

Quattor @ LCG T2 Workshop

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Introduction...



Agenda page

Goals

- To give an overview of the Quattor tool suite and its application to Grid services configuration and administration
- To illustrate the potentials of Quattor in a Tier2 environment

Topics

- Overview of Quattor architecture and modules
- How to manage the configuration of large sites
- Software package deployment and configuration of Grid services (LCG and gLite)
- Experiences coming from running Quattor instances

...Introduction

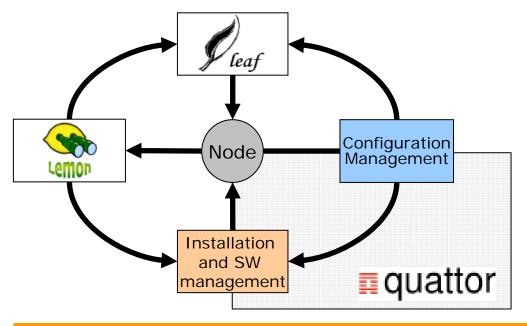


- The "level" of this tutorial is intermediate
 - **◆** Basic understanding of ☺
 - Unix service management
 - Grid services
 - versioning-based authoring
 - Not/minimally addressed
 - → low-level installation tasks
 - implementation issues
- Tutorial "format"
 - Mostly slides
 - Interactive demo sessions
 - No practical exercises ⊗ (sorry, not enough time/resources!)
 - → A whole afternoon for discussions, Q/A and how-to trials ②

The ELFms project

quattor

- <u>Extremely Large Fabric management</u> <u>system (ELFms):</u>
 - Quattor: automated installation, configuration and management of fabric nodes
 - + Lemon: system and service monitoring
 - **★** Leaf: hardware and state management





- "Target" system: fabric of heterogeneous nodes
- Goal/challenge: scalability to O(10k) nodes
- High modularity for different usage scenarioes
- Extensible to accommodate new services

Quattor around the world...



- Latest version is *Quattor 1.2*
- Usage statistics as of March, 3rd 2006 (see also the latest poll results):
 - 19 production instances over 40 sites across Europe and Asia
 - → 9 x for local services (4 x also for LCG)
 - → 14 x for LCG, with management based on
 - 6 x QWG only
 - 3 x YAIM only
 - 5 x QWG and YAIM
 - → 2 x O(1000) nodes (CERN-CC, CNAF), 8 x O(100) nodes, 9 x O(10) nodes
 - → 1 x business-oriented, remaining ones for HEP projects
 - → Mostly on SL3/i386; SL4 and x86_64 are coming
 - #managed nodes >6400

...Quattor around the world



- Many people say good of it ©
 - "Quattor rocks"
 - "Keep up the good work"
 - "Is a very good tool"
 - "Quattor is very useful"
- But...
 - Steep learning curve
 - Complexity of configuration data
 - "Not good documentation"... well, not really! To be improved, sure.
 - "Tutorial would be appreciated"... here we go!
- That's why we would like you to
 - Try it!
 - Give your constructive feedback, and...
 - Publicize it ;-)



http://quattor.org