ABAQUS

Licensing

Abaqus is licensed software which you must configure to use the correct license server before you can use it. Previously it was possible to configure Abaqus to use either "FLEXLM" or "DSLS" for licensing, but now only the DSLS method is available. If you were previously using the FLEXLM method, you must change your configuration to use DSLS.

DSLS

Create a file called *custom_v6.env* in your home directory with the contents:

```
license_server_type = DSLS
dsls_license_config = "DSLicSrv.txt"
```

and another file called DSLicSrv.txt with the contents:

```
193.136.28.43:4085
```

You can now test that the configuration works by running the following commands:

```
$ module load abaqus
$ export DSLS_CONFIG=/homes/<username>/DSLicSrv.txt
$ abaqus licensing dslsstat
```

which should show a table of the entitlements. These are reported as a list of three-letter acronyms, whose meaning is explained on this page.

Number of licenses

There are a limit number of licenses available. If you submit a job which needs more licenses than are available in total, then Abaqus will quit when the job starts running. If your Abaqus job requires more licenses than are free when the job starts (perhaps because another job is using some licenses) then Abaqus will wait for those licenses to be free.

To prevent Abaqus from waiting, you can add the following line to your *custom_v6.env* file:

```
lmlicensequeuing = OFF
```

To limit the time Abaqus waits for licenses to 10 minutes, add the following line to your *custom_v6.env* file:

```
lmhanglimit = 10
```

Running Abaqus

After you have configured the licensing, you can load the Abaqus program via the module command, and then run it:

```
$ module load abaqus
$ abaqus job=Frame interactive
```

You can drive Abaqus by creating a job file (Frame in the above example) through the Abaqus CAE GUI. See the Abaqus/CAE User Guide for more information

× **If you don't specify** `interactive` mode **you may see errors like:** Abaqus Error: $PBS_NODEFILE improperly defined.

Parallel Jobs

To see how to configure ABAQUS to use multiple cores on the same node, please refer to the knowledge base article QA00000009316e.

To use multiple nodes, see article QA00000009316e and QA00000008994e.

The Abaqus Installation and Licensing Guide provides guidance on some of the settings you can use to configure parallelization, whilst the Analysis User's Guide provides detailed information about parallel jobs.

Don't forget that to request the right number of cores/nodes when submitting your job. See how to do this in the resources page.

ABAQUS CAE

The GUI for Abaqus CAE on some platforms can be unusable, with the menus, sidebars and topbar almost hidden. This can be fixed by setting the environment variable XLIB_SKIP_ARGB_VISUALS when running ABAQUS CAE. For example:

```
$ export XLIB_SKIP_ARGB_VISUALS=1
$ module load abaqus
$ abaqus cae
```