

QWG Templates Update

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Outline

- ⦿ Last releases and their new features
- ⦿ Release cycle
- ⦿ New ncm-spma
- ⦿ Pakiti integration
- ⦿ SCDB

Usage Status Changes

- ◉ Israel: gave up with the idea of using Quattor to share the management of several sites
 - › Not sure about the reason, except their lack of time
- ◉ Romania: 1 site mentioned they were using it but still need to establish contact
- ◉ Senegal stopped using Quattor, back to YAIM
 - › Not sure this will improve their site reliability...
 - › Problem beyond Quattor
- ◉ 1 new site in France, quite happy (Univ. of Lille)

Last Releases

- ◎ New releases: gLite-3.2.0-4 and gLite-3.1.0-9 (9/2/11)
 - › gLite 3.2 is the main release : new features only in it
 - › Many things still in sync: when required (eg. VO config) or easy
 - › 3.1 still required for LCG CE, WMS and MyProxy
- ◎ Branches updated actively
 - › Since January: twice a month at least
 - › Can be considered as production quality: doesn't exclude minor problems, fixed quickly
 - › Branch updates announced on the quattor-grid list

Release Cycle

- Until now, it has been difficult to have more than 2 release a year
 - › Some overhead to produce the appropriate change log, release notes...
- No real impact on sites as the branch is considered the production release
 - › Significant testing before merging trunk changes into a branch
- Release are important for visibility and should ideally be used for production
 - › Current goal: 1 release every 2 sprints (~3 months)
 - › More collective involvement through the scrum process may also help to share the release manager role

Main Changes

- For details, see 3.2 branch log
 - › https://trac.lal.in2p3.fr/Quattor/log/QWG/templates/branches/gLite-3.2?action=stop_on_copy&mode=stop_on_copy&rev=5626&stop_rev=5296&limit=100&verbose=on
- Most important changes and new features
 - › VO configuration major cleanup, in particular in pool account support for specific FQANs
 - Easy to say “use pool accounts for everything except SW mgr”
 - › New machine types in 3.2: APEL, ARGUS, LB
 - VOMS in progress
 - › Support for .lsc files to configure VOMS client: reduce impact of VOMS server certificate changes

ncm-spma v2

- ⦿ Major schema change to better support multiple architectures
 - Version is now per architecture
- ⦿ Chicken and egg problem: 2-phase upgrade
 - 1.8: deploy new functions with old schema
 - Able to deal with new schema
 - Deploy 2.0 when all machines have picked up 1.8
 - Else they won't be able to upgrade...
- ⦿ How to release this in QWG still a question
 - Currently 1.8 is distributed but this is not a guarantee if a site doesn't deploy it

gLite Templates ToDo

- Part of Quattor backlog
 - > <https://trac.lal.in2p3.fr/Quattor/wiki/Development/Scrum>
 - > Actions in progress in sprint backlog
- New machine types for gLite 3.2
 - > Mainly VOMS (soon), WMS (when released)
 - > FTS: need RAL to do it as it is the only one to run it
- Support YAIM to configure gLite services
- New handling of packages based on (improved) default value definitions

Other Related Tools

- No real plan to do it yet... lack of manpower
- A script to check a RPM list is satisfied by an existing (XML) profiles
 - › RPM list as a text file, not a complete list
 - › Different purpose than checkdeps
- Redesign/rewrite directory-sync ?
 - › Support non-Linux OS, don't rely on a complex 'find'
 - › A python script created but doing nothing...

New Handling of Packages

- ⦿ Current implementation has drawbacks
 - › Need to reapply OS updates every time an OS-provided RPM is added to the configuration
 - › Lot of pkg_repl for the same packages: very inefficient
- ⦿ New approach based on default versions
 - › Define default version of each possible package in a OS/gLite version
 - › Define the updated default versions for each update/errata level
 - › Very efficient as it involves only nlist entry replacement
- ⦿ For each service define the list of packages to use without an explicit version
 - › Pkg added in the configuration without a version
 - › Version resolved at the end of the configuration process
 - Just before resolving repositories

Documentation

- ◉ <https://trac.lal.in2p3.fr/QWG>
- ◉ Probably still too much a personal effort...
 - > A few contributions in the last months
 - > Feel free to contribute!
- ◉ Review of existing/missing part required done by Andrea
 - > Action followed up during standup (weekly) meetings: no progress yet
 - > Merge between former MediaWiki content and Trac still to be done (highest priority?)
 - E.g. 2 sections for developers
 - More generally "Quattor Toolkit" section content need to be reshuffled

Pakiti integration

- Full coverage of all nodes managed by Quattor
 - › Pakiti client installed/configured on every machine as a RPM
 - › Installed as cron reporting to the server configured
 - › Available in last branch versions
- Pakiti web interface allows easy identification of nodes without Pakiti or not reporting properly
 - › Either absent from node list or with a last update date too old
- Pakiti server configuration included
 - › Still some minor issues, caused by config embedded into the RPM (eg. cron entry)

Open Questions

- ⦿ Have clearly identified QWG subsets
 - › Almost the case already: OS, gLite, Monitoring, All...
 - › How to package these subsets?
- ⦿ No-grid templates effort didn't succeed
 - › Work in progress, mainly by Christos, but no time to complete it in the last 2 years
 - Web server, smtp server...
 - Mainly SL4-based?
 - › Do we really need such a release or properly identified (packaged?) subsets are enough?

Number of Packages

- ⦿ Reducing the number of packages has been on the todo list for quite a long time and still no progress
 - SPMA/rpm issue because of too many open files
 - Security issue with unused vulnerable packages installed
- ⦿ Short term: pkg_del() everything added to the configuration but not useful and reported as vulnerable by Pakiti
- ⦿ Medium term: rebuild RPM lists based on core group only

SCDB

- Main change: full rewrite of VOConfigTask
 - Available only for SCDB 3.x (SVN 1.6)
 - Used to generate VO-related templates from CIC portal
 - Fixes all known issues
 - Need to be updated for the new CIC portal export format...
- Change in site-customization of VO templates
 - Site-specific VO templates no longer included as part of the standard ones
 - Instead they are merged with standard template contents
 - Includes ability to merge voms_servers and voms_mappings entry attributes