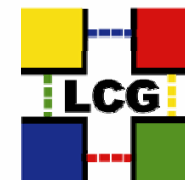# LCG: the LHC Computing Grid project

Middleware update

Andreas Unterkircher

Rollback

Updated release scripts for rollback should be available this week. Some internal testing is then being done. If all goes well we start again to release in the second half of February.

- Initially rollback will be per complete release.
- More, smaller releases affecting only a few node types resp. aspects of the middleware (e.g. VDT)
- Rollback per patch will come later.

Managed rollout/early life support: SA1 is looking for sites that do ELS. Sites available so far

- GUP-CERTIF-TB lcg-CE, glite-BDII (site)
- SiGNET lcg-CE, glite-BDII (site)
- RAL glite-BDII (top)
- WCSS lcg-CE, glite-SE_dpm_mysql

SL5

SL5/x86_64 WN pilot is over. No major problems found by the experiments

- WN pilot page:
  https://twiki.cern.ch/twiki/bin/view/LCG/PpsPilotSLC5

- Known problem: Savannah bug
  https://savannah.cern.ch/bugs/index.php?45852

  - PYTHONPATH contains 32bit libs – does not work for "native" 64bit Python.

  - Most likely not a problem for the experiments as they come with their own python and libs.

  - Workaround available – to be published in the initial release notes if the fix does not arrive in time.

- Preparing the release now, we would like to do it with the new release scripts.

Multiple WN version

Possibility to have multiple versions of the WN installed on one base WN.

- Installation through an rpm.

- VO managers publish tags about the installed WN versions.

- WN version can be selected (and matched) via JDL attributes.

- Should work for submission through the WMS as well as through direct submission to CREAM.

- Rpms are ready; mechanism is currently being tested by a SA3 partner.

- Twiki: https://twiki.cern.ch/twiki/bin/view/EGEE/WNVersionRPM

CREAM-CE

- Dedicated CREAM release in Jan 09 for patch 2415
  https://savannah.cern.ch/patch/index.php?2415
  - Fixes ~30 bugs.

- CREAM patch 2669 ("Patch for short term proxy renewal solution in CREAM based CE & other bug fixes") in certification
  https://savannah.cern.ch/patch/index.php?2669
  - Has been given for certification to SA3 partner GRNET in Dec. 2008, they started to work on it on 16th Jan. 2009.
  - Some potential problems are still being investigated by GRNET (look into the patch comments)

- Patch 2665 ("Second update of CREAM and CEMon Clients for slc4/i386 platform")
  - "Ready for certification"; assigned to GRNET.

SA3 Patch and task watch

We have a complete overview of our current SA3 tasks (many of them being patch certification) on
http://lxbra1902.cern.ch/gLite/Savannah/web/TaskTracker/

SCAS patch history from last GDB

Patch #2719 rejected on the 22nd of January for configuration problems (lcas files were not installed)

Patch #2759 rejected on the 30th of January for updates to the SCAS yaim module.

Patch #2767 in certification from the 30th of January. The system is under stress tests and failure tests will be done in the next few days. The fix to the memory leak causes a periodic error (0.03% of the requests).

Glexec patch history from last GDB

Patch #2381 rejected the 2nd of February for important updates to the glexec yaim module

Patch #2770 in certification since 3rd of February. The major issue is about the error codes and messages returned by glexec that does not allow to distinguish between configuration problems, SCAS server not reachable and SCAS server returning negative authorization decision. A discussion involving LHCb and ATLAS is ongoing to fix the most critical scenarios in 2 weeks time.

SCAS/glexec certification

A pilot to test glexec/SCAS in a production like environment has been started last week
https://twiki.cern.ch/twiki/bin/view/LCG/PpsPilotSCAS

Issues that might have an impact:

- Current main SCAS (and glexec, as one person left and a new came) developer announced to be on holidays for 4 weeks from 20th March onwards.

Stress test results

Done by Gianni Pucciani and Andrey Kiryanov.

The test lasted almost 3 days (67 hours), from Fri Feb 6 12:47:14 to Mon Feb 9 08:00:00. It was executed using 2 WNs and one SCAS server all deployed on VMs.

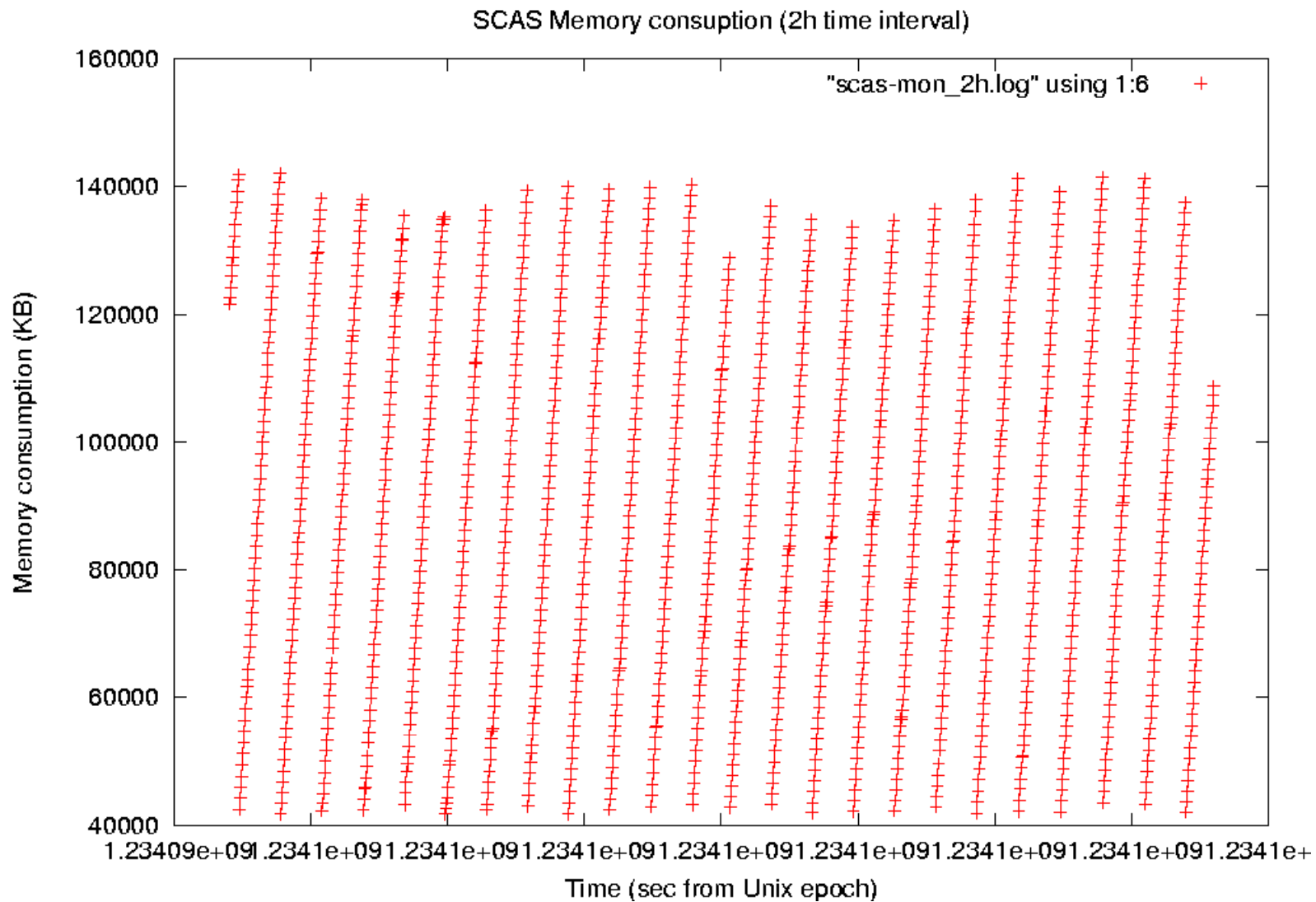Installed patches: #2767 (SCAS), #2770 (glexec), #2635 (lcas/lcmaps)

Throughput and error rate:

- Requests per second: 10.23
- Error rate: .03664%

More information:
https://twiki.cern.ch/twiki/bin/view/EGEE/SCAStestsresults

Stress test results

SCAS Memory consuption (2h time interval)

Stress test results

Response Time