



quattor

Update at RAL and in the Quattor community

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Quattor Update - Contents

Quattor at RAL

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Developments

10th Quattor Workshop

Process & Involvement

In May 2009 after examining options and alternatives, the decision was made to adopt Quattor as the Fabric Management System for RAL Tier1

A challenge to apply to a running Tier1 with out downtime

In September 2009 we deployed our new SL5 batch service, along with a new batch server managed by Quattor

In deployed the first SL4 disk servers managed by Quattor

And since new 64-bit SL5 disk servers

At the same time we have been migrating all of our grid services and core services to Quattor management

And finally we are working on the Castor servers

So, we acheived rather a lot, the sky did not fall. The Tier1 is still running, we learned a lot, ended up attending many workshops and meetings, even hosting a workshop - not part of the original plan!

Quattor at RAL - Status: Clusters

Switched SL 5 batch farm just 14 months ago

Now fully committed to Quattor and reaping benefits

Closed SL4 service in August and reinstalled remainder

So all 700 or so WNs

Saving ~ 1/3-1/2 FTE on batch farm management

Since start of the year all new disk servers tested and then deployed with Quattor

About to migrate all older disk servers to Quattor

Need to upgrade to latest 64 bit Castor - much easier this way

Very carefully testing that we really can preserve data, even for some of the older raid cards etc.

Quattor at RAL - Status: Core

Using Quattor Working Group framework for all supported grid services nodes
servers
seeing really significant benefits in the shared effort

bdiis, cream-ce, vo-boxes etc., etc.

RAL is the first Tier 1 using QWG - our use cases are a bit different sometimes, which has taken a bit of work...

For machine types not yet supported by QWG configuring OS and standard site parts and then using YAIM for the gLite parts

LFC, FTS...

Contributing back to QWG and seeing really significant benefits in the shared effort

Core non-grid systems also managed with quattor

Quattor server itself, plus repository servers, our helpdesk, squids, nagios servers, etc, etc

Quattor at RAL - Status: Castor

Not yet using any of the components developed at CERN

Castor payload already delivered on disk servers by Quattor

Configured new castor tape servers which went into production in the summer

Currently testing a new Castor instance for non-LHC data at RAL.

Installing OS, all software including Castor, and standard site configuration with Quattor

Then using existing puppet manifests for configuring Castor services

Very similar to the Quattor+YAIM use for unsupported gLite machine types

Will likely migrate to full Quattor management next year.

Some very positive discussion with Castor team at CERN about both converging on a compatible set of configurations

Quattor at RAL - Plans

Upgrade remaining disk servers

Continue support for Castor

hybrid approach using existing puppet for configuration files

Deploy Sines to secure communication and allow distribution of sensitive information

Improve the inventory database that we use to 'feed' Quattor

Still planning to trial Aquilon, an SQL based configuration database

Begin support for RHEL to allow management of database servers

Quattor Community - 10th Workshop

Very successful workshop hosted at RAL in October

I really noticed that there was really a lot of discussion in (almost) all sessions - a true workshop not just a bunch of presentations and site reports (in fact for the first time we had no site reports)

A strong sense of a community gathering to work together on things

I think it is useful to think about what allowed this (more on this later)

Quattor Community - 10th Workshop

Last year I reported on the bid for 7th framework programme funding (QUEST)

We did not get the money :(

However, the process of preparing the bid concentrated our minds

We built a detailed view of what we would like to do to improve Quattor

- and how we might get that done

We developed a much more involved team

So this is perhaps one (the main?) factor in the very active and interactive workshop

Quattor Community - 10th

Workshop

Some Highlights/Actions

RAL/CERN to collaborate on improving Sindes - esp the usability

Considerable work on building Nagios configurations inside QWG framework

Work to improve main websites and establish better outreach
- for example it would be nice if when you search for configuration management tools you see something about Quattor

Interesting use of Quattor in StratusLab project - see Michel's talk