Pilot Jobs + glexec

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MB Policy

- WLCG sites must allow job submission by the LHC VOs using *pilot jobs* that submit work on behalf of other users. It is mandatory to change the job identity to that of the real user to avoid the security exposure of a job submitted by one user running under the credentials of the pilot job user.
- Implementation of this policy is subject to the following pre-requisites:
  - The identity change and sub-job management must be executed by a commonly agreed mechanism that has been reviewed by a recognized group of security experts. At present the only candidate is *glexec*, and a positive review by the security teams of each of the grid infrastructures (OSG, EGEE) would be sufficient.
  - All experiments wishing to use this service must publish a description of the distributed parts of their pilot job frameworks. A positive recommendation to the MB on the security aspects of the framework by a team of experts with representatives of OSG and EGEE is required. The frameworks should be compatible with the draft JSPG *Grid Multi-User Pilot Jobs Policy* document.
  - *glexec* testing: *glexec* must be integrated and successfully tested with the commonly used batch systems (BQS, PBS, PBS pro, Condor, LSF, SGE).
  - *LCAS/LCMAPS*: the server version of LCAS/LCMAPS must be completed, certified and deployed.
- The policy will come into effect when the MB agrees that all of the above pre-requisites have been met.

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Slight revision at MB 27/11 GDB Summary More Information
http://indico.cern.ch/conferenceDisplay.py?confId=22188 2

Multi-User Pilot Job Policy

- Draft 0.3 https://edms.cern.ch/document/855383/1

- Should be completed

- But the ideas in it can be used to help review the experiment frameworks.

Review glexec

- The identity change and sub-job management must be executed by a commonly agreed mechanism that has been reviewed by a recognized group of security experts.

- At present the only candidate is *glexec*, and a positive review by the security teams of each of the grid infrastructures (OSG, EGEE) would be sufficient.

- Reviewed by EGEE – see November GDB

- Now being tested, not ready for certification yet.

Experiment Frameworks

- All experiments wishing to use Pilot Jobs must publish a description of the **distributed parts** of their pilot job frameworks. A positive recommendation to the MB on the security aspects of the framework by a team of experts with representatives of OSG and EGEE is required.

- The frameworks should be compatible with the draft JSPG *Grid Multi-User Pilot Jobs Policy* document.

- Team formed Maarten Litmaath, (EGEE2), Eileen Berman, Mina Altunay, Alice, ATLAS, CMS (Igor Sifiligoi), LHCb(Andrei Tsaregorodtsev)

gLExec and batch

- *glexec* must be integrated and successfully tested with the commonly used batch systems (BQS, PBS, PBS pro, Condor, LSF, SGE).
- David Groep will define some key tests (not yet ready)
- Who will do this?
  - *BQS – CC-IN2P3*
  - *PBS – CERN, NIKHEF*
  - *PBS pro - ??*
  - *Condor - ??*
  - *LSF - CERN*
  - *SGE - CESGA*
- *Progress?*

LCAS/LCMAPS

- *Local mode LCAS/LCMAPS does not scale to large sites*
  - *Client-server version required*
- *OSG uses GUMS – they have a common API*
  - *Only one version of glexec required*
- *LCAS/LCMAPS*: the server version of LCAS/LCMAPS must be completed, certified and deployed.
- Progress?

- JRA1
- SA3
- SA1

Timescales

- glexec review – done

- Glexec testing - started

- Framework Review
  - Team being formed.
  - \still to define their mandate

- Batch system testing
  - Started but not yet full coverage

- Glexec certification and deployment
  - Once testing

- LCAS/LCMAPS service
  - Still in development

Any Other Issues?

Summary

- The MB Policy aims to break the current deadlock
    - One way or another
- Still much work to do before the policy becomes effective
    - Timescale