

SCAS certification status

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**pre-cert testing was carried out in NIKHEF by EGEE/SA3
(ie not by the developers)**

during SCAS pre-certification the following was tested;

- installation of an SCAS server

- installation of the SCAS client: glxexec in SETUID mode with the SCAS client plugin

After this we verified that the command

- `glxexec /usr/bin/id`


- returned a user mapping generated on the SCAS server.

**Further testing was carried out by the security team in
JRA1**

- **Support for peak rates of 10 connections per second had been requested**
 - assuming a site of ~14000 cores
 - including shorter analysis jobs
 - 4x peakiness
- **A single server instance, on relatively old hardware, was testing with multiple VM clients**
 - rate of 18Hz was achieved

- Next, physical WNs were used
- Part of the Nikhef cluster to one old service machine:
 - Lots of dual-quad xeons for clients
 - One old dual Opteron for the SCAS service

	# clients	# cum. server load	# cum. server peak	# Mappings in Hz
1 SCAS daemon	15	10%	13%	~24Hz
1 SCAS daemon	30	15%	18%	~31Hz
2 SCAS daemon	30	20%	25%	~42Hz
2 SCAS daemons	60	40%	48%	~66Hz
4 SCAS daemons	60	60%	65%	~80Hz

- **Patch #2511 has been submitted**
 - **First thing done was create a yaim module for the SCAS server and to update the yaim-clients to configure the lcms plugin properly**
 - **Smoke testing of the configuration showed problems. You may have heard about issues with**
 - Particular CAs
 - Platform variations (SL/SLC/Centos/RHEL/...)
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- **There was a configuration error**
 - **Debugging was difficult (done at NIKHEF)**
 - could use better error messages

- **A test plan for glexec/SCAS is 'accumulating' here;**
 - https://twiki.cern.ch/twiki/bin/view/EGEE/SCAS_testing
- **No spec is available**
 - But we can start immediately...
- **We are in contact with EIS team to get usage patterns**
- **We are collecting scenarios to check**
 - Need to check ageing effects & reliability
 - What happens when pool accounts run out?
 - how is recycling done?
 - how can SCAS be sure an account is recyclable?
 - What happens when the server times out?
 - do the clients fail gracefully?
 - where to retries happen?
 - What else?

- **Perform certification**
 - Currently need a yaim-clients update, but this will take another day or two as there are other fixes which need to go in (unrelated to SCAS)
- **Experience has shown that the testing may show up issues anywhere in the glxec/lcas/lcmaps/SCAS ensemble**
- **After certification...**
 - Pilot service?
 - For the user, it should be irrelevant whether SCAS is behind their glxec calls or not

- **Initially glxec was advertised as being available in 3 'modes'**
 - null
 - logging only
 - setuid
- **Which of these are now of interest to WLCG?**