

SA1 Fabric Management Group (formerly known as: LCG Operational Fabric WG)

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ROC(42) phone conference

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History

- The “Operational Fabric WG” was formed during the last LCG workshop (CERN, Nov 2, 2004)
- On the one hand, a weak point of the current (LCG) Grid infrastructure was recognized to be in the unreliability of fabric infrastructures (besides weaknesses of middleware / applications / etc, of course);
- On the other hand, a number of participants to the workshop expressed interest in sharing and acquiring knowledge on how to improve fabric management procedures;
- Therefore, it was thought interesting to set up a WG to deal with operational fabric issues; software installation was also discussed (but it’s a very wide topic, won’t cover much of it here);
- Some tentative milestones for the working group were sent to ROC and CIC managers on November 15th, 2004 (see this agenda page for the presentation) and the working group itself was briefly discussed at the ROC(35) meeting on December 1st, 2004.

From the LCG Workshop

WG4: Summary of Actions

- Provide details on Quattor scalability (comparable to an analogous work made in EDG times for LCFG) and resilience, with an How-To – German Cancio
- Better document which components are available at CERN, and encourage their usage outside of CERN – German Cancio
- Organize a Quattor training for interested parties – CERN (around December)
- Write a document on how to configure maui for simple use cases, targeting mostly smaller sites. There are several ongoing drafts that already partially deal with this – we need to integrate them. RAL, CERN-GD (Sophie Lemaitre), NIKHEF.
- There are useful patches to both Torque and Maui, developed by some of the sites: integrate them into a set of RPMs, and also try to get those patches accepted by the official Torque/Maui distributions. RAL, NIKHEF (+ CERN-GD?)
- Create a subgroup to document which tests should be made at the fabric level to verify that WNs, batch system are in good order
 - Try out Piotr's script locally
 - Validate and integrate existing scripts
 - Weizmann, RAL, CNAF, IN2P3, NIKHEF, CERN (German Cancio)
- Gather existing HT data, and perform some tests – CNAF, IN2P3, RAL
- Survey of common use cases for farm set-ups: review document being written in SEE-GRID (to be out approx. in 1 week) – All
- Communication channels? (open point)

Where we are now

- With regard to the tentative milestones drafted in November:
 - The Quattor training was held last week; very good attendance, a number of people were in a waiting list (it will perhaps be necessary to organize a second one soon); the LCG Quattor WG is now operative (chairperson is Cal Loomis, email project-lcg-gdb-quattor-wg@cern.ch, subscribe via the usual <http://wwwlistbox.cern.ch>); documents on Quattor scalability and recipes are also available;
 - The first version of the MAUI cookbook is out, shipped with the LCG 2.3.0 distribution; still needs to be revised to include more details and explanations;
 - Torque is now shipped with LCG, so we probably have a much larger installed base now. Steve T has integrated known patches to Torque and Maui into a single set of RPMs. A new Torque version recently came out that should fix some annoying problems with timeouts and provide more hooks for remote control of WNs; will be tested soon;
 - Piotr's script is being rewritten (by Piotr himself) so that it can be used outside CERN; will check with Piotr for what regards the timeframe. NIKHEF's scripts are now also deployed at SARA – I would like to distribute them to this group in the coming 2 weeks (need to write more documentation, of course);
 - HT discussions (esp. on LCG-ROLLOUT) have been quite useful; need to collate results in a document;
 - The use cases document needs to be written; we have the SEE-GRID paper as a starting point, but we need input from sites to see what is needed more;
 - For what regards communication channels, there is a new (unannounced yet) mailing list, project-eu-egee-sa1-fabric-working-group@cern.ch; at the moment the only people subscribed to this list are Cristina and myself.

Possible Course of Actions

- Please become part of the WG subscribing to project-eu-egee-sa1-fabric-working-group@cern.ch
- I shall send to that list what we have so far: a summary of Quattor documents and discussions, the HT threads, the MAUI cookbook and pointers to current torque RPMs, a collection of monitoring scripts, the SEE-GRID draft (a web page would be useful, actually)
 - But we need contributions from ROCs: identify problem areas, share solutions, comment on the above
 - Keep on working on the areas identified at the LCG workshop (example: the use cases document), maintaining a hands-on approach
 - Please explicitly state on which areas you are interested on working, so we can focus the effort (let's try and avoid that the mailing list becomes a catch-all sink)
- EGEE Operational fabric and software installation should have a role at the next Hepix meeting (Karlsruhe, May 9-13, 2005) – suggestions?