

Quattor: core modules status update

4th Quattor Workshop

Universidad Autónoma de Madrid

10/2007

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quattor *Major CERN developments...*

(Not including CERN-specific developments!)

◆ Support for namespaces

- New CDB with a *deploy* mechanism under testing (see presentation):
 - Based on “stages”: `test/`, `preprod/`, `prod/`
 - New commands `cp`, `mv`, `deploy` available

◆ CDB backend (ongoing)

- Current SQL-based backend is asynchronous
- Rewriting CDB backend in multithreaded Python with a fast XML parsing library

No progress: lack of manpower ☹️

◆ SWRepSOAP (ongoing, with BARC India)

- Only minor enhancements

◆ CCM extensions (started)

- CCM to accept non-local profiles
- Essentially, what All does, but fully

Done (thanks to BARC's collaborators)



quattor ...Major CERN developments

◆ Release build framework

- ETICS integration still missing

On hold

◆ Release 1.3 under preparation

- Namespaces + cumulative features and components enhancements

Done. Release 1.4 will follow ASAP

◆ NotD

- Framework re-architected to allow users to connect with several authentication mechanisms (NICE, KRB5, X.509).
- It also allows user to select the hosts to be notified using wassh-ssm.

Work in progress

◆ CERN manpower *still* limited

- ~1.4 FTE (counting 1 FTE contributed by CNAF and 0.4 contributed by BARC India)

-1 FTE from 02/2008 ☹

... but I'm available for new job proposals ;-)



◆ CDB

- Expose CVS functionalities to the client [#9734, #17827]
- Visualization/navigation tool [#24156]
- Selective synchronization among multiple servers [#24687]
- Suppress notifications [#26433]

◆ CDB2SQL

- Direct back-end interfacing, like native XML DB and Oracle
 - Avoid re-parsing XML profile just generated by PAN

No progress

◆ PAN Compiler

- Make dependency information available [#18005]
- New “data template” type in [#10622]
- Memory consumption with huge template sets.

◆ Generic

- Develop a generic, plugin-based login and authentication library [#17676]
- Developers' conventions and perl coding style document [#23236]
- Provide a common logging service [#28607]



- ◆ Support to fetch foreign profiles added [#10628]
- ◆ Support for multiple instances of Configuration object [#21846]
- ◆ Wish list:
 - De-privilege CCM execution [#17673]
 - Addition of `fill_template()` method to the base API [#28391]



quattor *Developments at CERN: NCM...*

◆ cdispd. Wish list:

- add global activation switch [#13484]
- should be restarted after changes in modules [#27529]

◆ ncd. Wish list:

- Automated web-based documentation for components **Work in progress**
- give access to current debuglevel to NCM components [#39451]
- Provide a way to force the reconfig of a node [#7791] **Pending: still desired?**
- Generic 'provides' for NCM components [#17681] **Pending: still desired?**
- update component includes and structure [#17928]
- add 'NOACTION_SUPPORTED' to NCM component [#20040]
- ncm-ncd should have a --skip option [#20619]
- NCM-components as downloadable agents [#21204]
- ncm-ncd should catch exiting components [#22409]
- ncm-ncd : improve handling of pre dependencies [#23814]

◆ template

- Added <DSSTFOREACH> (DiSk SorTed FOREACH) tag for fixing bug #26137. Still needed, Luis?

quattor *Developments at CERN: NCM components*



- ◆ No framework's changes.
- ◆ `ncm-fileystems` (Luis)
 - Used at CERN-CC for Xen-based paravirtualization
- ◆ `lib/blockdevices` (Luis)
 - Generic support for managing block devices in other components (see Luis's presentations)
- ◆ Wish list:
 - Document which file is modified by which component [#6279]: what about a **mandatory** tag in `config.mk`?
 - Insecure calls to `system()` in `ncm`-components leading to remote code execution [#21794]: please review your components!
 - cannot use "perl -c" to check components, need rebuild+install for any test [#22280]
 - allow for `%post/%pre/...` scripts for `ncm` component RPMs [#24506]

quattor *Developments at CERN: pan-templates*



- ◆ New schema for “enclosures”
- ◆ Fixed default values and `set_partitions()` doing nothing on logical partitions [#28899] (Luis)
- ◆ Add support for gLite and gLite WMS in schema (Michel)
- ◆ Support for md devices (Michel)
- ◆ Wish list:
 - Need a function to ease handling of multiple subnets in one site [#15577]
 - CDB schema and functions to be extended for handling different OS device mapping [#15611]
 - `smarter [n]push()` [#21012]
 - `configure/install` systems using I2O drivers on SL4 [#28131]
 - document Pan functions in the standard template set [#29955]. Proposal: a man page for each relevant template file



◆ SPMA/rpmt

- Do not log when in --noaction mode to spma log file
- Include new error assertion verification after running rpmt
- Wish list:
 - `pkg_add()`: kernel management could be better [#4468]
 - formatting of SPMA output [#6203, #16825]
 - SPMA should refuse to run if it detects an OS change [#10403]
 - spma should upgrade, and not deinstall/install, a package when arch is changed AND version is changed [#19934]
 - Defaults for userpkgs and userprio not reset [#24025]
 - spma gives up at the first IO error [#29029]

◆ SWRepSOAP

- Support for multiple repositories added
- Version check between client and server implemented

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- ◆ `cdb-tpl-view`
 - XML parser donated by the Lemon's guys
 - Extended to support *stages*
 - Not yet integrated:
 - `pangraph`
 - next `panc`'s functionalities



- ◆ CDB update
 - See Marco Emilio's presentation
- ◆ Quattor release management
 - See Marco Emilio's presentation
- ◆ `ncm-rac` for Oracle RAC cluster installations, contributed by IT/DES. Slides available [here](#)
 - Wrapper around Oracle's tools (usually operated manually)
 - Significant installation speed-up

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