

# Grouper book - Deployment and testing in live

Deployment to live should be similar to test deployment, using your final set of configuration files. These can be transferred from one system to another. Remember to change database connections if your live database is different to your test one. It is a good plan to retain a test system for continued testing.

As you deploy, follow each step that you used in your test environment build, testing as you go to make sure no steps are missed out.

If you wish to conduct exhaustive tests on your grouper installation you can run the complete test suite. To do this you need to start with an empty database, correctly configured in `grouper.hibernate.properties`, and a default `sources.xml` file. You should also set `true` in all junit test includes in `grouper.properties`. Next, open a command line and go to `GROUPER_HOME/bin` and run `./gsh.sh -test -all` (linux) or `gsh.bat -test -all` (windows). The tests take some time to complete, but all should pass OK.

Grouper loader initiates scheduled jobs which operate on the whole group repository (database), you must ensure that jobs such as daily report and changelog are only enabled on only one instance of the Grouper loader daemon. During testing it is easy to start multiple instances of the Daemon, but it is important to avoid doing this. It is therefore a good idea to have 2 versions of the `grouper-loader.properties` file - one version which includes the scheduled jobs enabled, and another which does not. Jobs which can be scheduled include:

- Daily report
- Changelog enabled/disabled task
- ChangelogTemp to changeLog task
- Changelog client tasks

These will be covered in later sections.

If you ran the tests you should reinitialise your schema with:

Linux:

```
GROUPER_HOME/bin/gsh.sh
resetRegistry()
```

Windows:

```
GROUPER_HOME\bin\gsh.bat
resetRegistry()
```

Load your data. If you've been following this documentation without jumping ahead you may not actually have any data to load (other than by using the UI). Don't worry, we'll be looking at the various methods of getting data into and out of Grouper in later sections.