

QWG Templates Status

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- QWG Components
- Changes
- Errata Management
- Planned Changes
- Release policy
- Contributing to QWG
- Conclusions



- Sites using QWG templates increasing : several sites with 200+ machines
 - GRIF : 6 sites, 300 machines, grid + non grid usage, 1 SCDB
 - +250 machines being installed (LAL) and 50-100 expected by end
 - 6 French T2/T3s : 1 SCDB per site, 10-50 machines/site
 - BEGRID : 6 sites, 150 machines, 1 SCDB
 - Irish grid : 15+ sites, 350 machines, 1 SCDB
 - UAM : 200 + 500 nodes, 3 clusters, 3 SCDB
 - Valencia : QWG, SCDB
 - PIC : ?
 - DESY : ?
- BEGRID and Irish grid migrated to (almost) standard QWG
 - Proof of "flexibility"



- Standard : all templates coming from Quattor core not QWG specific if maintained by QWG
 - Quattor core templates unmodified
 - quattor/, components/, pan/
 - hardware/
 - monitoring/lemon/ : developed/maintained by C. Leroy (DAPNIA)
- OS : one set of template per OS version
 - Rely on some standard/
 - No dependency between OS versions
 - Hooks for OS configuration required by gLite (config/glite)
- Grid middleware : one set of template per gLite version
 - Nothing OS related : located in OS template hooks
 - Support for mixed OS versions in 1 cluster
 - Only 1 gLite version per cluster
- Site configuration outside QWG templates

- New OS versions : SL 4.4, SL 4.5, SLC 4.5...
 - End of support for SL 3.05 (non namespaced)
 - End of support for SL 3.07 and SL 4.3 ?
- All templates namespaced
 - Changes backward compatible, except for direct use outside grid templates
 - A few trivial edit may have been necessary in 'include'
- Name of namespaces and templates stabilized
 - rpmlist/ renamed rpms/ in SL 3.08 and SL 4.x
 - Template name is group name without any prefix
 - os/ renamed config/... (os/, glite/version/,...) in SL 4.4+
- Quattor client configuration moved to standard/ with a per OS version hook
 - A couple of RPMs depend on OS version/arch
- Use of panc v7 new features (if_exists())

Key feature for backward compatibility of layout changes

- gLite 3.1 templates
 - 1 specific branch : glite-3.1
 - RPM templates restructured to support multiple OS arch
 - Extendable to multiple OS version if required
 - New layout is rpms/*arch*/config.tpl
 - rpms/config.tpl is the "public" template and in charge of doing what is required for the service (force an architecture, select based on arch and/or version...)
 - 3.0/31 templates changed synchronized
- All templates now moved to namespaces
- Use of panc v7 new features (if_exists())
 - Key feature for backward compatibility of layout changes
- All gLite updates
- VO configuration : support for several VOMS servers
 - Support for 2 certs per VOMS server : easier cert updates
- Several new configuration options

- Most of the templates imported from CVS
- Quattor client configuration in quattor/client
- All updated to last version
 - Used to be a very old version
 - Variables defined and documented for All configuration
- Conversion to namespaces complete
 - Some old hardware templates still non namespaced
 - Hardware templates sharing with non QWG ?
- Hardware templates : move to generic templates when possible
 - E.g. : ram, disk, ... with size given in a create parameter
- Monitoring
 - Open to design adjustment and sharing with non QWG
 - Add Nagios (in progress at DAPNIA others ?)

- Already there for a long time for gLite
- 1 template included at end of configuration and doing pkg_only (don't add, only replace)
 - rpmUpdates.pl produces a template with an entry for the last version of any RPM found in errata RPM repository
- 1 distinct errata template for each gLite update
 - gLite update to deploy can be selected on a per node or per cluster basis
 - One default update defined in each QWG release



- A few specificities
 - No version numbering of errata : only one template mod when new RPMs are available (errata.tpl)
 - Kernel modules must be added instead of replaced
 - 'multi' option of pkg_xxx() functions
 - pkg_only() doesn't work with kernel modules : RPM name contains the kernel version
 - Will add a new option to pkg_xxx() functions
- Variable `PKG_DEPLOY_OS_ERRATA` to control deployment
 - errata.tpl part of standard OS templates and updated regularly
 - Configured by `config/os/updates.tpl` : also includes `rpms/updates.t`
- Variable `PKG_OS_ERRATA_TEMPLATE` to use an alternate template name
 - May allow some site « versioning »
- A cron for unattended download of new errata RPMs

- Both 3.0 and 3.1 as long as possible and main machine types are not available in gLite 3.1
 - End of the year ?
- Pool accounts for VO roles
 - Introduced by YAIM last spring
 - Backward compatibility very difficult to implement
 - Accounts numbering
 - SW area permission : wanted to look at using ACLs
 - Deeper reengineering of pool accounts management ?
 - How to add more roles without breaking compatibility ?
 - Move role accounts after normal accounts ?
 - Need to keep UID/GID consistency across several machines and with permissions on existing files/directories
 - Use LDAP or other account/pwd distribution mechanism ?
- Dummy WN integration (Stijn)
 - One WN XML profile included into actual WNs : significant reduction of compile time

- MAUI : define a customizable default configuration
 - Currently entirely site specific : only an example provided
 - Only if MAUI_CONFIG is undefined
 - MAUI_SITE_CONFIG to add to base configuration
 - Ability to enable/disable short deadline jobs support
- ncm-glite removal
 - ncm-glite was a generic component for managing gLite services
 - Schema generated from gLite XML configuration file
 - Action implemented with standard Python script
 - Unfortunately, support for both has been dropped
 - Will probably require a few more components or enhancements to some of the existing ones
- New machine types : WMS 3.1, AMGA, CREAM CE...
 - WMS 3.1 almost ready : first without ncm-glite

- 1 QWG branch made of templates for MW, OS and other standard templates
 - 1 branch per gLite version : almost stable
 - Each branch contains working examples
 - Development branch is 'trunk' : don't expect it to work at each rev
 - Regularly updated with fixes, new features and gLite updates
 - Revisions in branch consist of merge from trunk
 - Main changes announced in LCGQWG mailing list
 - Try to update branch with gLite/CA updates before 1 week
 - Examples compiled after each update of a branch
- QWG releases announced in LCGQWG site roadmap
 - 1 milestone per release containing a description of changes
 - Next release milestone contains a description of planned changes and work already completed
 - Associated tickets to describe planned/done changes (not intended support)



- QWG (tagged) releases
 - A stable snapshot : always out-of-date... How important are they ?
 - Currently 1 release every 2 months
 - Would site prefer more frequent tagged releases ?
 - Each release tag based on MW version : currently 3.0.2
 - QWG release number doesn't match gLite update numbers
- Compatibility, compatibility, compatibility...
 - My personal obsession...!!!
 - New and changed features should not required any change to an existing configuration if not using it
 - A success for 2 years...



Follow copies
 Show only adds, moves and deletes
 Show full log messages

Added
 Modified
 Copied or renamed

View changes

		Rev	Chgset	Date	Author	Log Message
<input type="radio"/>	<input checked="" type="radio"/>	@1461	[1461]	03/10/07 10:54:53	jouvin	Merge changes from trunk:1432-1459, mainly : * Update ncm-pbsclient; Add ...
<input checked="" type="radio"/>	<input type="radio"/>	@1460	[1460]	03/10/07 10:47:11	jouvin	Revert previous mod
<input type="radio"/>	<input type="radio"/>	@1446	[1446]	03/06/07 16:14:30	sweirdt	iihe: preparations for new QWG tag v2
<input type="radio"/>	<input type="radio"/>	@1433	[1433]	03/05/07 17:54:53	jouvin	Merge changes from trunk:1428-1432, mainly : * Update ncm-pbsclient; Add ...
<input type="radio"/>	<input type="radio"/>	@1429	[1429]	03/04/07 23:29:53	jouvin	Merge changes from trunk:1426-1428, mainly : \ * Add ncm-accounts as a pre ...
<input type="radio"/>	<input type="radio"/>	@1427	[1427]	03/04/07 23:10:32	jouvin	Merge changes from trunk:1424-1426, mainly : \ * Add ncm-accounts as a pre ...
<input type="radio"/>	<input type="radio"/>	@1425	[1425]	03/04/07 19:14:12	jouvin	Merge changes from trunk:1421-1424, mainly : \ * Miscellaneous fixes for SL ...
<input type="radio"/>	<input type="radio"/>	@1422	[1422]	03/04/07 18:29:14	jouvin	Merge changes from trunk:1418-1421, mainly : * Rename VO param ...
<input type="radio"/>	<input type="radio"/>	@1419	[1419]	03/04/07 16:27:36	jouvin	Merge changes from trunk:1336:1418, mainly : <u>Main changes</u> : * Add ...
<input type="radio"/>	<input type="radio"/>	@1337	[1337]	02/16/07 15:39:53	jouvin	Merge changes from trunk:1332-1336, mainly : * Fix CE_OS_xxx variable ...
<input type="radio"/>	<input type="radio"/>	@1334	[1334]	02/16/07 15:16:29	jouvin	Merge changes from trunk:1318:1332, mainly : * Remove gLite specific ...

Changeset 1419

Timestamp: 03/04/07 16:27:36 (1 week ago)
Author: jouvin

Message: Merge changes from trunk:1336:1418, mainly :

Main changes :

- Add gLite update 14 and 15 ([r1370](#))
- Support for a Torque cluster with worker nodes in a private subnet (Torque v2, variable CE_PRIV_HOST) ([r1343](#))
- Torque v2 client : directPaths entries are generated from WN_SHARED_AREAS ([r1344](#), [r1377](#), [r1415](#))
- VO Configuration : allow VOS_SITE_PARAMS[some_vo] to be a nlist with direct values instead of a template name ([r1375](#))
- VO Configuration : support for locking/unlocking accounts ([r1376](#))
- RPM errata list for SL 3.07 and SL 3.08 ([r1368](#), [r1372](#))

Miscellaneous changes and fixes :

- Torque v2 client : miscellaneous fixes ([r1345](#), [r1346](#), [r1348](#))

[r1350](#) | eknoops | 2007-02-20 10:36:22 +0100 (Tue, 20 Feb 2007) | 1 line

- VOMS server certificate updates (FNAL, ESR) ([r1361](#), [r1362](#))
- Fix JAVA_LOCATION for SL 4.4 ([r1362](#))
- Add missing RPMs for VOBOX required by gLite update 13 ([r1369](#))
- Update VO params for vo.dapnia.cea.fr ([r1371](#))
- Various fixes to vo/functions.tpl ([r1374](#), [r1414](#))
- Define Quattor client RPMs in a template in standard/ rather than per OS and upgrade ccm to support panc v7 ([r1416](#), [r1417](#))

View differences inline

Show lines around each change

Ignore:

Blank lines

Case changes

White space changes

- Contributions are welcome...
 - Some regular non LAL contributors in the last months
 - Contribution must be done directly in QWG repository
 - Patches sent by email are too much work to integrate
 - Ask me for an account to get write access to QWG repository
 - A contribution can range from new HW support to more sophisticated changes : no need to be a certified expert
- All contributions MUST be made to the trunk
 - Trunk is a log of work in progress, no guarantee to work at every revision
 - Try to use Trac wiki syntax in your commit messages
 - Each changes are reviewed before being moved to a release branch by the "release manager" (me currently...)
 - Expect an email if I have difficulty with your proposed change...
- Tools and procedures documented in 'Developers' Corner' on the wiki
 - Important to follow them to avoid "false differences"

- QWG templates succeeded to be a flexible, off-the-shelf set of templates for configuring OS and MW
- Work in progress on several non-covered areas : non-grid usage, virtual machines...
 - Need to release them as MW templates
- Tagged release cycle need to be adjusted base on site feedback
 - Are site comfortable switching between branch and releases ?
- Enlarging contribution is one of the main challenge for next year
 - SVN leverage the possibility for wide contribution
 - Every one can contribute its local modifications and improvements, not only experts !
 - At some point, release manager role may be shared between several people



- QWG site : <http://trac.lal.in2p3.fr/LCGQWG>
 - Description of QWG templates (OS and MW)
 - Description of SCDB
 - Description of PAN language
 - 3 areas : documentation, release notes (about releases) download and installation instructions
 - Actively updated : in fact often in advance with releases...!!!
 - Contributors are welcome... send me your certificate DN
- Mailing list : mainly QWG mailing list
 - Announcement of new releases (not beta) also sent to Quattor mailing list
- Support through Savannah ELFms
 - Trac tickets not used for QWG support but for development planning

