eGee

Enabling Grids for E-sciencE

Job Management

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Information Society
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Workload Management System

- **The gLite WMS has many new features**
  - WMProxy web service interface, bulk submission, shared input sandboxes, shallow resubmission, (VOMS) proxy renewal, etc...
- **The VOMS-aware proxy renewal is now independent of the WMS**
  - Used by other components (e.g. FTS). May be used by applications
- **Stability issues in the current gLite 3.0 WMS are solved in 3.1**
  - Support for non-DAG collections in WMS and L&B, bug fixes in *interlogd*, automatic load limiter, etc...
  - Acceptance test passed: run one week at more than 15000 jobs/day without manual intervention with less than 0.3% of jobs in non-final state
    - Dual AMD Opteron 250 with 4 GB RAM, may be better on better hardware...
    - Real job requirements from ATLAS productions
  - Internal tests on the L&B show scalability up to 1 Million jobs/day
  - Preliminary results of WMS stress tests show ~27000 jobs/day without problems
- **The gLite 3.1 WMS is now being packaged**
  - Foreseen on the PPS and on CERN experimental services in a couple of weeks
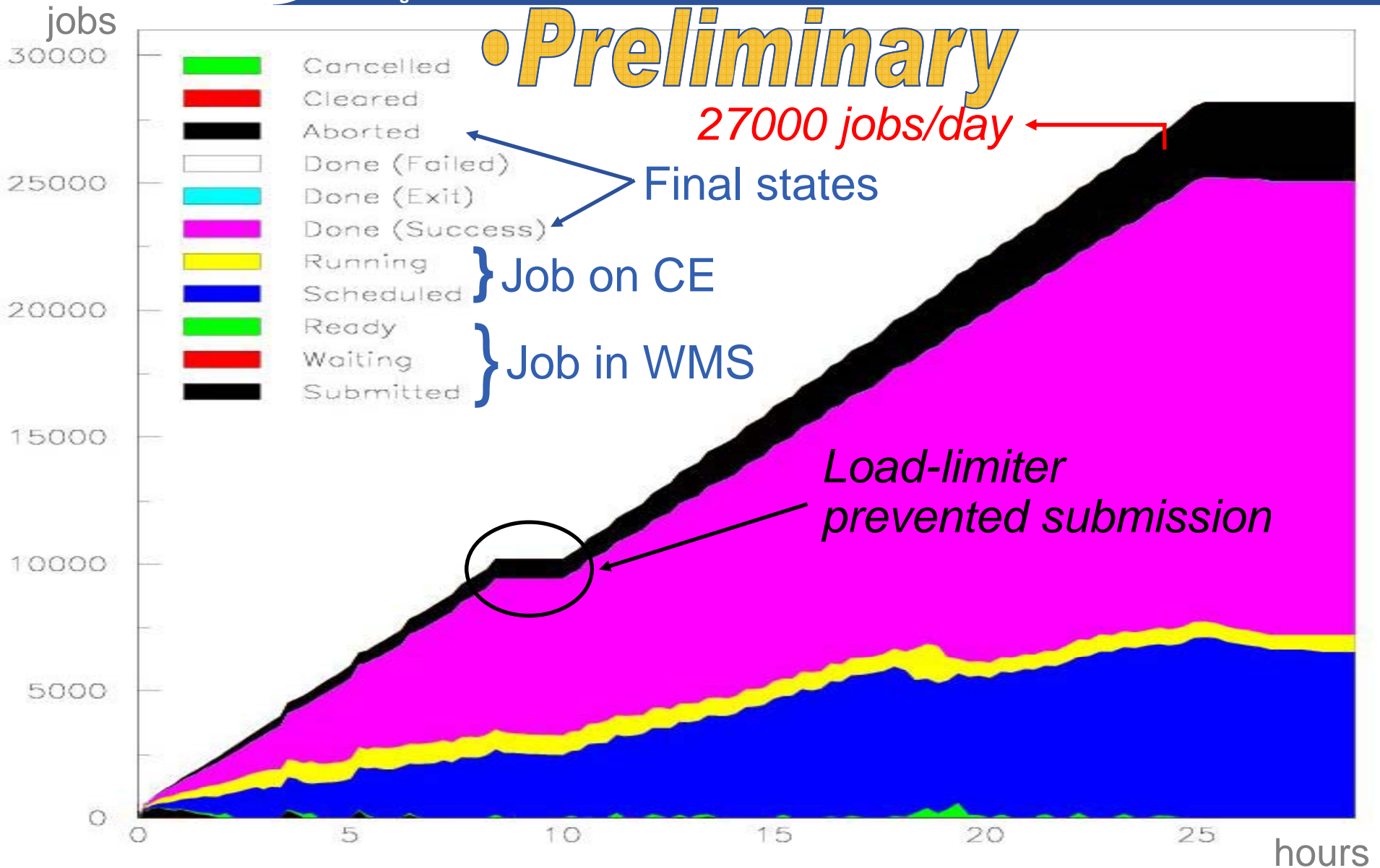
- **glexec** is used by the gLite Computing Elements to change the local *uid* as function of the user identity (DN & FQAN)
  - Calls LCAS/LCMAPS to get the correct local *uid* for the mapping
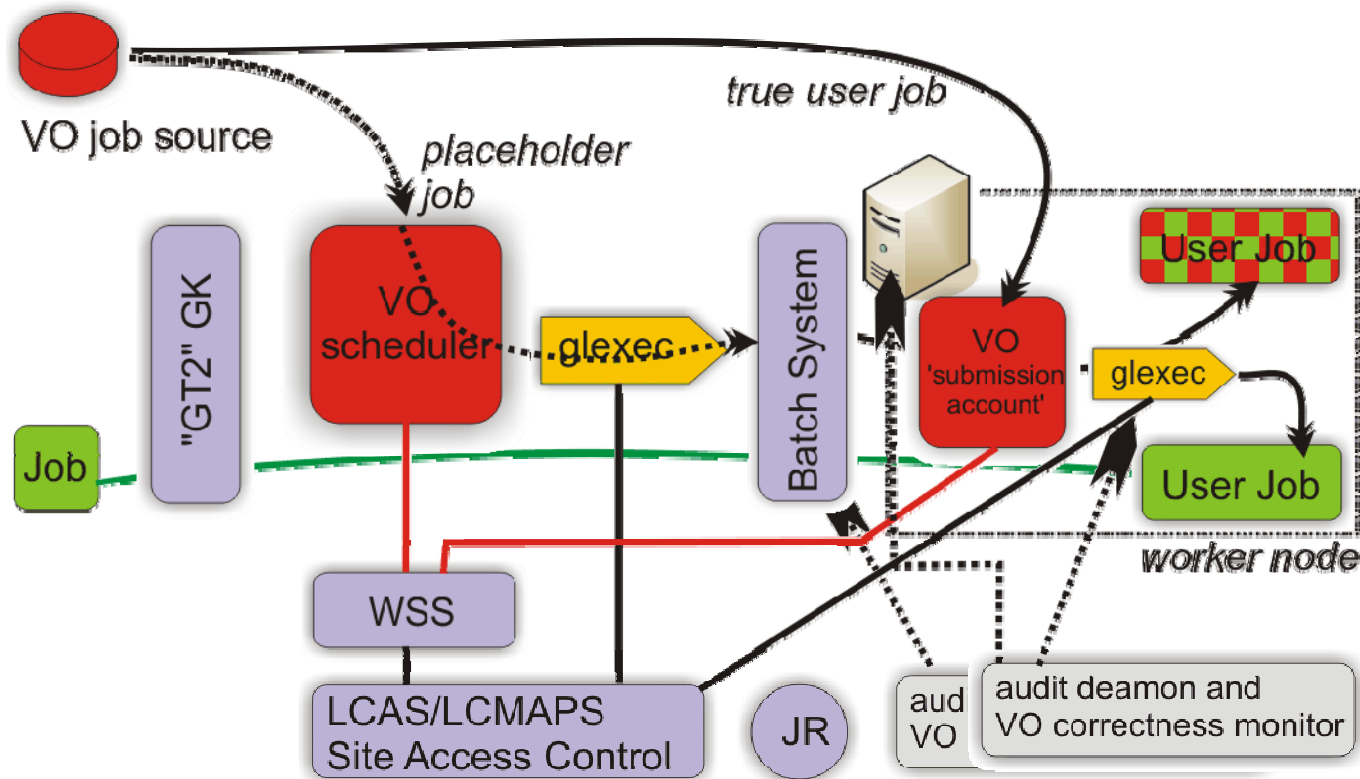
- **It may be used also on the WNs by** pilot jobs **that run payload by multiple users (submitted with a common** *VO identity*)

glexec on Worker Nodes

- **Why sites may want to ask the applications to use glexec on Worker Nodes when running multiple user pilot jobs:**
  - The site could *see* the identity of the user submitting the real job and *isolate* the user and pilot environment by changing the local *uid*
  - Con's: Run *sudo* code on the WN. Not all batch systems may understand that the children with a different *uid* are part of the same batch slot
- **If a site doesn't want to change the local *uid* on the Worker Node:**
  - Run glexec in "null" mode: no isolation of user and pilot environment but still get full auditing
- **Some sites already anticipated that they will not deploy glexec on Worker Nodes at all!**
- **A prototype of glexec on WNs is available on the preview test-bed**
  - With LCAS/LCMAPS configuration file on a shared file system
  - Not intended for production!
- **Development of an LCAS/LCMAPS *service* would be needed!**
  - Not yet recognized as a priority by TCG
  - Work is going on with OSG for a common interface to authZ services
  - No time scale for availability in production