/samples"

25.29.1   Define Documentation

25.29.1.1   #define PACKAGE "sevmgr"

Definition at line 4 of file sevmgr-paths.hpp.

25.29.1.2   #define PACKAGE_NAME "SEVMGR"

Definition at line 5 of file sevmgr-paths.hpp.

Referenced by readConfiguration().

25.29.1.3   #define PACKAGE_VERSION "0.2.0"

Definition at line 6 of file sevmgr-paths.hpp.

Referenced by readConfiguration().

25.29.1.4   #define PREFIXDIR "/usr"

Definition at line 7 of file sevmgr-paths.hpp.

Referenced by readConfiguration().

25.29.1.5   #define EXEC_PREFIX "/usr"

Definition at line 8 of file sevmgr-paths.hpp.

25.29.1.6   #define BINDIR "/usr/bin"

Definition at line 9 of file sevmgr-paths.hpp.

25.29.1.7   #define LIBDIR "/usr/lib"

Definition at line 10 of file sevmgr-paths.hpp.

25.29.1.8   #define LIBEXECDIR "/usr/libexec"

Definition at line 11 of file sevmgr-paths.hpp.

25.29.1.9   #define SBINDIR "/usr/sbin"

Definition at line 12 of file sevmgr-paths.hpp.

25.29.1.10   #define SYSCONFDIR "/usr/etc"

Definition at line 13 of file sevmgr-paths.hpp.

25.29.1.11   #define INCLUDEDIR "/usr/include"

Definition at line 14 of file sevmgr-paths.hpp.

25.29.1.12   #define DATAROOTDIR "/usr/share"

Definition at line 15 of file sevmgr-paths.hpp.

25.29.1.13   #define DATADIR "/usr/share"

Definition at line 16 of file sevmgr-paths.hpp.

25.29.1.14   #define DOCDIR "/usr/share/doc/sevmgr-0.2.0"

Definition at line 17 of file sevmgr-paths.hpp.

25.29.1.15   #define MANDIR "/usr/share/man"

Definition at line 18 of file sevmgr-paths.hpp.

25.29.1.16   #define INFODIR "/usr/share/info"

Definition at line 19 of file sevmgr-paths.hpp.

25.29.1.17   #define HTMLDIR "/usr/share/doc/sevmgr-0.2.0/html"

Definition at line 20 of file sevmgr-paths.hpp.

25.29.1.18   #define PDFDIR "/usr/share/doc/sevmgr-0.2.0/html"

Definition at line 21 of file sevmgr-paths.hpp.

25.29.1.19   #define STDAIR_SAMPLE_DIR "/usr/share/stdair/samples"

Definition at line 22 of file sevmgr-paths.hpp.

25.30   sevmgr-paths.hpp

```
00001 #ifndef __SEVMGR_PATHS_HPP__
00002 #define __SEVMGR_PATHS_HPP__
00003
00004 #define PACKAGE "sevmgr"
00005 #define PACKAGE_NAME "SEVMGR"
00006 #define PACKAGE_VERSION "0.2.0"
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/sevmgr-0.2.0"
00018 #define MANDIR "/usr/share/man"
00019 #define INFODIR "/usr/share/info"
00020 #define HTMLDIR "/usr/share/doc/sevmgr-0.2.0/html"
```

```
00021 #define PDFDIR "/usr/share/doc/sevmgr-0.2.0/html"
00022 #define STDAIR_SAMPLE_DIR "/usr/share/stdair/samples"
00023
00024 #endif // __SEVMGR_PATHS_HPP__
```

25.31   sevmgr/config/sevmgr-paths.hpp.in File Reference

Defines

- #define __SEVMGR_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@"

25.31.1   Define Documentation

25.31.1.1   #define __SEVMGR_PATHS_HPP__

Definition at line 2 of file sevmgr-paths.hpp.in.

25.31.1.2   #define PACKAGE "@PACKAGE@"

Definition at line 4 of file sevmgr-paths.hpp.in.

25.31.1.3   #define PACKAGE_NAME "@PACKAGE_NAME@"

Definition at line 5 of file sevmgr-paths.hpp.in.

25.31.1.4   #define PACKAGE_VERSION "@PACKAGE_VERSION@"

Definition at line 6 of file sevmgr-paths.hpp.in.

25.31.1.5   #define PREFIXDIR "@prefix@"

Definition at line 7 of file sevmgr-paths.hpp.in.

25.31.1.6   #define EXEC_PREFIX "@exec_prefix@"

Definition at line 8 of file sevmgr-paths.hpp.in.

25.31.1.7   #define BINDIR "@bindir@"

Definition at line 9 of file sevmgr-paths.hpp.in.

25.31.1.8   #define LIBDIR "@libdir@"

Definition at line 10 of file sevmgr-paths.hpp.in.

25.31.1.9   #define LIBEXECDIR "@libexecdir@"

Definition at line 11 of file sevmgr-paths.hpp.in.

25.31.1.10   #define SBINDIR "@sbindir@"

Definition at line 12 of file sevmgr-paths.hpp.in.

25.31.1.11   #define SYSCONFDIR "@sysconfdir@"

Definition at line 13 of file sevmgr-paths.hpp.in.

25.31.1.12   #define INCLUDEDIR "@includedir@"

Definition at line 14 of file sevmgr-paths.hpp.in.

25.31.1.13   #define DATAROOTDIR "@datarootdir@"

Definition at line 15 of file sevmgr-paths.hpp.in.

25.31.1.14   #define DATADIR "@datadir@"

Definition at line 16 of file sevmgr-paths.hpp.in.

25.31.1.15   #define DOCDIR "@docdir@"

Definition at line 17 of file sevmgr-paths.hpp.in.

25.31.1.16   #define MANDIR "@mandir@"

Definition at line 18 of file sevmgr-paths.hpp.in.

25.31.1.17   #define INFODIR "@infodir@"

Definition at line 19 of file sevmgr-paths.hpp.in.

25.31.1.18   #define HTMLDIR ”@htmldir@”

Definition at line 20 of file sevmgr-paths.hpp.in.

25.31.1.19   #define PDFDIR ”@pdfdir@”

Definition at line 21 of file sevmgr-paths.hpp.in.

25.31.1.20   #define STDAIR_SAMPLE_DIR ”@sampledir@”

Definition at line 22 of file sevmgr-paths.hpp.in.

25.32   sevmgr-paths.hpp.in

```
00001 #ifndef __SEVMGR_PATHS_HPP__
00002 #define __SEVMGR_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 // __SEVMGR_PATHS_HPP__
```

25.33   sevmgr/factory/FacSEVMGRServiceContext.cpp File Reference

```
#include <cassert> #include <stdair/service/FacSupervisor.-
hpp>    #include <sevmgr/factory/FacSEVMGRServiceContext.-
hpp>      #include <sevmgr/service/SEVMGR_ServiceContext.-
hpp>
```

Namespaces

- namespace SEVMGR

25.34   FacSEVMGRServiceContext.cpp

```
00001 // //////////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////////
00004 // STL
```

```
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/service/FacSupervisor.hpp>
00008 // Sevmgr
00009 #include <sevmgr/factory/FacSEVMGRServiceContext.hpp>
00010 #include <sevmgr/service/SEVMGR_ServiceContext.hpp>
00011
00012 namespace SEVMGR {
00013
00014   FacSEVMGRServiceContext* FacSEVMGRServiceContext::_instance = NULL;
00015
00016   // //////////////////////////////////////////////////////////////////
00017   FacSEVMGRServiceContext::~FacSEVMGRServiceContext () {
00018     _instance = NULL;
00019   }
00020
00021   // //////////////////////////////////////////////////////////////////
00022   FacSEVMGRServiceContext& FacSEVMGRServiceContext::instance () {
00023
00024     if (_instance == NULL) {
00025       _instance = new FacSEVMGRServiceContext();
00026       assert (_instance != NULL);
00027
00028       stdair::FacSupervisor::instance().registerServiceFactory (_instance);
00029     }
00030     return *_instance;
00031   }
00032
00033   // //////////////////////////////////////////////////////////////////
00034   SEVMGR_ServiceContext& FacSEVMGRServiceContext::create () {
00035     SEVMGR_ServiceContext* aServiceContext_ptr = NULL;
00036
00037     aServiceContext_ptr = new SEVMGR_ServiceContext ();
00038     assert (aServiceContext_ptr != NULL);
00039
00040     // The new object is added to the Bom pool
00041     _pool.push_back (aServiceContext_ptr);
00042
00043     return *aServiceContext_ptr;
00044   }
00045
00046 }
```

25.35   sevmgr/factory/FacSEVMGRServiceContext.hpp File Reference

```
#include <stdair/service/FacServiceAbstract.hpp> #include
<sevmgr/SEVMGR_Types.hpp>
```

Classes

- class SEVMGR::FacSEVMGRServiceContext

Namespaces

- namespace SEVMGR

25.36   FacSEVMGRServiceContext.hpp

```
00001 #ifndef __SEVMGR_FAC_FACSEVMGRSERVICECONTEXT_HPP
00002 #define __SEVMGR_FAC_FACSEVMGRSERVICECONTEXT_HPP
00003
```

```
00004 // ////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // ////////////////////////////////////////////////////////////////////
00007 // StdAir
00008 #include <stdair/service/FacServiceAbstract.hpp>
00009 // Sevmgr
00010 #include <sevmgr/SEVMGR_Types.hpp>
00011
00012 namespace SEVMGR {
00013
00015   class SEVMGR_ServiceContext;
00016
00018   class FacSEVMGRServiceContext : public stdair::FacServiceAbstract {
00019   public:
00020
00024     static FacSEVMGRServiceContext& instance();
00025
00030     ~FacSEVMGRServiceContext();
00031
00035     SEVMGR_ServiceContext& create ();
00036
00037
00038   protected:
00042     FacSEVMGRServiceContext () {}
00043
00044   private:
00046     static FacSEVMGRServiceContext* _instance;
00047   };
00048
00049 }
00050 #endif // __SEVMGR_FAC_FACSEVMGRSERVICECONTEXT_HPP
```

25.37   sevmgr/python/pysevmgr.cpp File Reference

#include <cassert> #include <stdexcept> #include <fstream> ×
#include <sstream>   #include <string>   #include <list> ×
#include <vector>   #include <boost/python.hpp>   #include
<stdair/stdair_basic_types.hpp> #include <stdair/stdair-
_exceptions.hpp>   #include <stdair/basic/BasFileMgr.hpp>
#include <stdair/basic/BasLogParams.hpp> #include <stdair/basic/-
BasDBParams.hpp> #include <sevmgr/SEVMGR_Service.hpp>

Classes

- struct SEVMGR::PYEventQueueManager

Namespaces

- namespace SEVMGR

Functions

- BOOST_PYTHON_MODULE (libpysevmgr)

25.37.1   Function Documentation

25.37.1.1 BOOST␣PYTHON␣MODULE (libpysevmgr)

Definition at line 152 of file pysevmgr.cpp.

References SEVMGR::PYEventQueueManager::sevmgr(), and SEVMGR::PYEvent-QueueManager::init().

25.38 pysevmgr.cpp

```
00001 // STL
00002 #include <cassert>
00003 #include <stdexcept>
00004 #include <fstream>
00005 #include <sstream>
00006 #include <string>
00007 #include <list>
00008 #include <vector>
00009 // Boost String
00010 #include <boost/python.hpp>
00011 // StdAir
00012 #include <stdair/stdair_basic_types.hpp>
00013 #include <stdair/stdair_exceptions.hpp>
00014 #include <stdair/basic/BasFileMgr.hpp>
00015 #include <stdair/basic/BasLogParams.hpp>
00016 #include <stdair/basic/BasDBParams.hpp>
00017 // SEvMgr
00018 #include <sevmgr/SEVMGR_Service.hpp>
00019
00020 namespace SEVMGR {
00021
00022   struct PYEventQueueManager {
00023   public:
00025     std::string sevmgr() {
00026       std::ostringstream oStream;
00027
00028       // Sanity check
00029       if (_logOutputStream == NULL) {
00030         oStream << "The log filepath is not valid." << std::endl;
00031         return oStream.str();
00032       }
00033       assert (_logOutputStream != NULL);
00034
00035       try {
00036
00037         // DEBUG
00038         *_logOutputStream << "Default service" << std::endl;
00039
00040         if (_sevmgrService == NULL) {
00041           oStream << "The Sevmgr service has not been initialised, "
00042                   << "i.e., the init() method has not been called "
00043                   << "correctly on the PYEventQueueManager object. Please "
00044                   << "check that all the parameters are not empty and "
00045                   << "point to actual files.";
00046           *_logOutputStream << oStream.str();
00047           return oStream.str();
00048         }
00049         assert (_sevmgrService != NULL);
00050
00051         // Do the sevmgr
00052         _sevmgrService->buildSampleBom();
00053
00054         // DEBUG
00055         *_logOutputStream << "Default service returned" << std::endl;
00056
00057         // DEBUG
00058         *_logOutputStream << "Sevmgr output: " << oStream.str() << std::endl;
00059
00060       } catch (const stdair::RootException& eSevmgrError) {
00061         *_logOutputStream << "Sevmgr error: " << eSevmgrError.what()
00062                           << std::endl;
```

```
00063
00064        } catch (const std::exception& eStdError) {
00065          *_logOutputStream << "Error: "  << eStdError.what() << std::endl;
00066
00067        } catch (...) {
00068          *_logOutputStream << "Unknown error" << std::endl;
00069        }
00070
00071        return oStream.str();
00072      }
00073
00074  public:
00076      PYEventQueueManager() : _sevmgrService (NULL), _logOutputStream (NULL) {
00077      }
00078
00080      PYEventQueueManager (const PYEventQueueManager& iPYEventQueueManager)
00081        : _sevmgrService (iPYEventQueueManager._sevmgrService),
00082          _logOutputStream (iPYEventQueueManager._logOutputStream) {
00083      }
00084
00086      ~PYEventQueueManager() {
00087        _sevmgrService = NULL;
00088        _logOutputStream = NULL;
00089      }
00090
00092      bool init (const std::string& iLogFilepath,
00093                 const std::string& iDBUser, const std::string& iDBPasswd,
00094                 const std::string& iDBHost, const std::string& iDBPort,
00095                 const std::string& iDBDBName) {
00096        bool isEverythingOK = true;
00097
00098        try {
00099
00100          // Check that the file path given as input corresponds to an actual
     file
00101          const bool isWriteable = (iLogFilepath.empty() == false);
00102          // stdair::BasFileMgr::isWriteable (iLogFilepath);
00103          if (isWriteable == false) {
00104            isEverythingOK = false;
00105            return isEverythingOK;
00106          }
00107
00108          // Set the log parameters
00109          _logOutputStream = new std::ofstream;
00110          assert (_logOutputStream != NULL);
00111
00112          // Open and clean the log outputfile
00113          _logOutputStream->open (iLogFilepath.c_str());
00114          _logOutputStream->clear();
00115
00116          // DEBUG
00117          *_logOutputStream << "Python wrapper initialisation" << std::endl;
00118          const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG,
00119                                                 *_logOutputStream);
00120
00121          // Initialise the context
00122          stdair::BasDBParams lDBParams (iDBUser, iDBPasswd, iDBHost, iDBPort,
00123                                         iDBDBName);
00124          _sevmgrService = new SEVMGR_Service (lLogParams, lDBParams);
00125
00126          // DEBUG
00127          *_logOutputStream << "Python wrapper initialised" << std::endl;
00128
00129        } catch (const stdair::RootException& eSevmgrError) {
00130          *_logOutputStream << "Sevmgr error: "  << eSevmgrError.what()
00131                            << std::endl;
00132
00133        } catch (const std::exception& eStdError) {
00134          *_logOutputStream << "Error: "  << eStdError.what() << std::endl;
00135
00136        } catch (...) {
00137          *_logOutputStream << "Unknown error" << std::endl;
00138        }
00139
```

```
00140        return isEverythingOK;
00141     }
00142
00143   private:
00145     SEVMGR_Service* _sevmgrService;
00146     std::ofstream* _logOutputStream;
00147   };
00148
00149 }
00150
00151 // /////////////////////////////////////////////////////////////
00152 BOOST_PYTHON_MODULE(libpysevmgr) {
00153   boost::python::class_<SEVMGR::PYEventQueueManager> ("PYEventQueueManager")
00154     .def ("sevmgr", &SEVMGR::PYEventQueueManager::sevmgr)
00155     .def ("init", &SEVMGR::PYEventQueueManager::init);
00156 }
```

25.39   sevmgr/service/SEVMGR_Service.cpp File Reference

#include <cassert> #include <sstream> #include <boost/make-_shared.hpp>   #include <stdair/basic/BasChronometer.hpp> #include <stdair/basic/BasConst_General.hpp>   #include <stdair/bom/BomRoot.hpp> #include <stdair/bom/BomDisplay.-hpp> #include <stdair/bom/EventStruct.hpp> #include <stdair/bom/-EventQueue.hpp>   #include <stdair/service/Logger.hpp> #include <stdair/STDAIR_Service.hpp> #include <sevmgr/basic/-BasConst_SEVMGR_Service.hpp>   #include <sevmgr/factory/-FacSEVMGRServiceContext.hpp>   #include <sevmgr/command/-EventQueueManager.hpp>   #include <sevmgr/service/SEVMG-R_ServiceContext.hpp>   #include <sevmgr/SEVMGR_Service.-hpp>

Namespaces

- namespace SEVMGR

25.40   SEVMGR_Service.cpp

```
00001 // /////////////////////////////////////////////////////////////////
00002 // Import section
00003 // /////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // Boost
00008 #include <boost/make_shared.hpp>
00009 // StdAir
00010 #include <stdair/basic/BasChronometer.hpp>
00011 #include <stdair/basic/BasConst_General.hpp>
00012 #include <stdair/bom/BomRoot.hpp>
00013 #include <stdair/bom/BomDisplay.hpp>
00014 #include <stdair/bom/EventStruct.hpp>
00015 #include <stdair/bom/EventQueue.hpp>
00016 #include <stdair/service/Logger.hpp>
00017 #include <stdair/STDAIR_Service.hpp>
00018 // Sevmgr
00019 #include <sevmgr/basic/BasConst_SEVMGR_Service.hpp>
00020 #include <sevmgr/factory/FacSEVMGRServiceContext.hpp>
00021 #include <sevmgr/command/EventQueueManager.hpp>
```

```
00022 #include <sevmgr/service/SEVMGR_ServiceContext.hpp>
00023 #include <sevmgr/SEVMGR_Service.hpp>
00024
00025 namespace SEVMGR {
00026
00027   // //////////////////////////////////////////////////////////////////////
00028   SEVMGR_Service::SEVMGR_Service() : _sevmgrServiceContext (NULL) {
00029     assert (false);
00030   }
00031
00032   // //////////////////////////////////////////////////////////////////////
00033   SEVMGR_Service::SEVMGR_Service (const SEVMGR_Service& iService)
00034     : _sevmgrServiceContext (NULL) {
00035     assert (false);
00036   }
00037
00038   // //////////////////////////////////////////////////////////////////////
00039   SEVMGR_Service::SEVMGR_Service (const stdair::BasLogParams& iLogParams,
00040                                   const stdair::BasDBParams& iDBParams)
00041     : _sevmgrServiceContext (NULL) {
00042
00043     // Initialise the STDAIR service handler
00044     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00045       initStdAirService (iLogParams, iDBParams);
00046
00047     // Initialise the service context
00048     initServiceContext();
00049
00050     // Add the StdAir service context to the SEVMGR service context
00051     // \note SEVMGR owns the STDAIR service resources here.
00052     const bool ownStdairService = true;
00053     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00054
00055     // Initialise the (remaining of the) context
00056     initSevmgrService();
00057   }
00058
00059   // //////////////////////////////////////////////////////////////////////
00060   SEVMGR_Service::SEVMGR_Service (const stdair::BasLogParams& iLogParams)
00061     : _sevmgrServiceContext (NULL) {
00062
00063     // Initialise the STDAIR service handler
00064     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00065       initStdAirService (iLogParams);
00066
00067     // Initialise the service context
00068     initServiceContext();
00069
00070     // Add the StdAir service context to the SEVMGR service context
00071     // \note SEVMGR owns the STDAIR service resources here.
00072     const bool ownStdairService = true;
00073     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00074
00075     // Initialise the (remaining of the) context
00076     initSevmgrService();
00077   }
00078
00079   // //////////////////////////////////////////////////////////////////////
00080   SEVMGR_Service::
00081   SEVMGR_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr)
00082     : _sevmgrServiceContext (NULL) {
00083
00084     // Initialise the service context
00085     initServiceContext();
00086
00087     // Add the StdAir service context to the SEVMGR service context
00088     // \note Sevmgr does not own the STDAIR service resources here.
00089     const bool doesNotOwnStdairService = false;
00090     addStdAirService (ioSTDAIR_Service_ptr, doesNotOwnStdairService);
00091
00092     // Initialise the context
00093     initSevmgrService();
00094   }
00095
```

```
00096   // //////////////////////////////////////////////////////////////////////
00097   SEVMGR_Service::~SEVMGR_Service() {
00098     // Delete/Clean all the objects from memory
00099     finalise();
00100   }
00101
00102   // //////////////////////////////////////////////////////////////////////
00103   void SEVMGR_Service::finalise() {
00104     assert (_sevmgrServiceContext != NULL);
00105     // Reset the (Boost.)Smart pointer pointing on the STDAIR_Service object.
00106     _sevmgrServiceContext->reset();
00107   }
00108
00109   // //////////////////////////////////////////////////////////////////////
00110   void SEVMGR_Service::initServiceContext() {
00111     // Initialise the service context
00112     SEVMGR_ServiceContext& lSEVMGR_ServiceContext =
00113       FacSEVMGRServiceContext::instance().create();
00114     _sevmgrServiceContext = &lSEVMGR_ServiceContext;
00115   }
00116
00117   // //////////////////////////////////////////////////////////////////////
00118   void SEVMGR_Service::
00119   addStdAirService (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr,
00120                     const bool iOwnStdairService) {
00121     // Retrieve the Sevmgr service context
00122     assert (_sevmgrServiceContext != NULL);
00123     SEVMGR_ServiceContext& lSEVMGR_ServiceContext =
00124       *_sevmgrServiceContext;
00125
00126     // Store the STDAIR service object within the (SEVMGR) service context
00127     lSEVMGR_ServiceContext.setSTDAIR_Service (ioSTDAIR_Service_ptr,
00128                                               iOwnStdairService);
00129   }
00130
00131   // //////////////////////////////////////////////////////////////////////
00132   stdair::STDAIR_ServicePtr_T SEVMGR_Service::
00133   initStdAirService (const stdair::BasLogParams& iLogParams,
00134                      const stdair::BasDBParams& iDBParams) {
00135
00141     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00142       boost::make_shared<stdair::STDAIR_Service> (iLogParams, iDBParams);
00143     assert (lSTDAIR_Service_ptr != NULL);
00144
00145     return lSTDAIR_Service_ptr;
00146   }
00147
00148   // //////////////////////////////////////////////////////////////////////
00149   stdair::STDAIR_ServicePtr_T SEVMGR_Service::
00150   initStdAirService (const stdair::BasLogParams& iLogParams) {
00151
00157     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00158       boost::make_shared<stdair::STDAIR_Service> (iLogParams);
00159     assert (lSTDAIR_Service_ptr != NULL);
00160
00161     return lSTDAIR_Service_ptr;
00162   }
00163
00164   // //////////////////////////////////////////////////////////////////////
00165   void SEVMGR_Service::initSevmgrService() {
00166     // Do nothing at this stage. A sample BOM tree may be built by
00167     // calling the buildSampleBom() method
00168   }
00169
00170   // //////////////////////////////////////////////////////////////////////
00171   void SEVMGR_Service::buildSampleBom() {
00172
00173     // Retrieve the Sevmgr service context
00174     if (_sevmgrServiceContext == NULL) {
00175       throw stdair::NonInitialisedServiceException ("The Sevmgr service has "
00176                                                     "not been initialised");
00177     }
00178     assert (_sevmgrServiceContext != NULL);
00179
```

```
00180     //SEVMGR_ServiceContext& lSEVMGR_ServiceContext = *_sevmgrServiceContext;
00181
00182     // Retrieve the STDAIR service object from the (Sevmgr) service context
00183     //stdair::STDAIR_Service& lSTDAIR_Service =
00184     // lSEVMGR_ServiceContext.getSTDAIR_Service();
00185
00186     // Retrieve the event queue
00187     //stdair::EventQueue& lEventQueue = lSTDAIR_Service.getEventQueue();
00188   }
00189
00190   // //////////////////////////////////////////////////////////////////////
00191   std::string SEVMGR_Service::csvDisplay() const {
00192
00193     // Retrieve the Sevmgr service context
00194     if (_sevmgrServiceContext == NULL) {
00195       throw stdair::NonInitialisedServiceException ("The Sevmgr service has "
00196                                                     "not been initialised");
00197     }
00198     assert (_sevmgrServiceContext != NULL);
00199
00200     SEVMGR_ServiceContext& lSEVMGR_ServiceContext = *_sevmgrServiceContext;
00201
00202     // Retrieve the STDAIR service object from the (Sevmgr) service context
00203     stdair::STDAIR_Service& lSTDAIR_Service =
00204       lSEVMGR_ServiceContext.getSTDAIR_Service();
00205
00206     // Retrieve the event queue
00207     stdair::EventQueue& lEventQueue = lSTDAIR_Service.getEventQueue();
00208
00209     // Delegate the BOM building to the dedicated service
00210     return stdair::BomDisplay::csvDisplay (lEventQueue);
00211   }
00212
00213   // //////////////////////////////////////////////////////////////////////
00214   stdair::ProgressStatusSet SEVMGR_Service::
00215   popEvent (stdair::EventStruct& ioEventStruct) const {
00216
00217     // Retrieve the Sevmgr service context
00218     assert (_sevmgrServiceContext != NULL);
00219     SEVMGR_ServiceContext& lSEVMGR_ServiceContext = *_sevmgrServiceContext;
00220
00221     // Retrieve the StdAir service context
00222     stdair::STDAIR_Service& lSTDAIR_Service =
00223       lSEVMGR_ServiceContext.getSTDAIR_Service();
00224
00225     // Retrieve the event queue object instance
00226     stdair::EventQueue& lQueue = lSTDAIR_Service.getEventQueue();
00227
00228     // Extract the next event from the queue
00229     return lQueue.popEvent (ioEventStruct);
00230   }
00231
00232   // //////////////////////////////////////////////////////////////////////
00233   bool SEVMGR_Service::isQueueDone() const {
00234
00235     // Retrieve the Sevmgr service context
00236     assert (_sevmgrServiceContext != NULL);
00237     SEVMGR_ServiceContext& lSEVMGR_ServiceContext =
00238       *_sevmgrServiceContext;
00239
00240     // Retrieve the StdAir service context
00241     stdair::STDAIR_Service& lSTDAIR_Service =
00242       lSEVMGR_ServiceContext.getSTDAIR_Service();
00243
00244     // Retrieve the event queue object instance
00245     const stdair::EventQueue& lQueue = lSTDAIR_Service.getEventQueue();
00246
00247     // Calculates whether the event queue has been fully emptied
00248     const bool isQueueDone = lQueue.isQueueDone();
00249
00250     //
00251     return isQueueDone;
00252   }
00253
```

```
00254   // //////////////////////////////////////////////////////////////////
00255   void SEVMGR_Service::reset() const {
00256
00257      // Retrieve the Sevmgr service context
00258      assert (_sevmgrServiceContext != NULL);
00259      SEVMGR_ServiceContext& lSEVMGR_ServiceContext =
00260        *_sevmgrServiceContext;
00261
00262      // Retrieve the StdAir service context
00263      stdair::STDAIR_Service& lSTDAIR_Service =
00264        lSEVMGR_ServiceContext.getSTDAIR_Service();
00265      // Retrieve the event queue object instance
00266      stdair::EventQueue& lQueue = lSTDAIR_Service.getEventQueue();
00267
00268      // Delegate the call to the dedicated command
00269      EventQueueManager::reset (lQueue);
00270   }
00271 }
```

25.41   sevmgr/service/SEVMGR_ServiceContext.cpp File Reference

`#include <cassert> #include <sstream> #include <stdair/-STDAIR_Service.hpp>     #include <stdair/basic/BasConst_-General.hpp>  #include <sevmgr/basic/BasConst_EventQueue-Manager.hpp>     #include <sevmgr/service/SEVMGR_Service-Context.hpp>`

Namespaces

- namespace SEVMGR

25.42   SEVMGR_ServiceContext.cpp

```
00001 // //////////////////////////////////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/STDAIR_Service.hpp>
00009 #include <stdair/basic/BasConst_General.hpp>
00010 // SEvMgr
00011 #include <sevmgr/basic/BasConst_EventQueueManager.hpp>
00012 #include <sevmgr/service/SEVMGR_ServiceContext.hpp>
00013
00014 namespace SEVMGR {
00015
00016   // //////////////////////////////////////////////////////////////////
00017   SEVMGR_ServiceContext::SEVMGR_ServiceContext() {
00018   }
00019
00020   // //////////////////////////////////////////////////////////////////
00021   SEVMGR_ServiceContext::
00022   SEVMGR_ServiceContext (const std::string& iServiceName) {
00023   }
00024
00025   // //////////////////////////////////////////////////////////////////
00026   SEVMGR_ServiceContext::~SEVMGR_ServiceContext() {
00027   }
00028
00029   // //////////////////////////////////////////////////////////////////
00030   const std::string SEVMGR_ServiceContext::shortDisplay() const {
```

```
00031      std::ostringstream oStr;
00032      oStr << "SEVMGR_ServiceContext -- Owns StdAir service: "
00033           << _ownStdairService;
00034      return oStr.str();
00035    }
00036
00037    // //////////////////////////////////////////////////////////////////////
00038    const std::string SEVMGR_ServiceContext::display() const {
00039      std::ostringstream oStr;
00040      oStr << shortDisplay();
00041      return oStr.str();
00042    }
00043
00044    // //////////////////////////////////////////////////////////////////////
00045    const std::string SEVMGR_ServiceContext::describe() const {
00046      return shortDisplay();
00047    }
00048
00049    // //////////////////////////////////////////////////////////////////////
00050    void SEVMGR_ServiceContext::reset() {
00051      if (_ownStdairService == true) {
00052        _stdairService.reset();
00053      }
00054    }
00055
00056 }
```

25.43   sevmgr/service/SEVMGR_ServiceContext.hpp File Reference

```
#include <string>   #include <stdair/stdair_basic_types.-
hpp> #include <stdair/stdair_service_types.hpp> #include
<stdair/service/ServiceAbstract.hpp> #include <sevmgr/SE-
VMGR_Types.hpp>
```

Classes

- class SEVMGR::SEVMGR_ServiceContext

    Class holding the context of the Sevmgr services.

Namespaces

- namespace SEVMGR

25.44   SEVMGR_ServiceContext.hpp

```
00001 #ifndef __SEVMGR_SVC_SEVMGRSERVICECONTEXT_HPP
00002 #define __SEVMGR_SVC_SEVMGRSERVICECONTEXT_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/service/ServiceAbstract.hpp>
00013 // SEvMgr
00014 #include <sevmgr/SEVMGR_Types.hpp>
```

```
00015
00016 namespace SEVMGR {
00017
00021   class SEVMGR_ServiceContext : public stdair::ServiceAbstract {
00027     friend class SEVMGR_Service;
00028     friend class FacSEVMGRServiceContext;
00029
00030   private:
00031     // ////////// Getters //////////
00035     stdair::STDAIR_ServicePtr_T getSTDAIR_ServicePtr() const {
00036       return _stdairService;
00037     }
00038
00042     stdair::STDAIR_Service& getSTDAIR_Service() const {
00043       assert (_stdairService != NULL);
00044       return *_stdairService;
00045     }
00046
00050     const bool getOwnStdairServiceFlag() const {
00051       return _ownStdairService;
00052     }
00053
00054
00055   private:
00056     // ////////// Setters //////////
00060     void setSTDAIR_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_ServicePtr,
00061                             const bool iOwnStdairService) {
00062       _stdairService = ioSTDAIR_ServicePtr;
00063       _ownStdairService = iOwnStdairService;
00064     }
00065
00066
00067   private:
00068     // ////////// Display Methods //////////
00072     const std::string shortDisplay() const;
00073
00077     const std::string display() const;
00078
00082     const std::string describe() const;
00083
00084
00085   private:
00087
00090     SEVMGR_ServiceContext();
00091     SEVMGR_ServiceContext (const std::string& iServiceName);
00095     SEVMGR_ServiceContext (const SEVMGR_ServiceContext&);
00096
00100     ~SEVMGR_ServiceContext();
00101
00105     void reset();
00106
00107
00108   private:
00109     // /////////////// Children ///////////////
00113     stdair::STDAIR_ServicePtr_T _stdairService;
00114
00118     bool _ownStdairService;
00119
00120
00121   private:
00122     // /////////////// Attributes ///////////////
00123     // No attributes for now
00124   };
00125
00126 }
00127 #endif // __SEVMGR_SVC_SEVMGRSERVICECONTEXT_HPP
```

25.45   sevmgr/SEVMGR_Exceptions.hpp File Reference

#include <exception> #include <stdair/stdair_exceptions.-

```
hpp>
```

Classes

- class SEVMGR::SEvMgrException

Namespaces

- namespace SEVMGR

25.46 SEVMGR_Exceptions.hpp

```
00001 #ifndef __SEVMGR_SEVMGR_EXCEPTIONS_HPP
00002 #define __SEVMGR_SEVMGR_EXCEPTIONS_HPP
00003
00004 // //////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <exception>
00009 // StdAir
00010 #include <stdair/stdair_exceptions.hpp>
00011
00012 namespace SEVMGR {
00013
00014   // ///////// Exceptions ///////////
00018   class SEvMgrException : public stdair::RootException {
00019   public:
00023     SEvMgrException (const std::string& iWhat)
00024       : stdair::RootException (iWhat) {}
00025   };
00026
00027 }
00028 #endif // __SEVMGR_SEVMGR_EXCEPTIONS_HPP
00029
```

25.47 sevmgr/SEVMGR_Service.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp> #include <stdair/stdair-
_service_types.hpp>      #include <stdair/bom/EventTypes.-
hpp>
```

Classes

- class SEVMGR::SEVMGR_Service
    class holding the services related to Travel Demand Generation.

Namespaces

- namespace stdair
- namespace SEVMGR

25.48   SEVMGR␣Service.hpp

```
00001 #ifndef __SEVMGR_SEVMGR_SERVICE_HPP
00002 #define __SEVMGR_SEVMGR_SERVICE_HPP
00003
00004 // //////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/stdair_service_types.hpp>
00010 #include <stdair/bom/EventTypes.hpp>
00011
00012 // Forward declarations
00013 namespace stdair {
00014   class EventQueue;
00015   struct ProgressStatusSet;
00016   struct BasLogParams;
00017   struct BasDBParams;
00018   struct EventStruct;
00019 }
00020
00021 namespace SEVMGR {
00022
00024   class SEVMGR_ServiceContext;
00025
00029   class SEVMGR_Service {
00030   public:
00031     // ////////////////// Constructors and Destructors //////////////////
00047     SEVMGR_Service (const stdair::BasLogParams&, const stdair::BasDBParams&);
00048
00060     SEVMGR_Service (const stdair::BasLogParams&);
00061
00077     SEVMGR_Service (stdair::STDAIR_ServicePtr_T);
00078
00082     ~SEVMGR_Service();
00083
00084
00085   public:
00086     // ////////////////// Business support methods //////////////////
00090     void buildSampleBom();
00091
00108     stdair::ProgressStatusSet popEvent (stdair::EventStruct&) const;
00109
00115     bool isQueueDone() const;
00116
00121     void reset() const;
00122
00123
00124   public:
00125     // ////////////// Display support methods //////////////////
00133     std::string csvDisplay() const;
00134
00135
00136   private:
00137     // ////////////////// Constructors and Destructors //////////////////
00141     SEVMGR_Service();
00142
00146     SEVMGR_Service (const SEVMGR_Service&);
00147
00152     void initServiceContext();
00153
00165     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&,
00166                                                    const stdair::BasDBParams&);
00167
00177     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&)
  ;
00178
00187     void addStdAirService (stdair::STDAIR_ServicePtr_T ioSTDAIR_ServicePtr,
00188                            const bool iOwnStdairService);
00189
00196     void initSevmgrService();
00197
```

```
00201    void finalise();
00202
00203
00204  private:
00205    // ///////// Service Context /////////
00209    SEVMGR_ServiceContext* _sevmgrServiceContext;
00210  };
00211
00212 }
00213 #endif // __SEVMGR_SEVMGR_SERVICE_HPP
```

25.49 sevmgr/SEVMGR_Types.hpp File Reference

```
#include <boost/shared_ptr.hpp> #include <sevmgr/SEVMGR_-
Exceptions.hpp>
```

Namespaces

- namespace SEVMGR

Typedefs

- typedef boost::shared_ptr < SEVMGR_Service > SEVMGR::SEVMGR_-
  ServicePtr_T

25.50 SEVMGR_Types.hpp

```
00001 #ifndef __SEVMGR_SEVMGR_TYPES_HPP
00002 #define __SEVMGR_SEVMGR_TYPES_HPP
00003
00004 // //////////////////////////////////////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////////////////////////////////////
00007 // Boost
00008 #include <boost/shared_ptr.hpp>
00009 // Sevmgr
00010 #include <sevmgr/SEVMGR_Exceptions.hpp>
00011
00012 namespace SEVMGR {
00013
00014   // Forward declarations
00015   class SEVMGR_Service;
00016
00017   // ///////// Type definitions specific to to Sevmgr /////////
00021   typedef boost::shared_ptr<SEVMGR_Service> SEVMGR_ServicePtr_T;
00022
00023 }
00024 #endif // __SEVMGR_SEVMGR_TYPES_HPP
00025
```

25.51 sevmgr/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]

25.51.1   Typedef Documentation

25.51.1.1   typedef int(∗ pt2Func)(char ∗)

Definition at line 35 of file readline_autocomp.hpp.

25.51.2   Function Documentation

25.51.2.1   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().

25.51.2.2   char∗ xmalloc (size_t   )

Referenced by dupstr().

25.51.2.3   void com_list (char ∗ arg)

List the file(s) named in arg.

Definition at line 264 of file readline_autocomp.hpp.

25.51.2.4   int com_view (char ∗ arg)

Definition at line 274 of file readline_autocomp.hpp.

References valid_argument().

25.51.2.5   int com_rename (char ∗ arg)

Definition at line 284 of file readline_autocomp.hpp.

References too_dangerous().

25.51.2.6   int com_stat (char ∗ arg)

Definition at line 289 of file readline_autocomp.hpp.

References valid_argument().

25.51.2.7   int com_pwd (char ∗ ignore)

Definition at line 367 of file readline_autocomp.hpp.

References getwd().

Referenced by com_cd().

25.51.2.8   int com_delete (char ∗ arg)

Definition at line 315 of file readline_autocomp.hpp.

References too_dangerous().

25.51.2.9   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.

25.51.2.10   int com_cd (char ∗ *arg*)

Definition at line 356 of file readline_autocomp.hpp.

References com_pwd().

25.51.2.11   int com_quit (char ∗ *arg*)

Definition at line 381 of file readline_autocomp.hpp.

25.51.2.12   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.

25.51.2.13   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().

25.51.2.14   char∗ dupstr (char ∗ *iString*)

Duplicate a string

Definition at line 85 of file readline_autocomp.hpp.

References xmalloc().

Referenced by command_generator().

25.51.2.15   int execute_line (char ∗ *line*)

Execute a command line.

Definition at line 94 of file readline_autocomp.hpp.

References find_command(), and COMMAND::func.

25.51.2.16   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().

25.51.2.17   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().

25.51.2.18   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().

25.51.2.19   void too_dangerous (char ∗ *caller*)

Definition at line 387 of file readline_autocomp.hpp.

Referenced by com_rename(), and com_delete().

25.51.2.20   int valid_argument (char ∗ *caller,* char ∗ *arg*)

Definition at line 395 of file readline_autocomp.hpp.

Referenced by com_view(), and com_stat().

25.51.3   Variable Documentation

25.51.3.1   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.

25.51.3.2 int done

When non-zero, this global means the user is done using this program.

Definition at line 80 of file readline_autocomp.hpp.

25.51.3.3 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.

25.52 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
```

25.53   sevmgr/ui/cmdline/sevmgr.cpp File Reference

25.54   sevmgr.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 // SEvMgr
00022 #include <sevmgr/SEVMGR_Service.hpp>
00023 #include <sevmgr/config/sevmgr-paths.hpp>
00024 // GNU Readline Wrapper
00025 #include <sevmgr/ui/cmdline/SReadline.hpp>
00026
00027 // ///////// Constants //////
00031 const std::string K_SEVMGR_DEFAULT_LOG_FILENAME ("sevmgr.log");
00032
00036 const int K_SEVMGR_EARLY_RETURN_STATUS = 99;
00037
00042 typedef std::vector<std::string> TokenList_T;
00043
00047 struct Command_T {
00048   typedef enum {
00049     NOP = 0,
00050     QUIT,
00051     HELP,
00052     LIST,
00053     DISPLAY,
00054     SELECT,
00055     NEXT,
00056     RUN,
00057     JSON_LIST,
00058     JSON_DISPLAY,
00059     LAST_VALUE
00060   } Type_T;
00061 };
00062
00063 // ///////// Parsing of Options & Configuration /////////
00064 // A helper function to simplify the main part.
00065 template<class T> std::ostream& operator<< (std::ostream& os,
00066                                             const std::vector<T>& v) {
00067   std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00068   return os;
00069 }
00070
00074 int readConfiguration (int argc, char* argv[], std::string& ioLogFilename) {
00075   // Declare a group of options that will be allowed only on command line
00076   boost::program_options::options_description generic ("Generic options");
00077   generic.add_options()
00078     ("prefix", "print installation prefix")
00079     ("version,v", "print version string")
00080     ("help,h", "produce help message");
00081
00082   // Declare a group of options that will be allowed both on command
00083   // line and in config file
00084
00085   boost::program_options::options_description config ("Configuration");
00086   config.add_options()
00087     ("log,l",
00088      boost::program_options::value< std::string >(&ioLogFilename)->
00089   default_value(K_SEVMGR_DEFAULT_LOG_FILENAME),
00089     "Filename for the logs")
00090     ;
00091
00092   // Hidden options, will be allowed both on command line and
00093   // in config file, but will not be shown to the user.
00094   boost::program_options::options_description hidden ("Hidden options");
00095   hidden.add_options()
00096     ("copyright",
00097     boost::program_options::value< std::vector<std::string> >(),
00098     "Show the copyright (license)");
00099
```

```
00100    boost::program_options::options_description cmdline_options;
00101    cmdline_options.add (generic).add(config).add(hidden);
00102
00103    boost::program_options::options_description config_file_options;
00104    config_file_options.add(config).add(hidden);
00105    boost::program_options::options_description visible ("Allowed options");
00106    visible.add(generic).add(config);
00107
00108    boost::program_options::positional_options_description p;
00109    p.add ("copyright", -1);
00110
00111    boost::program_options::variables_map vm;
00112    boost::program_options::
00113      store (boost::program_options::command_line_parser (argc, argv).
00114            options (cmdline_options).positional(p).run(), vm);
00115
00116    std::ifstream ifs ("sevmgr.cfg");
00117    boost::program_options::store (parse_config_file (ifs, config_file_options),
00118                                   vm);
00119    boost::program_options::notify (vm);
00120
00121    if (vm.count ("help")) {
00122      std::cout << visible << std::endl;
00123      return K_SEVMGR_EARLY_RETURN_STATUS;
00124    }
00125
00126    if (vm.count ("version")) {
00127      std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION << std::endl;
00128      return K_SEVMGR_EARLY_RETURN_STATUS;
00129    }
00130
00131    if (vm.count ("prefix")) {
00132      std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00133      return K_SEVMGR_EARLY_RETURN_STATUS;
00134    }
00135
00136    if (vm.count ("log")) {
00137      ioLogFilename = vm["log"].as< std::string >();
00138      std::cout << "Log filename is: " << ioLogFilename << std::endl;
00139    }
00140
00141    return 0;
00142 }
00143
00144 // ////////////////////////////////////////////////////////////////////
00145 void initReadline (swift::SReadline& ioInputReader) {
00146
00147    // Prepare the list of my own completers
00148    std::vector<std::string> Completers;
00149
00150    // The following is supported:
00151    // - "identifiers"
00152    // - special identifier %file - means to perform a file name completion
00153    Completers.push_back ("help");
00154    Completers.push_back ("list %airline_code %flight_number");
00155    Completers.push_back ("select %airline_code %flight_number %flight_date");
00156    Completers.push_back ("display");
00157    Completers.push_back ("next");
00158    Completers.push_back ("run");
00159    Completers.push_back ("quit");
00160
00161
00162    // Now register the completers.
00163    // Actually it is possible to re-register another set at any time
00164    ioInputReader.RegisterCompletions (Completers);
00165 }
00166
00167 // ////////////////////////////////////////////////////////////////////
00168 Command_T::Type_T extractCommand (TokenList_T& ioTokenList) {
00169    Command_T::Type_T oCommandType = Command_T::LAST_VALUE;
00170
00171    // Interpret the user input
00172    if (ioTokenList.empty() == false) {
00173      TokenList_T::iterator itTok = ioTokenList.begin();
```

```
00174      std::string lCommand (*itTok);
00175      boost::algorithm::to_lower (lCommand);
00176
00177      if (lCommand == "help") {
00178        oCommandType = Command_T::HELP;
00179
00180      } else if (lCommand == "list") {
00181        oCommandType = Command_T::LIST;
00182
00183      } else if (lCommand == "display") {
00184        oCommandType = Command_T::DISPLAY;
00185
00186      } else if (lCommand == "select") {
00187        oCommandType = Command_T::SELECT;
00188
00189      } else if (lCommand == "next") {
00190        oCommandType = Command_T::NEXT;
00191
00192      } else if (lCommand == "run") {
00193        oCommandType = Command_T::RUN;
00194
00195      } else if (lCommand == "json_list") {
00196        oCommandType = Command_T::JSON_LIST;
00197
00198      } else if (lCommand == "json_display") {
00199        oCommandType = Command_T::JSON_DISPLAY;
00200
00201      } else if (lCommand == "quit") {
00202        oCommandType = Command_T::QUIT;
00203      }
00204
00205      // Remove the first token (the command), as the corresponding information
00206      // has been extracted in the form of the returned command type enumeration
00207      ioTokenList.erase (itTok);
00208
00209    } else {
00210      oCommandType = Command_T::NOP;
00211    }
00212
00213    return oCommandType;
00214 }
00215
00216 // //////////////////////////////////////////////////////////////////////
00217 void parseFlightKey (const TokenList_T& iTokenList,
00218                      stdair::AirlineCode_T& ioAirlineCode,
00219                      stdair::FlightNumber_T& ioFlightNumber) {
00220    // Interpret the user input
00221    if (iTokenList.empty() == false) {
00222
00223      // Read the airline code
00224      TokenList_T::const_iterator itTok = iTokenList.begin();
00225      if (itTok->empty() == false) {
00226        ioAirlineCode = *itTok;
00227        boost::algorithm::to_upper (ioAirlineCode);
00228      }
00229
00230      // Read the flight-number
00231      ++itTok;
00232      if (itTok != iTokenList.end()) {
00233
00234        if (itTok->empty() == false) {
00235          try {
00236
00237            ioFlightNumber = boost::lexical_cast<stdair::FlightNumber_T> (*itTok)
     ;
00238
00239          } catch (boost::bad_lexical_cast& eCast) {
00240            std::cerr << "The flight number ('" << *itTok
00241                      << "') cannot be understood. "
00242                      << "The default value (all) is kept."
00243                      << std::endl;
00244            return;
00245          }
00246        }
```

```
00247
00248     } else {
00249       return;
00250     }
00251   }
00252 }
00253
00254 // ////////////////////////////////////////////////////////////////////
00255 void parseFlightDateKey (const TokenList_T& iTokenList,
00256                         stdair::AirlineCode_T& ioAirlineCode,
00257                         stdair::FlightNumber_T& ioFlightNumber,
00258                         stdair::Date_T& ioDepartureDate) {
00259   //
00260   const std::string kMonthStr[12] = {"Jan", "Feb", "Mar", "Apr", "May", "Jun",
00261                                      "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"};
00262   //
00263   unsigned short ioDepartureDateYear = ioDepartureDate.year();
00264   unsigned short ioDepartureDateMonth = ioDepartureDate.month();
00265   std::string ioDepartureDateMonthStr = kMonthStr[ioDepartureDateMonth-1];
00266   unsigned short ioDepartureDateDay = ioDepartureDate.day();
00267
00268   // Interpret the user input
00269   if (iTokenList.empty() == false) {
00270
00271     // Read the airline code
00272     TokenList_T::const_iterator itTok = iTokenList.begin();
00273     if (itTok->empty() == false) {
00274       ioAirlineCode = *itTok;
00275       boost::algorithm::to_upper (ioAirlineCode);
00276     }
00277
00278     // Read the flight-number
00279     ++itTok;
00280     if (itTok != iTokenList.end()) {
00281
00282       if (itTok->empty() == false) {
00283         try {
00284
00285           ioFlightNumber = boost::lexical_cast<stdair::FlightNumber_T> (*itTok)
  ;
00286
00287         } catch (boost::bad_lexical_cast& eCast) {
00288           std::cerr << "The flight number ('" << *itTok
00289                     << "') cannot be understood. "
00290                     << "The default value (all) is kept."
00291                     << std::endl;
00292           return;
00293         }
00294       }
00295
00296     } else {
00297       return;
00298     }
00299
00300     // Read the year for the departure date
00301     ++itTok;
00302     if (itTok != iTokenList.end()) {
00303
00304       if (itTok->empty() == false) {
00305         try {
00306
00307           ioDepartureDateYear = boost::lexical_cast<unsigned short> (*itTok);
00308           if (ioDepartureDateYear < 100) {
00309             ioDepartureDateYear += 2000;
00310           }
00311
00312         } catch (boost::bad_lexical_cast& eCast) {
00313           std::cerr << "The year of the flight departure date ('" << *itTok
00314                     << "') cannot be understood. The default value ("
00315                     << ioDepartureDateYear << ") is kept. " << std::endl;
00316           return;
00317         }
00318       }
00319
```

```
00320      } else {
00321        return;
00322      }
00323
00324      // Read the month for the departure date
00325      ++itTok;
00326      if (itTok != iTokenList.end()) {
00327
00328        if (itTok->empty() == false) {
00329          try {
00330
00331              const boost::regex lMonthRegex ("^(\\d{1,2})$");
00332              const bool isMonthANumber = regex_match (*itTok, lMonthRegex);
00333
00334              if (isMonthANumber == true) {
00335                const unsigned short lMonth =
00336                  boost::lexical_cast<unsigned short> (*itTok);
00337                if (lMonth > 12) {
00338                  throw boost::bad_lexical_cast();
00339                }
00340                ioDepartureDateMonthStr = kMonthStr[lMonth-1];
00341
00342              } else {
00343                const std::string lMonthStr (*itTok);
00344                if (lMonthStr.size() < 3) {
00345                  throw boost::bad_lexical_cast();
00346                }
00347                std::string lMonthStr1 (lMonthStr.substr (0, 1));
00348                boost::algorithm::to_upper (lMonthStr1);
00349                std::string lMonthStr23 (lMonthStr.substr (1, 2));
00350                boost::algorithm::to_lower (lMonthStr23);
00351                ioDepartureDateMonthStr = lMonthStr1 + lMonthStr23;
00352              }
00353
00354          } catch (boost::bad_lexical_cast& eCast) {
00355            std::cerr << "The month of the flight departure date ('" << *itTok
00356                      << "') cannot be understood. The default value ("
00357                      << ioDepartureDateMonthStr << ") is kept. " << std::endl;
00358            return;
00359          }
00360        }
00361
00362      } else {
00363        return;
00364      }
00365
00366      // Read the day for the departure date
00367      ++itTok;
00368      if (itTok != iTokenList.end()) {
00369
00370        if (itTok->empty() == false) {
00371          try {
00372
00373              ioDepartureDateDay = boost::lexical_cast<unsigned short> (*itTok);
00374
00375          } catch (boost::bad_lexical_cast& eCast) {
00376            std::cerr << "The day of the flight departure date ('" << *itTok
00377                      << "') cannot be understood. The default value ("
00378                      << ioDepartureDateDay << ") is kept. " << std::endl;
00379            return;
00380          }
00381        }
00382
00383      } else {
00384        return;
00385      }
00386
00387      // Re-compose the departure date
00388      std::ostringstream lDepartureDateStr;
00389      lDepartureDateStr << ioDepartureDateYear << "-" << ioDepartureDateMonthStr
00390                        << "-" << ioDepartureDateDay;
00391
00392      try {
00393
```

```
00394        ioDepartureDate =
00395          boost::gregorian::from_simple_string (lDepartureDateStr.str());
00396
00397      } catch (boost::gregorian::bad_month& eCast) {
00398        std::cerr << "The flight departure date ('" << lDepartureDateStr.str()
00399                  << "') cannot be understood. The default value ("
00400                  << ioDepartureDate << ") is kept. " << std::endl;
00401        return;
00402      }
00403
00404    }
00405 }
00406
00407 // //////////////////////////////////////////////////////////////////
00408 void parseBookingClassKey (const TokenList_T& iTokenList,
00409                            stdair::ClassCode_T& ioBookingClass,
00410                            stdair::PartySize_T& ioPartySize,
00411                            stdair::AirportCode_T& ioOrigin,
00412                            stdair::AirportCode_T& ioDestination) {
00413    // Interpret the user input
00414    if (iTokenList.empty() == false) {
00415
00416      // Read the booking class
00417      TokenList_T::const_iterator itTok = iTokenList.begin();
00418      if (itTok->empty() == false) {
00419        ioBookingClass = *itTok;
00420        boost::algorithm::to_upper (ioBookingClass);
00421      }
00422
00423      // Read the party size
00424      ++itTok;
00425      if (itTok != iTokenList.end()) {
00426
00427        if (itTok->empty() == false) {
00428          try {
00429
00430            ioPartySize = boost::lexical_cast<stdair::PartySize_T> (*itTok);
00431
00432          } catch (boost::bad_lexical_cast& eCast) {
00433            std::cerr << "The party size ('" << *itTok
00434                      << "') cannot be understood. The default value ("
00435                      << ioPartySize << ") is kept." << std::endl;
00436            return;
00437          }
00438        }
00439
00440      } else {
00441        return;
00442      }
00443
00444      // Read the origin
00445      ++itTok;
00446      if (itTok != iTokenList.end()) {
00447
00448        if (itTok->empty() == false) {
00449          ioOrigin = *itTok;
00450          boost::algorithm::to_upper (ioOrigin);
00451        }
00452
00453      } else {
00454        return;
00455      }
00456
00457      // Read the destination
00458      ++itTok;
00459      if (itTok != iTokenList.end()) {
00460
00461        if (itTok->empty() == false) {
00462          ioDestination = *itTok;
00463          boost::algorithm::to_upper (ioDestination);
00464        }
00465
00466      } else {
00467        return;
```

```
00468      }
00469    }
00470 }
00471
00472 // ///////////////////////////////////////////////////////
00473 std::string toString (const TokenList_T& iTokenList) {
00474    std::ostringstream oStr;
00475
00476    // Re-create the string with all the tokens, trimmed by read-line
00477    unsigned short idx = 0;
00478    for (TokenList_T::const_iterator itTok = iTokenList.begin();
00479         itTok != iTokenList.end(); ++itTok, ++idx) {
00480      if (idx != 0) {
00481        oStr << " ";
00482      }
00483      oStr << *itTok;
00484    }
00485
00486    return oStr.str();
00487 }
00488
00489 // ///////////////////////////////////////////////////////
00490 TokenList_T extractTokenList (const TokenList_T& iTokenList,
00491                               const std::string& iRegularExpression) {
00492    TokenList_T oTokenList;
00493
00494    // Re-create the string with all the tokens (which had been trimmed
00495    // by read-line)
00496    const std::string lFullLine = toString (iTokenList);
00497
00498    // See the caller for the regular expression
00499    boost::regex expression (iRegularExpression);
00500
00501    std::string::const_iterator start = lFullLine.begin();
00502    std::string::const_iterator end = lFullLine.end();
00503
00504    boost::match_results<std::string::const_iterator> what;
00505    boost::match_flag_type flags = boost::match_default | boost::format_sed;
00506    regex_search (start, end, what, expression, flags);
00507
00508    // Put the matched strings in the list of tokens to be returned back
00509    // to the caller
00510    const unsigned short lMatchSetSize = what.size();
00511    for (unsigned short matchIdx = 1; matchIdx != lMatchSetSize; ++matchIdx) {
00512      const std::string lMatchedString (std::string (what[matchIdx].first,
00513                                                      what[matchIdx].second));
00514      //if (lMatchedString.empty() == false) {
00515      oTokenList.push_back (lMatchedString);
00516      //}
00517    }
00518
00519    // DEBUG
00520    // std::cout << "After (token list): " << oTokenList << std::endl;
00521
00522    return oTokenList;
00523 }
00524
00525 // ///////////////////////////////////////////////////////
00526 TokenList_T extractTokenListForFlight (const TokenList_T& iTokenList) {
00533    const std::string lRegEx ("^([[:alpha:]]{2,3})?"
00534                              "[[:space:]]*([[:digit:]]{1,4})?$");
00535
00536    //
00537    const TokenList_T& oTokenList = extractTokenList (iTokenList, lRegEx);
00538    return oTokenList;
00539 }
00540
00541 // ///////////////////////////////////////////////////////
00542 TokenList_T extractTokenListForFlightDate (const TokenList_T& iTokenList) {
00553    const std::string lRegEx("^([[:alpha:]]{2,3})?"
00554                              "[[:space:]]*([[:digit:]]{1,4})?"
00555                              "[/ ]*"
00556                              "([[:digit:]]{2,4})?[/-]?[[:space:]]*"
00557                              "([[:alpha:]]{3}|[[:digit:]]{1,2})?[/-]?[[:space:]]*
```

```
                     "
00558                                        "([[:digit:]]{1,2})?$");
00559
00560   //
00561   const TokenList_T& oTokenList = extractTokenList (iTokenList, lRegEx);
00562   return oTokenList;
00563 }
00564
00565 // //////////////////////////////////////////////////////////
00566 TokenList_T extractTokenListForClass (const TokenList_T& iTokenList) {
00575   const std::string lRegEx ("^([[:alpha:]])?"
00576                              "[[:space:]]*([[:digit:]]{1,3})?"
00577                              "[[:space:]]*([[:alpha:]]{3})?"
00578                              "[[:space:]]*([[:alpha:]]{3})?$");
00579
00580   //
00581   const TokenList_T& oTokenList = extractTokenList (iTokenList, lRegEx);
00582   return oTokenList;
00583 }
00584
00585
00586 // ///////// M A I N ////////////
00587 int main (int argc, char* argv[]) {
00588
00589   // Readline history
00590   const unsigned int lHistorySize (100);
00591   const std::string lHistoryFilename ("sevmgr.hist");
00592   const std::string lHistoryBackupFilename ("sevmgr.hist.bak");
00593
00594   // Default parameters for the interactive session
00595   stdair::AirlineCode_T lLastInteractiveAirlineCode;
00596   stdair::FlightNumber_T lLastInteractiveFlightNumber;
00597   stdair::Date_T lLastInteractiveDate;
00598   stdair::AirlineCode_T lInteractiveAirlineCode;
00599   stdair::FlightNumber_T lInteractiveFlightNumber;
00600   stdair::Date_T lInteractiveDate;
00601   stdair::AirportCode_T lInteractiveOrigin;
00602   stdair::AirportCode_T lInteractiveDestination;
00603   stdair::ClassCode_T lInteractiveBookingClass;
00604
00605   // Parameters for the sale
00606   std::string lSegmentDateKey;
00607
00608   // Output log File
00609   stdair::Filename_T lLogFilename;
00610
00611   // Call the command-line option parser
00612   const int lOptionParserStatus = readConfiguration (argc, argv, lLogFilename);
00613
00614   if (lOptionParserStatus == K_SEVMGR_EARLY_RETURN_STATUS) {
00615     return 0;
00616   }
00617
00618   // Set the log parameters
00619   std::ofstream logOutputFile;
00620   // Open and clean the log outputfile
00621   logOutputFile.open (lLogFilename.c_str());
00622   logOutputFile.clear();
00623
00624   // Initialise the inventory service
00625   const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00626   SEVMGR::SEVMGR_Service sevmgrService (lLogParams);
00627
00628   // DEBUG
00629   STDAIR_LOG_DEBUG ("Welcome to SEvMgr");
00630
00631   // Build the sample BOM tree for RMOL
00632   sevmgrService.buildSampleBom();
00633
00634   // Update the default parameters for the following interactive session
00635   lInteractiveAirlineCode = "BA";
00636   lInteractiveFlightNumber = 9;
00637   lInteractiveDate = stdair::Date_T (2011, 06, 10);
00638   lInteractiveBookingClass = "Q";
```

```
00639    lInteractiveOrigin = "LHR";
00640    lInteractiveDestination = "SYD";
00641
00642    // Save the last state
00643    lLastInteractiveAirlineCode = lInteractiveAirlineCode;
00644    lLastInteractiveFlightNumber = lInteractiveFlightNumber;
00645    lLastInteractiveDate = lInteractiveDate;
00646
00647    // DEBUG
00648    STDAIR_LOG_DEBUG ("=====================================================");
00649    STDAIR_LOG_DEBUG ("=        Beginning of the interactive session       =");
00650    STDAIR_LOG_DEBUG ("=====================================================");
00651    STDAIR_LOG_DEBUG ("Last saved state: " << lLastInteractiveAirlineCode
00652                       << lLastInteractiveFlightNumber << " / "
00653                       << lLastInteractiveDate);
00654
00655    // Initialise the GNU readline wrapper
00656    swift::SReadline lReader (lHistoryFilename, lHistorySize);
00657    initReadline (lReader);
00658
00659    // Now we can ask user for a line
00660    std::string lUserInput;
00661    bool EndOfInput (false);
00662    Command_T::Type_T lCommandType (Command_T::NOP);
00663
00664    while (lCommandType != Command_T::QUIT && EndOfInput == false) {
00665      // Prompt
00666      std::ostringstream oPromptStr;
00667      oPromptStr << "sevmgr "
00668                 << lInteractiveAirlineCode << lInteractiveFlightNumber
00669                 << " / " << lInteractiveDate
00670                 << "> ";
00671      // Call read-line, which will fill the list of tokens
00672      TokenList_T lTokenListByReadline;
00673      lUserInput = lReader.GetLine (oPromptStr.str(), lTokenListByReadline,
00674                                    EndOfInput);
00675
00676      // The history can be saved to an arbitrary file at any time
00677      lReader.SaveHistory (lHistoryBackupFilename);
00678
00679      // The end-of-input typically corresponds to a CTRL-D typed by the user
00680      if (EndOfInput) {
00681        std::cout << std::endl;
00682        break;
00683      }
00684
00685      // Interpret the user input
00686      lCommandType = extractCommand (lTokenListByReadline);
00687
00688      switch (lCommandType) {
00689
00690        // ///////////////////////////// Help /////////////////////////
00691        case Command_T::HELP: {
00692          std::cout << std::endl;
00693          std::cout << "Commands: " << std::endl;
00694          std::cout << " help" << "\t\t" << "Display this help" << std::endl;
00695          std::cout << " quit" << "\t\t" << "Quit the application" << std::endl;
00696          std::cout << " list" << "\t\t" << "List events" << std::endl;
00697          std::cout << " select" << "\t\t"
00698                    << "Select an event to become the current one" << std::endl;
00699          std::cout << " display" << "\t"
00700                    << "Display the current event" << std::endl;
00701          std::cout << " next" << "\t\t"
00702                    << "Play the current event and pop the next one from the queue"
00703                    << std::endl;
00704          std::cout << " run" << "\t\t"
00705                    << "Play all the events until the next break-point, if any"
00706                    << std::endl;
00707          std::cout << " \nDebug Commands" << std::endl;
00708          std::cout << " json_list" << "\t"
00709                    << "List events in a JSON format"
00710                    << std::endl;
00711          std::cout << " json_display" << "\t"
00712                    << "Display the current event in a JSON format"
```

```
00713                << std::endl;
00714      std::cout << std::endl;
00715      break;
00716    }
00717
00718    // /////////////////////////// Quit ///////////////////////
00719    case Command_T::QUIT: {
00720      break;
00721    }
00722
00723    // /////////////////////////// List ///////////////////////
00724    case Command_T::LIST: {
00725      //
00726      std::cout << "List" << std::endl;
00727
00728      //
00729      break;
00730    }
00731
00732    // /////////////////////////// Select ///////////////////////
00733    case Command_T::SELECT: {
00734      //
00735      std::cout << "Select" << std::endl;
00736
00737      //
00738      break;
00739    }
00740
00741    // /////////////////////////// Display ///////////////////////
00742    case Command_T::DISPLAY: {
00743      //
00744      std::cout << "Display" << std::endl;
00745
00746      //
00747      break;
00748    }
00749
00750    // /////////////////////////// Next ///////////////////////
00751    case Command_T::NEXT: {
00752      //
00753      std::cout << "Next" << std::endl;
00754
00755      //
00756      break;
00757    }
00758
00759    // /////////////////////////// Run ///////////////////////
00760    case Command_T::RUN: {
00761      //
00762      std::cout << "Run" << std::endl;
00763
00764      //
00765      break;
00766    }
00767
00768    // /////////////////////////// JSon List ///////////////////////
00769
00770    case Command_T::JSON_LIST: {
00771      //
00772      std::cout << "JSON List" << std::endl;
00773
00774      //
00775      break;
00776    }
00777
00778    // /////////////////////////// JSon Display ///////////////////////
00779
00780    case Command_T::JSON_DISPLAY: {
00781      //
00782      std::cout << "JSON Display" << std::endl;
00783
00784      //
00785      break;
00786    }
```

```
00787
00788       // ///////////////////////// Default / No value ////////////////////////
00789       case Command_T::NOP: {
00790         break;
00791       }
00792
00793       case Command_T::LAST_VALUE:
00794       default: {
00795         // DEBUG
00796         std::ostringstream oStr;
00797         oStr << "That command is not yet understood: '" << lUserInput
00798              << "' => " << lTokenListByReadline;
00799         STDAIR_LOG_DEBUG (oStr.str());
00800         std::cout << oStr.str() << std::endl;
00801       }
00802     }
00803   }
00804
00805   // DEBUG
00806   STDAIR_LOG_DEBUG ("End of the session. Exiting.");
00807   std::cout << "End of the session. Exiting." << std::endl;
00808
00809   // Close the Log outputFile
00810   logOutputFile.close();
00811
00812   /*
00813     Note: as that program is not intended to be run on a server in
00814     production, it is better not to catch the exceptions. When it
00815     happens (that an exception is throwned), that way we get the
00816     call stack.
00817   */
00818
00819   return 0;
00820 }
```

25.55 sevmgr/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.

25.55.1 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.

25.56 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,
00387        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
```

25.57   test/sevmgr/EventQueueManagementTestSuite.cpp File Reference

25.58   EventQueueManagementTestSuite.cpp

```
00001
00005 // /////////////////////////////////////////////////////////////////
00006 // Import section
00007 // /////////////////////////////////////////////////////////////////
00008 // STL
00009 #include <sstream>
00010 #include <fstream>
00011 #include <map>
00012 #include <cmath>
00013 // Boost Unit Test Framework (UTF)
00014 #define BOOST_TEST_DYN_LINK
00015 #define BOOST_TEST_MAIN
00016 #define BOOST_TEST_MODULE EventQueueManagementTest
00017 #include <boost/test/unit_test.hpp>
00018 // StdAir
00019 #include <stdair/stdair_basic_types.hpp>
00020 #include <stdair/basic/BasLogParams.hpp>
00021 #include <stdair/basic/BasDBParams.hpp>
00022 #include <stdair/basic/BasFileMgr.hpp>
00023 #include <stdair/basic/ProgressStatusSet.hpp>
00024 #include <stdair/bom/EventStruct.hpp>
00025 #include <stdair/bom/EventQueue.hpp>
00026 #include <stdair/bom/BookingRequestStruct.hpp>
00027 #include <stdair/service/Logger.hpp>
00028 // SEvMgr
00029 #include <sevmgr/SEVMGR_Service.hpp>
00030 #include <sevmgr/config/sevmgr-paths.hpp>
```

```
00031
00032 namespace boost_utf = boost::unit_test;
00033
00034 // (Boost) Unit Test XML Report
00035 std::ofstream utfReportStream ("EventQueueManagementTestSuite_utfresults.xml");
00036
00040 struct UnitTestConfig {
00042   UnitTestConfig() {
00043     boost_utf::unit_test_log.set_stream (utfReportStream);
00044     boost_utf::unit_test_log.set_format (boost_utf::XML);
00045     boost_utf::unit_test_log.set_threshold_level (boost_utf::log_test_units);
00046     //boost_utf::unit_test_log.set_threshold_level
      (boost_utf::log_successful_tests);
00047   }
00048
00050   ~UnitTestConfig() {
00051   }
00052 };
00053
00054 // Specific type definitions
00055 typedef std::pair<stdair::Count_T, stdair::Count_T> NbOfEventsPair_T;
00056 typedef std::map<const stdair::DemandStreamKeyStr_T,
00057                  NbOfEventsPair_T> NbOfEventsByDemandStreamMap_T;
00058
00059
00060 // /////////////// Main: Unit Test Suite ///////////////
00061
00062 // Set the UTF configuration (re-direct the output to a specific file)
00063 BOOST_GLOBAL_FIXTURE (UnitTestConfig);
00064
00065 // Start the test suite
00066 BOOST_AUTO_TEST_SUITE (master_test_suite)
00067
00068
00071 BOOST_AUTO_TEST_CASE (sevmgr_simple_simulation_test) {
00072
00073   // Input file name
00074   const stdair::Filename_T lInputFilename (STDAIR_SAMPLE_DIR "/demand01.csv");
00075
00076   // Check that the file path given as input corresponds to an actual file
00077   const bool doesExistAndIsReadable =
00078     stdair::BasFileMgr::doesExistAndIsReadable (lInputFilename);
00079   BOOST_CHECK_MESSAGE (doesExistAndIsReadable == true,
00080                        "The '" << lInputFilename
00081                        << "' input file can not be open and read");
00082
00083   // Output log File
00084   const stdair::Filename_T lLogFilename ("EventQueueManagementTestSuite.log");
00085
00086   // Set the log parameters
00087   std::ofstream logOutputFile;
00088   // open and clean the log outputfile
00089   logOutputFile.open (lLogFilename.c_str());
00090   logOutputFile.clear();
00091
00092   // Initialise the Sevmgr service object
00093   const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00094   SEVMGR::SEVMGR_Service sevmgrService (lLogParams);
00095
00097   sevmgrService.buildSampleBom();
00098
00101   sevmgrService.reset();
00102
00103   // DEBUG
00104   STDAIR_LOG_DEBUG ("End of the simulation");
00105
00106   // Close the log file
00107   logOutputFile.close();
00108 }
00109
00110 // End the test suite
00111 BOOST_AUTO_TEST_SUITE_END()
00112
00113
```

Index