UK glexec experience

- UK has deployed glexec at several Tier2s.
- A number of problems have been found. These are shown here to alert other sites. Many of them have been fixed but not yet released.
- SGE support seems a particular issue. UK has several SGE sites and so warns that these may affect UK T2s ability to meet the June deadline.

glexec Problems (1/3)

- Allows user jobs to "escape" on SGE batch systems (GGUS #69159).
 - Allows jobs to avoid SGE accounting!
 - Fixable (in glexec), but currently has no time-scale.
- Switches CWD to user's home dir.
 - Jobs can no-longer write back to the "job directory" created by the batch system (SGE, Torque, ...?).
 - Probably fine (at Imperial) as long as MUPJs call /opt/glite/sbin/glexec_wrap.sh instead of glexec.
 - More of a problem for other sites (such as ECDF).

glexec Problems (2/3)

- glexec fails to read proxy from NFS home-dir when using Argus (GGUS #69332).
- Argus doesn't support pool account names containing "-" in the prefix (GGUS #69359).
 - Show-stopper for Argus (& glexec) deployment (at affected sites).
- No tarball install makes installation at some sites difficult.
- Some other minor bugs.
 - #69333 GLExec segfaults if argc == 0 (verified)
 - #69361 GLExec possible segfault when reading proxy (verified)
 - #69362 Segfault in some grid software (such as glexec/voms-proxy-info) if a proxy with an empty subject is used

glexec Problems (3/3)

- Requires cluster admins to trust grid admins on installing a setuid executable.
 - This is likely to cause problems at sites which run jobs on shared clusters.
 - Auditing the full glexec code isn't simple, it requires a large number of grid libraries.