



SGE integration with Globus

Omar Hassaine

HPC/Grid Technologist

Sun Microsystems

SUPerG



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Grid Engine & Globus

- Grid Engine(GE) can be used as a Globus job manager
- The job manager type for GE is 'grd'
- Globus Toolkit includes job scripts files for GE.
 - globus-script-grd-submit
 - globus-script-grd-rm
 - globus-script-grd-poll
 - etc....

Globus Installation

- Before you install Globus Toolkit you need to set the executable search path and other env. variables by sourcing the settings.[csh|sh]
 - source \$SGE_ROOT/...../settings.csh
 - . \$SGE_ROOT/...../settings.sh
- For Globus build no additional options are required in the globus environment.

Globus Deployment

- Before Globus is deployed the following file needs to be edited:
 - `$GLOBUS_INSTALL_PATH/etc/globus-services.conf`
 - Need to add a line for GE job manager.
 - NOTE: See GTK SysAdm Guide.
- Run `globus-local-deploy` command
- start the gate keeper by specifying the GE job manager as a gatekeeper contact.

Submitting to Globus

- `globus-job-submit "<IP/DNS name>/jobmanager-grd* a.out`
 - NOTE: See GTK SysAdm Guide.
- You can also submit array jobs. Read the HowTo for more information on the procedure.
- Globus supports the following job types:
 - jobtype 0 = mpi, jobtype 1 = single
 - jobtype 3 =multiple, jobtype 4 = condor

Submitting array jobs to Globus

- Example of submitting an array job is given in the HowTo at the gridengine opensource site (referred at the end of the preso)
- Read the HowTo for more information on the procedure.

Submitting MPI jobs to Globus

- There is also information on how to submit an MPI job in a SGE/Globus environment.
 - The example is for the loose integration but the tight integration also works.

References

- <http://gridengine.sunsource.net>
 - See globus on left pane
 - See Howtos on left pane



Omar Hassaine

omar.hassaine@sun.com

