Other services during STEP'09
or afterwards

Maarten Litmaath

(CERN)

Other services

- LCG-CE
  - See next pages
- CREAM
  - Tomcat restart needed at RAL
  - File system full at CERN
    - https://savannah.cern.ch/bugs/?48144
- Shared SW area
  - Problems at NL-T1, GridKa, CNAF
  - Does not scale?
    - ALICE: BitTorrent!
- APEL
  - Tomcat problems
- WMS, MyProxy, glexec, WN, BDII
  - Concerns, prospects

LCG-CE (1)

- Globus-gma problems at RAL, DESY, CERN, …
- Zombies left behind for batch system queries that time out
  - Fixed by https://savannah.cern.ch/patch/index.php?2749
    - In production since June 16
- Timeouts can make LCG-CE unusable for anyone
  - WMS/Condor-G jobs fail with Globus error 10
    - "data transfer to the server failed"
  - Workaround: skip jobs whose queries time out!
    - We may need to improve the algorithm
  - Patch https://savannah.cern.ch/patch/index.php?3041
    - Certified
- Why do queries time out?
  - Too many jobs sent to a single account!
    - See next page

LCG-CE (2)

- Too many concurrent jobs submitted to a single local account
  - Seen at RAL, DESY, CERN, …
- Each job needs a subdirectory under ~user/.globus/job/host
  - An ext2/ext3 directory can have at most 32000 links
- Why would anyone need to submit 32k concurrent jobs to a single account on a single CE?
  - This would not be a good idea for CREAM either
    - Even after fixing https://savannah.cern.ch/bugs/index.php?43830
  - Check #waiting jobs, ERT etc. before submitting more
  - Submit evenly to <u>all</u> the CEs at a site
    - And ensure that all of them are checked

LCG-CE (3)

- YAIM bug: gatekeeper is started without globus-gma support
  - https://savannah.cern.ch/bugs/?48588
    - Fix certified
  - Workaround: restart gatekeeper after running YAIM

- Mapping problems at PIC, LIP, …
  - User proxies may have primary FQANs that are not explicitly supported by the CE
    - Typically national groups within experiment VO
  - Fallback on classic grid-mapfile may give unwanted mapping
    - User jobs may unexpectedly run e.g. under "sgm" account
  - Fix 1: add wildcard catch-all rules to YAIM groups.conf
  - Fix 2: use VO_<vo>_UNPRIVILEGED_MKGRIDMAP

Other concerns & prospects

- WMS 3.2 for gLite 3.1 on PPS, to go to production soon
  - Can again submit to CREAM
- MyProxy
  - Single point of failure for various scenarios
- Glexec/SCAS
  - Just released to production, we need to gain experience
- WN
  - Efficiency of matching job requirements to WN properties
    - https://twiki.cern.ch/twiki/bin/view/EGEE/WNWorkingGroup
- BDII
  - Version 5 should be more robust
  - GFAL failover will skip "empty" BDIIs ("No entries for host")
    - LCG_GFAL_INFOSYS should have ordered list of BDIIs
    - Some tools cannot handle that yet