

# LCG: the LHC Computing Grid project

Middleware Update

Andreas  
Unterkircher



# SCAS/glexec



- SCAS patch [#2684](#) made available "Ready for Integration" by NIKHEF on 9<sup>th</sup> Dec. 2008.
  - RPMs are now available, certification starts now
- Glexec patch [#2381](#) announced to be "Ready for Integration" by NIKHEF next week (week 51 2008).
- Lcmaps/lcas patch [#2635](#) "On hold" (waiting for above patches)
- SCAS testplan has been set up:  
[https://twiki.cern.ch/twiki/bin/view/EGEE/SCAS\\_testing](https://twiki.cern.ch/twiki/bin/view/EGEE/SCAS_testing)

# SCAS/glexec



- Deployment scenarios:
  1. WN (pilot jobs) ← **PRIORITY**
  2. CREAM CE ← After CREAM-CE has been in production
  3. dCache ← In cooperation with DESY

For Multi User Pilots SCAS is a single point of failure

- Glexec/SCAS WN test scenarios:
  - functional tests
  - Failure modes of SCAS
    - server not available,
  - Scalability
  - Service stability
    - extended period under high load (5 days)
- If the patches are OK we expect to do the tests within 2-3 weeks.

# SCAS/glexec



- Rollout
- Central security component → Pilot and staged rollout required
- Staged rollout after short PPS phase
- Initially Experiments should “opt in” in a flexible way
  - Use glexec when available and working
  - “Ignore” and report when broken
    - *The security situation is in this case not worse than it is now!*
- Given no additional problems we can start in February
- Future Plans
  - Failsafe deployment scenario
    - *Without CE and dCache can't depend on it*
  - Not yet started, needs cooperation with developers

# CREAM CE



- Patch [#2415](#) (First update of CREAM CE)
  - In PPS to be released to production (next week)
  - Fixes ~ 30 bugs
- Patch [#2669](#) (short term proxy renewal solution for CREAM)
  - Announced to arrive in "Ready for Integration" today (10.12)
  - Will be released to production in January
    - If no problems are found
- We need more sites to gain operational experience with CREAM

- Patch [#1841](#) (WMS 3.1.100) certified and currently in PPS. Will never be released to production alone because some failures (segmentation faults).
  - Many bug fixes, improved integration
- Patch [#2562](#) currently "With Provider" fixes these issues.
- Release to Production: Patches #1841 & #2562.
  - January certification, February release to production
- Submission to CREAM (ICE) not available in these patches
  - There is a patch, but it still with the developers

- [DPM/LFC v1.7.0 \(patches #2563 and #2564\)](#)
  - Full implementation of srmCopy
  - Some WLCG SRM MoU requirements implemented (detail in the patch)
  - Certification to be finished this week.
  - Release to production in January 2009.

# VOMS



- Patch [#2613](#)
  - Fixes the remaining voms core issues reported on <https://twiki.cern.ch/twiki/bin/view/EGEE/VoManagementIssues>
  - Certification started this week



# VDT update on SL4



VDT 1.6 release 9 for x86/x86\_64 SL4 currently in certification

- GridFTP2 support.
- Fix for bug [#40734](#) (lcg-rep failure - no space on device error), a prominent bug.
- To be released to production in January.

# SL5 WN



Combined x86/x86\_64 SL5 WN based on VDT 1.8

- Has been tried by Atlas, Alice, LHCb and CMS - o.k. so far.
- Stop gap solution as building against VDT 1.10 needed changes in the build procedure.

Combined x86/x86\_64 SL5 WN based on VDT 1.10

- Has been given to FIO last Friday (5<sup>th</sup> of December 2008).
- After set up by FIO this WN should be tested by the experiments.
- This is what we intend to release on SL5 (as gLite 3.2).

# Clients on WN



## Python 2.5 clients

- For SL4 DM provides rpms with Python 2.5 clients.
- They all (Python 2.4 and 2.5) go into /opt/lcg/lib(64)/python thus cannot be installed together (better have /opt/lcg/lib(64)/python 2.4 and /opt/lcg/lib(64)/python 2.5 ?)
- We need these rpms also for SL5.

## Gcc 4.3 clients

- No problem for C code, we need to deal with C++.
- Only VOMS-api-cpp is used on the WN?
- SL5/gcc4.3.2 build machine has been set up, we will try to build VOMS-api-cpp.
  - Initially no plans to release this on SL4
    - Needs prioritization with AA
- Packaging with RPMs is challenging

# gLite 3.2



## gLite 3.2

- Based on VDT 1.10 for SL5
- Java 1.6
- No `edg-*` commands, based on WMS (no more `lcg-RB`)
- Python 2.4 and 2.5 DM clients on the WN