eGee

quattor
Tools for quattor

Stephen Childs
Trinity College Dublin & Grid-Ireland

6th quattor workshop
28th September 2008

www.eu-egee.org

Information Society
and Media

Enabling Grids for E-sciencE

- **Goal of session**
  1. Identify and categorise existing tools within community
  2. Identify any duplication
  3. Analyse tool requests from survey
     - Which can be met by existing tools
     - Which are invalid requests
     - Which represent genuine needs
  4. Coordinate future tools development
     - Allocate effort (avoid duplication)
     - Decide on hosting (and packaging)

Existing tools: debugging

Tool name	Description	Hosting	Comments
panc logging tools	Analyse tpl includes, performance, fn call graphs	QWG & SF	Works with panc 8+ Possible enhancements: more output formats, integration with Eclipse
pangraph	Analyse tpl includes and generate graph	CERN CVS	Obsoleted by panc tools?
pantree	Analyse tpl includes and generate tree	CERN CVS	Obsoleted by panc tools?
checkdeps	Check consistency of package lists in profiles	QWG	Works on recent YUM, but fragile
gencompswebdoc*	Generate html documentation for components	CERN CVS	Could be used for other quattor software
cdb-tpl-view	"Simple template viewer"	CERN CVS	"does not yet support namespaces", is this tool used at CERN?
cdb-getclusters	"retrieve clusters and hosts ... from cdb sql database"	CERN CVS	Looks very CERN-specific?
lld2pkgs, rpmcheck	Extracts list of RPM URLs from profile; checks via fake install	QWG	Same functionality is in checkdeps? Does it work? How fast is it?

* in quattor-sw-util package

Enabling Grids for E-sciencE

Tool name	Description	Hosting	Comments
xmldb2hw	Generate HW inventory from set of XML profiles	QWG	Limited. Will be superceded by quatview?
xmldb2pkgs	Generate RPM list from set of XML profiles	QWG	Obsoletes lld2pkgs?
compare_xml	Compares two trees of XML profiles	QWG	How hard would it be to do real XML diffs?

* in quattor-sw-util package

Tool name	Description	Hosting	Comments
rpmConflicts	Scans RPM directories and reports on conflicts	CERN CVS	
fill_swrep_server		CERN CVS	Does anyone use this?
getpkgarch	Decide which architecture to use for multi-arch packages	CERN CVS	What is the use case?
quattor-etics-add-component	Generate and upload ETICS config for components	CERN CVS	
mac	Tool for capturing MAC addresses	CERN CVS	
quattor-client-install	Installs quattor SW on non-quatttor machine	QWG	For converting non-quattor hosts
AII web interface	Web page for setting nodes to boot/install	Not in VC yet	Needs more work

* in quattor-sw-util package

Tool name	Description	Hosting	Comments
buildOSTemplates	Generate OS templates for RH-style distro	QWG	Wrapper for rpmRequires, rpmProvides, comps2pan
createPackagesTemplate	Query list of RPMs and generate pan package list	QWG	Used for generating rpmlists for CA and gLite
html2pan	Scans HTML for RPM refs, converts to Pan	QWG	Is this still needed?
generate-hw-templates	Generate Pan HW templates based on CSV file	QWG	Useful outside LAL?
rpmq2pan_pkg*	Query installed RPMs and generate Pan package list	CERN CVS	For converting non-quattor hosts
groupandpasswd2tpl	Query user config and generate pan accounts spec	QWG	For converting non-quattor hosts
rpmErrata, rpmUpdates	Generates tpl with pkg_ronly for applying updates	QWG	Difference between them? Could they be merged with createPackagesTemplate?
updateComponent	Generates tpl with component code from CVS	QWG	Looks very QWG-specific?

* in quattor-sw-util package

Enabling Grids for E-sciencE

Tool name	Description	Hosting	Comments
ncmtplconv*	Convert "flat" components to use namespaces	CERN CVS	Shouldn't be needed for ever?
check-compile.sh	Downloads and compiles QWG trees	QWG	
quattor build tools		CERN CVS	

* in quattor-sw-util package

Tool requests from survey

Tool name	Comments	Existing tools
GUI (x3)	"It would be nice if you implement hierarchical templates management and automatic importing of them in the configuration database." (from a CDB user)	Eclipse?
Pan parser for doxygen		
The base "getting started tools"	Not quite sure what this means ...	
CDB (cdbop) grep functionality, access to dependency information	Depends on discussion about CDB development ... Tools exist in SCDB world Also "package dependencies checker package version compare by rpm algoritm"?	checkdeps, grep!
A tool to display the inclusion tree of tpls	Also "A tool to understand how templates are related"	panc v8 logging tools
Having the possibility to restore a machine configuration to a given date in the past.		Just revert in configuration DB and deploy?
XSL stylesheets for visualization of node profiles so that they can be viewed in a browser.		

- "Better error handling/diagnostics and resiliency"
- "Comprehensive documentation. Slides are NOT documentation."
- "I think good documentation is at least as important as new tools."

- **Do we need a GUI?**

- **SCDB users have a GUI: Eclipse**
  - Can interact directly with SVN repository
  - Syntax highlighting (broken on 64-bit though ...)
  - Can initiate deployment
  - Click through from compilation error messages
  - I'm sure other tools could be integrated too ...

- **CDB users?**

- **Personal opinion: focus on improving Eclipse integration**
  - Benefit from work on Eclipse
  - Effort of developing own GUI would be huge and better spent elsewhere

Enabling Grids for E-sciencE

- **We actually have a lot of tools spread across**
    - CERN CVS
    - LAL QWG
    - Local tools?

- **We need to rationalise them**
    - Merge duplicate functionality
    - Put in one location
    - Package by function? (e.g. tools for "quattorising" a machine together)

- **Need to document recipes (on wiki FAQ page?)**
- **Start by converting this PPT into wiki form**
- **We have more documentation than you'd think**
    - Again, needs rationalisation
    - SF documentation area for HTML?