



INFN-T1 migration to scdb

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8th Quattor Workshop

Bruxelles

Reason to migrate

- After M.E. left CNAF, no significant update to cdb has been deployed
- Even if working good, we were feeling to be on a dead end
- Several scdb feature were appealing
 - Quatview, eclipse integration, profile cloning

How we did it

- Before summer, installed a quattor server to test installation and conversion of tpls
- Followed the documentation on quattor web site, it's rather complete
- Our template set was already aligned to standard layout, only minor changes were required

Migration process (1)

- The main goal was to reduce downtime to the minimum
 - Storage people are always very demanding
- Installed scdb on the same quattor server that hosts cdb
- Slowly migrated clusters from one “world” to the “other”
 - Used a fake dir for scdb xml profiles in the beginning

Migration process (2)

- Process started 7-oct-2009 (wed) with common templates (os, standard, site)
- Legacy cluster came first (wed)
- Farming, babar and lhcb_t2 followed (thu, fri)
 - In the meanwhile I removed the corresponding profiles from cdb, to be sure users don't get confused
- On Friday cloning of WNs was completed
- During the week-end monitored site availability

Migration process (3)

```

chierici@obrien: ~ - Shell No. 2 - Konsole
Session Edit View Bookmarks Settings Help
<cdbop@quattorsrv.cr.cnaf.infn.it: ~/lun>
<cdbop@quattorsrv.cr.cnaf.infn.it: ~/lun>
<cdbop@quattorsrv.cr.cnaf.infn.it: ~/lun>
<cdbop@quattorsrv.cr.cnaf.infn.it: ~/lun>
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<cdbop@quattorsrv.cr.cnaf.infn.it: ~/lun>
<cdbop@quattorsrv.cr.cnaf.infn.it: ~/lun>
<cdbop@quattorsrv.cr.cnaf.infn.it: ~/lun>
<cdbop@quattorsrv.cr.cnaf.infn.it: ~/lun>
<cdbop@quattorsrv.cr.cnaf.infn.it: ~/lun>
<cdbop@quattorsrv.cr.cnaf.infn.it: ~/lun> del babar/*

```


Migration process (3)


- On Monday I migrated storage clusters
 - This required a major re-organization of the templates as they were “living” into a segregated name-space
 - Some duplicates were found (and not solved!)
 - Had to downgrade lemon tpl
 - Some concerns came from storage people

Final result

- Quattor server migrated, not reinstalled
 - Slc4.8
 - Svn 1.4.6
 - Scdb 2.3.2
 - Websvn 1.1.2 to access db ro
 - Quatview
- Generic quattor front-end machine still available to users




WebSVN

SUBVERSION REPOSITORIES  QUATTOR SCDB

 Quattor SCDB

[/] [trunk/] [cfg/] - Rev 472

Rev

 Changes |  View Log |  RSS feed









































LAST MODIFICATION

Rev 472 2009-11-03 15:14:08

Author: italiano

Log message:

nuovo profilo per 131.154.195.158

Path		Last modification	Log	RSS feed
  branches/	1	41d 04h chierici	 View Log	 RSS feed
 tags/	471	1h 09m sdalpra	 View Log	 RSS feed
 trunk/	472	2m italiano	 View Log	 RSS feed
 cfg/	472	2m italiano	 View Log	 RSS feed
 clusters/	472	2m italiano	 View Log	 RSS feed
 grid/	448	4d 17h chierici	 View Log	 RSS feed
 os/	461	23h 59m italiano	 View Log	 RSS feed
 sites/	463	23h 19m chierici	 View Log	 RSS feed
 standard/	312	14d 00h chierici	 View Log	 RSS feed
 storage/	469	1h 26m ronchieri	 View Log	 RSS feed
 tools/	7	27d 01h chierici	 View Log	 RSS feed
 external/	5	27d 03h chierici	 View Log	 RSS feed
 src/	2	41d 03h chierici	 View Log	 RSS feed
 utils/	2	41d 03h chierici	 View Log	 RSS feed

Minor problems

- **apr rpm, svn dependency, broke aii-installack mechanism**
 - Had to downgrade to 0.9.12 version
 - Thanks to Michel for immediate feedback
- All our desktops (and laptops) seem to be inadequate for using eclipse as a working tool
 - Shell+editor still preferred

Feedback from users (1)

- Better than I expected
 - Had prepared an internal wiki in advance, users seem to have read it
 - Svn is already well known among cnaf staff
 - Users like to have the entire tree checked-out
 - The compile/commit/deploy process has been assimilated

Feedback from users (2)

- Ant seems to demand too many resources
- Users don't like to recompile changes made by others (e.g. after svn update)
- Feature request: is it possible to recompile only a cluster (or a subset)?
- For some users new approach is bad

Major differences

- Compiling a single profile, e.g. a test node, requires almost double the time compared to cdb ☹️
- If for any reason someone commits a wrong template, everyone else is blocked until the error is corrected ☹️
- The “commit” operation does not compile profiles
 - More operations are required
 - Upgrading a repository tpl does not require to recompile everything 😊
- cdb approach is more user-friendly, scdb is more programmer-friendly

Summary

- We are generally happy about the migration
- The migration process did not cause major problems and run smoothly
- Scdb is more appealing thanks to many features
 - Profile cloning speeded-up compilation time tremendously
- Even if we're not using QWG we feel of the party now