

MWSG 08/03

Accounting information coming from
gLExec in OSG

Context

- Pilot job lands on a worker node
- Calls gLExec to execute user jobs
 - This is the only interaction with the site security system
 - Important to account the CPU to the proper entity

gLExec in OSG

- gLExec, LCAS and LCMAPS frameworks are provided by the NIKHEF group
- VO privilege provides the PRIMA/GUMS plugin
 - Contacts GUMS to get the correct mapping
 - Spawns a monitoring companion for auditing

gLExec GUMS plugin monitor

- Started from inside the GUMS plugin
- Logs the user information
 - DN, FQAN, parents
- Tracks the descendants of gLExec
 - logging long lived processes
 - accounting for the CPU usage (Usr+Sys)

Interfaced to GRATIA

- GRATIA probe can read gLExec GUMS monitor log file
- Collects:
 - DN, VO, FQAN
 - wallclock, Usr and Sys CPU time

Process tracking

- Use Condor provided procd
 - Part of VDT
- Use a secondary GID for tracking
 - gLExec will set it before starting the user job
 - Only superuser can change list of sGIDs
 - Reliably tracks also daemonized processes

Summary

- OSG uses gLExec accounting information
 - Accounting today provided by gLExec GUMS plugin
 - But would be better to move it elsewhere
- Reliable process tracking based on sGID added recently
 - Can properly account for daemonized processes