



Quattor@CERN

Véronique Lefébure
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Deployment status overview

- Quattor instances in production at CERN:
 - “Main instance”: 6360 profiles
 - -1200 wrt March 2008 (old hw retired, new to come)
 - Of which ~1600 not-quattor-managed:
 - ~430 “standalone” machines (openlab, testbeds,...)
 - ~300 OS not supported (solaris, windows)
 - 390 enclosures (twin and blade systems)
 - 210 diskarrays
 - 60 diskshelves
 - In 140 clusters (same as March 2008)



Deployment status overview

- Main Instance Setup (CERN Computer Center)
 - CDB
 - Panc-v6 still used, panc-v8 tested, now ok
 - Is it safe to migrate ?
 - Did not try “new” push functions yet
 - panc-8.2.0-1: 1100sec/6365 profiles
 - CAKE version: cdb-2.1.2-1 (multi-threaded)
 - Namespaces used for SLC5
 1. /profiles, /repository
 2. /prod/pan, /prod/quattor
 3. /prod/components
 4. /prod/services
 5. /prod/os
 6. /prod/hardware
 7. /prod/monitoring/lemon



Deployment status overview

- Main Instance Setup
 - CDB (cont'd)
 - Multi-core CPU setup: still 4 cores
 - Memory issues solved (big repository slimmed down).
 - SPMA and Swrep-soap
 - Starting to have VO-dedicated swrep (in addition to the main one)
 - Added “archive” flag fonctionnality to SWRep-soap-client
 - Still no enforcing for RPM signing



Deployment status overview

- Main Instance Setup
 - CDB2SQL in the process of being improved:
 - was ~1 sec per profile → up to 2 hours for a full update !
 - Now max 10min for all profiles (python, 1 process per core)
 - CCM
 - ccm-2.0.3-1 deployed
 - SSL-based transfer of profiles fully deployed and monitored. Still http used as fallback



Quattor development activities

- Conversion of CERN-CC templates to namespaces on-going
- SLC5 configuration templates
 - Use of ncm-useraccess
 - New filesystem and hardware configuration schema
 - New ncm-sysctl
 - Selinux
 - Use of package lists from comps.xml
- Clean up of obsolete (orphan) CDB templates
- Security re-enforcement
 - Lemon sensor to run as non-root as much as possible
 - Taint perl mode for ncm-ncd



CERN-CC-specific activities

- Xen-based virtualisation
 - Being taken over by Ewan Roche
 - Need to upgrade to SLC5
- More and more CDB users
 - Acl management issue
 - Reinforced (remove admin rights) →
 - 60 acl groups (x2 of March 2008)
 - /var/lib/cdb/auth/cdb.acls: ~15000 lines
 - Faster now, good !
 - Still long apparent commit times because users queue
- Update to Quattor 1.3 core templates:
 - Work well advanced
- New CDB profile template structure convention in place for SLC5 (use of OS, ARCH, SVCCCLASS env. Variables)
- Needed: tutorials