



Quattor Community Update

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GDB 14 May 2014

Highlights

- Yum based package management
 - Biggest change in last year
 - (almost) all sites migrating
- Regular releases
 - integration/testing infrastructure
- Aquilon entering production outside Morgan Stanley



GitHub

- In terms of how community works this is biggest change
- Everything now on GitHub (previously mostly but not exclusively sourceforge)
- Allowing more coherent overview & better collaboration
- Better review of contributions
- Similar workflows to those described by Ben in previous talk.
- More easily able to see obsolete/deprecated components



Release & packaging

- Regular releases
 - Every two months
 - Release manager currently at RAL (James Adams)
 - Release includes components and deployment server
 - Core template library not integrated yet...
 - Solaris packages not integrated yet
- Packaging automated using Jenkins
 - Also testing pull requests
- Process was just beginning a year ago
 - Significant effort to establish
 - Running smoothly & paying dividends



Aquilon

- Next generation Quattor configuration database and command line broker developed by Morgan Stanley
 - SQL database stores site, hardware, network info, plus internal organisation, mappings of features to personalities to hosts and groups of hosts.
 - Command line broker manages database operations operations without directly editing code
 - Templates stored in git repository – different workflows



Aquilon

- Now packaged and (relatively) easily installable
- Deploying production services at RAL
 - ~250 hosts so far (ceph clusters, cloud...)
 - Aim to have (900) WNs migrated by September
- UGent also has running broker
- This is the result collaboration over several between Morgan Stanley, RAL & UGent



YUM Package Management

- Management of packages & dependencies has been the single real 'pain point' with Quattor.
- Fully supported in most used, and latest releases
 - YUM has matured – usable without losing rollback.
 - Most sites migrating – some complete
 - Resulting in accelerating effort on rest of toolset as less time sunk into package management
 - Latest middleware templates (EMI-3) only support yum – significantly less work
 - Profiles are smaller and compile faster
- Morgan Stanley implementing Support for Solaris
 - Which in turn may make supporting other packaging easier



New components

- ncm-puppet
 - Allows puppet modules to be driven by quattor using site information in quattor
- Why?
 - YAIM support going
 - Some well supported puppet modules for middleware are appearing (eg DPM)
 - Do not want to duplicate effort unnecessarily
 - Prototype working with DPM modules



New components

- ncm-metaconfig
 - Writes a variety of configuration file formats
 - Allows definition of schema ‘on the fly’ and so allows verification of configuration before delivery
 - Can replace components that just write configuration files
 - Removes need for packaging & distribution
 - Project to replace simpler components



Workshops & Community

- Community is small but very engaged.
 - Still around 50 sites
 - About 15 regular contributors/reviewers on github in last month (based on notifications)
- Several active mailing lists
 - Quattor, quattor-devel, quattor-grid(middleware components), quattor-aquilon
- Short weekly developer standup meeting, adhoc meetings as required.



Workshops & Community

- Twice yearly workshops
 - 17th Quattor Workshop in Amsterdam in March
- Also just coming up to 3rd Informal collaboration workshop between RAL and UGent focussed on but not limited to Quattor
 - Much of the work packaging aquilon at these workshops



Summary

- Quattor toolset is in very good shape
 - perhaps best it has ever been
- Yum package management
 - removes single area of actual pain
- Release process
 - steady improvements delivered coherently
- Next generation Aquilon configuration database & broker entering wider production
- Github facilitating stronger collaboration
- Active/engaged community



Questions?



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