

OSCARS QuickStart

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Set environment variables

Set the environment variables \$OSCARS_DIST and \$OSCARS_HOME.
\$OSCARS_DIST is the source directory for OSCARS.
\$OSCARS_HOME is the deployment directory.

Get code

You can use svn to download the most recent set of OSCARS sources or you can download a tar file of the last checkpointed SDK set of sources. To use svn

```
cd $OSCARS_DIST

svn co https://oscars.es.net/repos/oscars/branches/0.6 latest sources
svn co https://oscars.es.net/repos/oscars/releases/oscars-0.6-sdk-01.11.11 - sdk release
```

The tar file including all the necessary jar files can be downloaded from the oscars-idc wiki at

<http://code.google.com/p/oscars-idc/wiki/SoftwareDownload>

Binary Distribution

Run \$OSCARS_DIST/deployOscarsBin.sh to initialize the mysql tables. (see below for details)

Run \$OSCARS_DIST/bin/exportconfig

Source Distribution

Run \$OSCARS_DIST/bin/deployOscarsSrc.sh script which configures the OSCARS package. This script may be run more than once. If it has already completed an action, it will not change the result.

1. Creates the \$OSCARS_HOME directory if it does not exist.
2. Prompts for the mysql root user password. If this password is empty, set it with the following command:
`/usr/bin/mysqladmin -u root password 'new-password'`

3. Executes several scripts to create and initialize the OSCARS authN, authZ and rm databases and tables.

If you receive the following errors you have incorrectly entered the mysql root password

```
ERROR 1045 (28000): Access denied for user 'root'@'localhost' (using password: YES)
ERROR 1045 (28000): Access denied for user 'root'@'localhost' (using password: NO)
```

4. Copies all the config.yaml.template files to their non-template versions. These files are needed for configuring the OSCARS package.

NOTE: the config.yaml files define the mysql oscarsUser and password and the port on

which each service it to run. If you need to change these values, edit the config.yaml files in the config directory in each service directory.

Build the system using:

`mvn install.`

the following mvn switches may be useful

- DskipTests - skips all the unit tests
- Dmaven.test.failure.ignore=true - executes the unit tests, but continues after failures

After all the servers have been built, maven executes the `$OSCARS_DIST/bin/exportconfig` command. This command copies config files from `$OSACRS_DIST` to `$OSCARS_HOME` and executes few other commands to configure the OSCARS package completely. NOTE `exportconfig` will not overwrite files that have already been copied.

Start the servers

Run `$OSCARS_DIST/bin/startServers.sh dev | sdk ALL` to start all the OSCARS Services
`$OSCARS_DIST/bin/testServers.sh. dev | sdk` checks to see that all the services have started

Test the installation

There are several scripts in `$OSCARS_DIST/api/bin`.

```
createRes.sh -pf <paramFile>
modifyRes.sh -pf <paramFile> (not implemented in the Coordinator yet)
cancelRes.sh -gri <gri>
query.sh -gri <gri>
list.sh -n <numReq> -o <offset> -st <status>
setupPath.sh -gri <gri>
teardownPath.sh -gri <gri>
```

These scripts can be run in the following contexts: `PRODUCTION/pro`, `DEVELOPMENT/dev`, `SDK/sdk`, and `UNITTEST/test`. In `SDK` and `UNITTEST` all the services are run over `http`. In `DEVELOPMENT` `authN`, `authNPolicy` and `WBUI` are run over `https`. So far all the contexts run the services on the same ports, but the plan is to have different contexts (especially `UNITTEST`) to use their own set of ports.

Some sample paramFiles can be found in `api/src/test/resources/*.yaml`

`autoTD1.yaml` – creates a reservation of 4 minutes duration, starting immediately in `testdomain-1`. It should work with the default installation.

`autoTD2.yaml` – like `TD1` except it creates the reservation in `testdomain-2`. To use this you must change the `localDomain:id` to `testdomain-2` in `topoBridge/config/config.yaml`

`signalTD1.yaml` – creates a signal-xml reservation in `testdomain-1` that will exist for 5 days. You can use this reservation to test the `setupPath` and `teardownPath` operations.

`autoTD3TD4.yaml` – creates a multi-domain reservation starting in `testdomain-3` and ending in `testdomain-4`.

Stop Servers

Run `$OSCARS_DIST/bin/stopServers ALL` to stop all the servers.

Individual servers can be started or stopped by using one or more of the following names:

```
authN authZ api coord topoBridge rm stubPSS lookup wbui  
stubPCE bwPCE connPCE dijpCE vlanPCE nullAGG stubPSS
```