FIX 4.2 FAQ

Where is the XML stored that configures the FIX/CAS?

Run_dir\properties\xml\StrikePriceHelperHome.xml
Run_dir\properties\dtd\StrikePriceHelperHome.dtd
Run_dir\properties\xml\CoppeliaAdapterHome.xml
Run_dir\properties\dtd\CoppeliaAdapterHome.dtd
Run_dir\properties\xml\FixCAS.xml
\Run_dir\properties\dtd\CASApplication.dtd
Infra\run_dir\properties\xml\SBTCatalog.xml
Infra\run_dir\properties\xml\processes.xml

Is the XML stored in ClearCase, as well?

Yes in the following locations:
Fix\Release\xml\StrikePriceHelperHome.xml
Fix\Release\dtd\StrikePriceHelperHome.dtd
Fix\Release\xml\CoppeliaAdapterHome.xml
Fix\Release\dtd\CoppeliaAdapterHome.dtd
Fix\Release\xml\FixCAS.xml
Client\Release\dtd\CASApplication.dtd

How do we add a new home to the application?

We have to add the home to the SBTCatalog.xml stored in the Infrastructure VOB.

How do I change the name of the Coppelia .ini file?

Change run_dir\bin\setFixContext to reflect the ini file name.
export prefixFixIniFile=$RUN_DIR/properties/cboefix201.ini

How do I change the name of the Coppelia server?

Change run_dir\bin\setFixContext to reflect the Coppelia Server name
export prefixFixServerName=CBOEFIX201A

What is the name of the jar file that contains the FIX/CAS code?

fix42.jar

How do I modify one of the program files that make up the FIX/CAS?

Have a properly configured view from which you can edit and make program modifications to the source code located in the fix vob under the Java directory.
(This means you need to have your view setup with the proper "config spec").

See: How do I create a Unix View?

It is more than highly recommended that you create a UNIX view – since you will be compiling your programs from UNIX. You will be able to edit files in your UNIX view from NT – but building a new jar file to test your changes has to be done from UNIX.

Most people use Jbuilder 4.0 on their NT PC to edit and do the initial compile of the changes – accessing the source code through their UNIX view.

You need to check files from ClearCase prior to modifying them.

Once you think your change is ready for testing – build a new jar and start testing.

What are the commands to build a new fix42.jar?

Logon to Unix

ct setview *viewname*

Where *viewname* **is the name of the view you are using to make your coding modifications.**

cd /vobs/dte/fix/Java

NOTE: There is a *Makefile* **located in this directory that has commands to maintain the application.**

Use the following commands to compile and rebuild the jar file.

clearmake –C gnu java	**Recompile the source code**
clearmake –C gnu fix42jar	**Rebuild the jar file**
clearmake –C gnu install_fix42	**Install the jar file (check it in)**
clearmake –C gnu help	**List all commands available in the Makefile**

How do I create a Unix View?

Logon to one of the Unix development machines: dte_dev, dte2, devsvr3, etc.

ct mkview –tag *view_name* /net/qaserv2/views/*view_name*.vws

Where: *view_name* is the name you have chosen for your view.

Next you need to set the appropriate config_spec:

ct setcs –tag *view_name* /vobs/dte/dte_admin/config_specs/*config_spec_name*.unix.cs

Where: *view_name* is the name of your view.
***config_spec_name* is the name of the config_spec you have been given to use – most likely by a scrum leader, configuration management person, or manager.**

You can then start this view from NT using the ClearCase Homebase program's startview option.

How do I install the jar into the testing environment?

You should ftp the fix42.jar file you just created over to your test environment on fixtest0 in the */home/fix/fix42test/fix/fixtest0/classes* **directory.**

MAKE SURE YOU COORDINATE THIS WITH OTHER DEVELOPERS – AND MAKE SURE YOU MAKE A BACKUP COPY OF THE JAR BEFORE YOUR OVERWRITE IT!

What are the commands to install a new fixcasadapter jar?

ftp fix42.jar to *host directory* fix\run_dir\classes

How do we perform a merge with enhancements / bug fixes to the CAS?

The first thing to understand is that the deployment architecture allows for multiple versions to be installed on a single box. A typical installation has the follwing environment:

root/infra/infra<version>
root/infra/run_dir
root/client/client<version>
root/client/run_dir
root/fix/fix<version>
root/fix/run_dir

In each case the run_dir is a symbolic link to the specific version. All of the scripts are setup to refer to run_dir. So, to migrate to a newly installed version, is a simple change of the symbolic link.

root/fix/fix<version>
root/fix/fix<NewVersion>
root/fix/run_dir

The same strategy holds true for infra and client. When a new CAS has been released, a new installation should be done. If the new CAS is merely bug fixes, then it is unlikely any other work than changing a symbolic link will be needed.

Modify the config spec of your clearcase dynamic view to reference the new base line. Any vobs where there are Fix specific changes will need to be merged to the clearcase dynamic view.

Where is the documentation for the testing environments?

How do we get a new firm added for testing? For instance, if we need a broker or a firm instead of a market maker account?

How are message dispatchers registered with the FIX/CAS?

Current dispatchers are registered in the code CasCoppeliaAdaptorImpl.java
New dispatchers can be register by adding a handler to the handlerList in CoppeliaAdapterHome.xml

What are the names and locations of the log files produced by the FIX/CAS?

Run_dir\log\cas.default.debug
Run_dir\log\cas.out
Run_dir\log\acas.default.debug
Run_dir\log\cas.audit
Run_dir\log\cas.debug
Run_dir\log\FirmSimulatorCYYYYMMDD.log
Run_dir\log\FirmSimulatorCYYYYMMDD.rej

Can the locations and names of the log files be changed? If so, how (and the answer by changing the configuration is not a complete enough answer)?

Change the location or file names in
../../client/run_dir/properties/LoggingService.properties

When a problem occurs, such as the ones recently, where components were not found (StirkePriceHelperHome) – what is the recovery steps needed to resolve the problem?

1. **Read cas.out and cas.default.debug and the .rej, .log files.**
2. **Try to determine if it's a configuration problem, class path, property files, environment variables, orb name conflict etc.**
3. **Try to determine if it's an application problem. Bad scripts etc.**
4. **Is the error message generated by CAS, server or Coppelia ?**
5. **Finally, read the source code.**

What is the directory structure for the FIX/CAS?

Infrastructure:
Root/infra/run_dir/
Client:
Root/client/run_dir/
Fix Adaptor:
Root/fix/run_dir

Under each subsystem,
Properties
Bin
Classes

What is the command to start the FIX/CAS?

What directory is the FIX/CAS actually started from?

cd $RUN_DIR

How to perform a complete fix installation?

An installation is performed from a clearcase view. Start the view that will select the version of Fix that you wish to install. The target machine will have a directory path into which fix is to be installed. That target path is referred to as {root} within this document. The example I use targets a host of fix0a, of course you should use the host that's right for you! The 'fix'version being installed in this example is FIX_DEV. You should use a directory name that has meaningful version information to yourself.

Change directory to /vobs/dte/fix/installation.

```
FixEnv -h fix0a -u fix {root}/fix/FIX_DEV
```

connect to fix0a
cd {root}/infra

The next assumes the infrastructure code was in “INFRA_5…..04”
ln -s INFRA_5.04_IF_5.04.03_CF_6.05.04 run_dir

cd {root}/client
The next assumes the client code was in “SBT_6.05.08”
ln -s SBT_6.05.08 run_dir

cd {root}/fix
The next assumes the fix code was in “FIX_DEV”
ln -s FIX_DEV run_dir

cp StandardMessageCatalog.properties from client to the fix/run_dir
cp ssconfig.cm from the client area to the fix/run_dir
cp firmsimulator.ini if you are going to run tests to the fix/run_dir
cp startFirmSimulator if you are going to run tests to the fix/run_dir

modify ../../client/bin/setContext with the following changes:
The SBT_PREFIX is the server environment to which we are connecting. In the case that enviroment is identified by devenv4.
SBT_PREFIX=devenv4
Select the IOR_FILE from the correct server enviroment.
IOR_FILE=....

modify ../../client/properties/LoggingService.properties to have the filenames of "log/<fileName>".

It may be necessary to update the FixCAS.xml document if the CAS.xml document has changed. This should not happen with bugfix releases, but it will likely happen with new CAS versions. If you do copy the file over you’ll need to add two homes: CoppeliaAdapterHome, and StrikePriceHelperHome to the configuration. It may also be that you need to change the LoggingService selection from CurrentWorkingDirectory to PropertiesDirectory.

Run all scripts from the run_dir
. ../../client/bin/setpath.ksh
. bin/setFixContex

How do I start an SBT Trading Session?

Logon to the server where your test environment is running. For instance, if you are running on devsvr3 – logon to that server with userid/password of “tradeeng” / “tradeeng”

Below is shown the commands to start W_AM1 trading session for the test environment devsvr3test2 environment.

The bolded text shows your input commands.

su - tradeeng
Password:
Sun Microsystems Inc. SunOS 5.6 Generic August 1997

enter destination for DISPLAY: [dte1:99] devsvr3:37
Select the testing environment that you want:
1) test1
2) test2
#? 2
Select the environment you want:
1) infra
2) tradeeng
#? 2
Setting Oracle environment
setting view to wickberg_cboedirect
WARNING: local classes directory is in classpath.
setup Talarian environment
devsvr3 /tradeengine/sbt/test2/tradeeng/run_dir $ startSession W_AM1
adminRequest
GlobalTradingSessionService.TradingSessionServiceHomeImpl(TradingSessionService
HomeImpl).startSession W_AM1
Execute adminRequest devsvr3tst2_AGlobalServer
GlobalTradingSessionService.TradingSessionServiceHomeImpl(TradingSessionService
HomeImpl).startSession W_AM1
Target SERVER devsvr3tst2_AGlobalServer
Status of FF is : Initializing
Status of FF is : Slave

Session started.
Connecting to project <CBOE> on <localhost> RTserver.
Using local protocol.
Could not connect to <localhost> RTserver.
Connecting to project <CBOE> on <localhost> RTserver.
Using tcp protocol.
Message from RTserver: Connection established.
Start subscribing to subject </AdminRequest_18150>.

-- Monitor the GlobalServer.log to verify successful completion of startSession W_AM1 --

If I encounter a TCP port conflict when configuring or running any of the FIX services, how can I determine if the port is in use?

The command **`netstat –an {PORTNUMBER}`** will indicate if the port is being listened on.