

Quattor Usage at Nikhef

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QWG workshop Bologna – March 2008

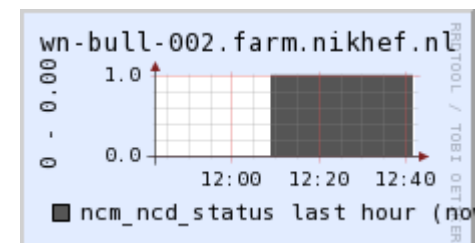
- Projects:
 - EGEE grid
 - Tier-1 for LHC (with SARA)
 - National projects (VL-e, BIG GRID)
- Sites:
 - NIKHEF-ELPROD: ~150 hosts (~400 cores)
 - Including main (LCG) services
 - ***April 2008: 250-300 hosts?!***
 - Installation Test Bed: ~15 nodes
 - Similar setup as production
- Staf:
 - 2.5 FTE (4 people) / 1.25 (2) Quattor-aware/friendly
 - 0.5 FTE hardware support

- Install with Quattor:
 - Nearly all grid machines (CentOS 3, 4, 5 i386)
 - Not: core server (LDAP, NFS user homes), Quattor server
 - **Generic x86-64 servers (trivial)**
- Configure with Quattor (ncm-components):
 - Basic Linux services
 - Grid Middleware using Yaim via ncm-yaim
 - Local modifications to standard Yaim
 - Requires frequent patching
 - Torque + Maui

- Still using home-cooked namespace layout :-(
 - Lacking time to investigate the required changes
 - Intention to switch to QWG
 - Benefit from & contribute to community effort
 - ... interest from *another* site
 - Namespace organization:
 - 3 facilities (clusters): PRD, ITB, test
 - Will this scale?
- Straightforward implementation Xen guests

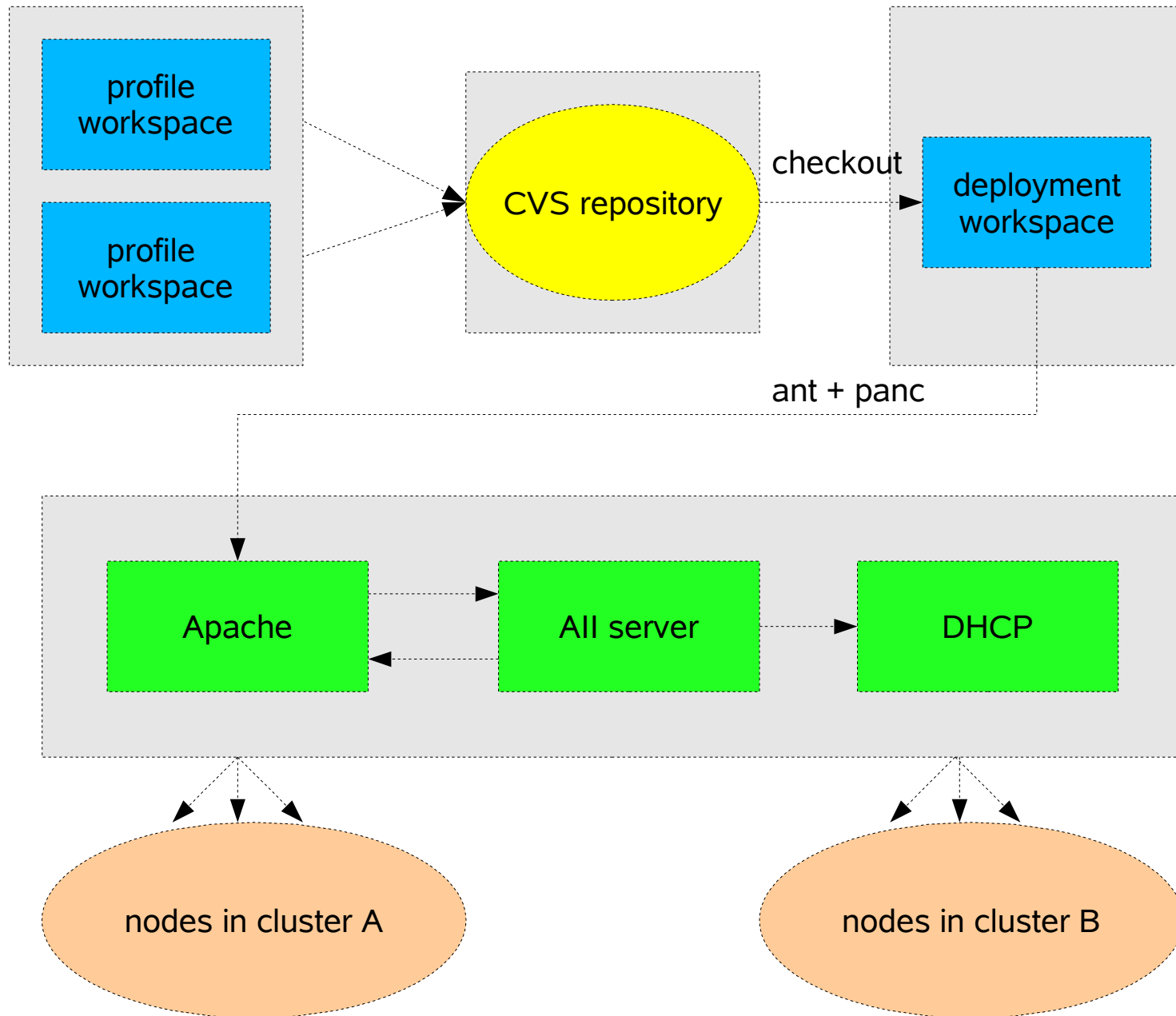
- Result of ncm-ncd
 - /var/log/ncm/ncd.log
 - Result of last ncm-ncd run
 - Time stamp of last run
 - Check ncm-cdispd still running
 - Ganglia: overview ("*did all nodes execute ncm-ncd?*")
 - Nagios: notification when non-zero exit
- Is ncm-cdispd running (NRPE)?
- How?
 - Install rpm(s) at Quattor clients
 - Nagios server: (still) manual configuration
 - Ganglia server: nothing to do!

```
wn-bull-002.farm.nikhef.nl
ncm_ncd_finished:
2008/03/12-18:45:32
```



- Pan compiler v7
- *AII version 2*
 - See dedicated talk on upgrade
- SPMA
- “SCDB--”:
 - SCDB-based (compile, deploy, update repos)
 - no Subversion
 - shell script hiding ant calls:
 - makexprof -f prd
 - pushxprof -f itb tbn14 tbn16
 - some patches to build.xml

- Scaling issues
 - Currently one Quattor server:
 - DHCP
 - TFTP
 - Software repositories
 - NFS server for /osinstall and SCDB root
 - Additional Quattor VM build host
 - Compile profiles (faster because more CPUs)
- Questions
 - How to distribute repositories?
 - How to distribute load for TFTP?
 - Preferably no master-slave setup
 - Already resolved at other sites?



- Not many changes since last workshop
 - Setup works pretty well
 - Monitoring
 - AII v2
- Issues:
 - Pan compiler performance: remains concern
 - Scaling problems
 - Occasionally reconfiguration does not occur
- Future:
 - Closer SCDB integration
 - QWG templates?
 - Scaling...