

Quattor Status Report

Michel Jouvin

LAL, Orsay

jouvin@lal.in2p3.fr

<http://grif.fr>

October 11, 2010

Quattor Workshop, RAL

Outline

- Survey
- Monthly meetings
- Contributors
- Conclusions

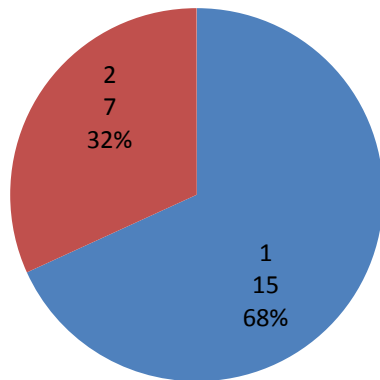
Quattor Survey

- Reflects situation at end of September 2010
- 22 answers from different sites in 10 countries
 - Including 1 non-European country (China)
- Most questions with a limited set of answers for easier analysis
 - But no accuracy at the % level
 - 1 site ~ 4.5%
- Quattor managing 40K machines
 - Based on the sites who answered
 - ½ at MS

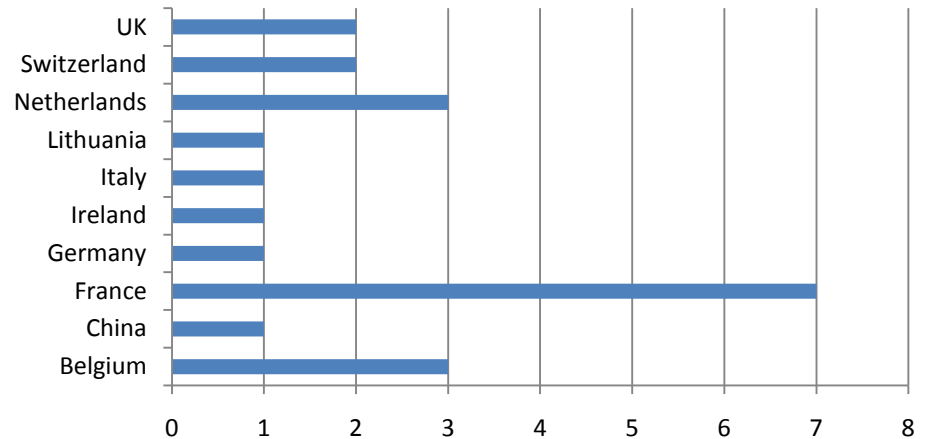
Site Profiles

- From small to very large
- Most sites running only one production instance

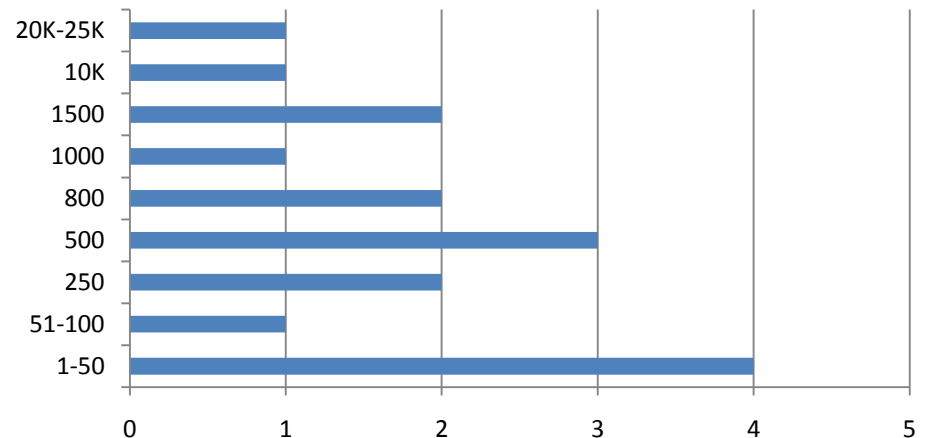
Number of Instances per Site



Site per Country



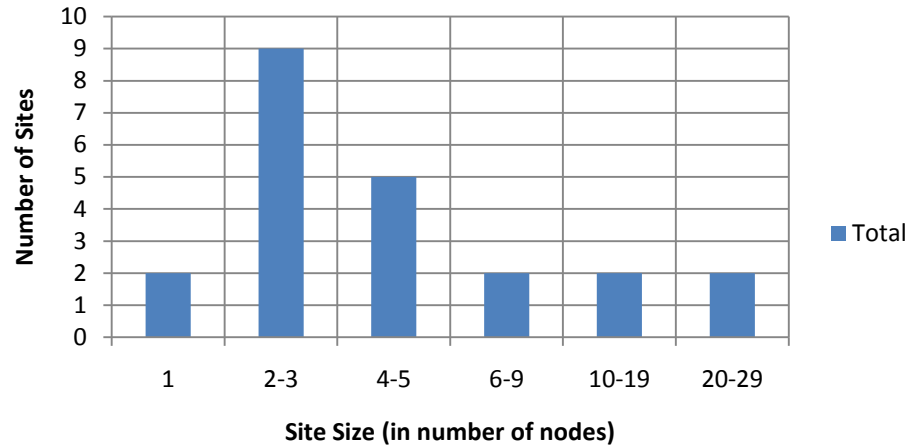
Number of Nodes per Site



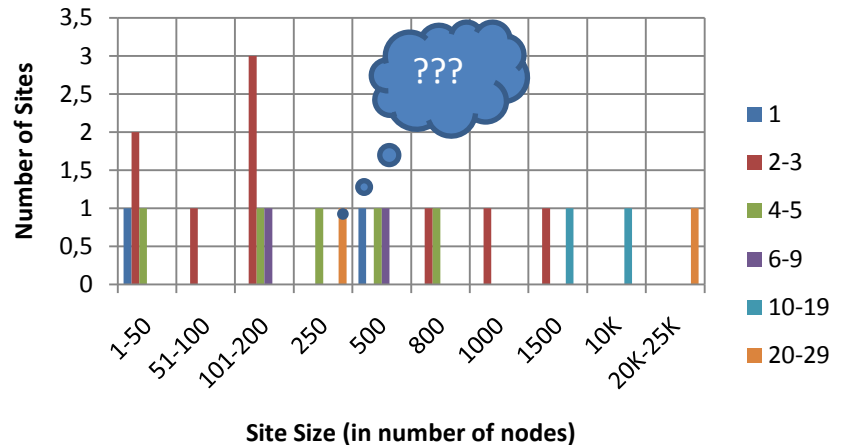
Deployment Time

- Large majority of sites with a full deployment (compile) time below 5 mn
- Good correlation between number of nodes and deployment time
 - A few strange exceptions (eg. LPSC)

Full Deployment time (minutes)



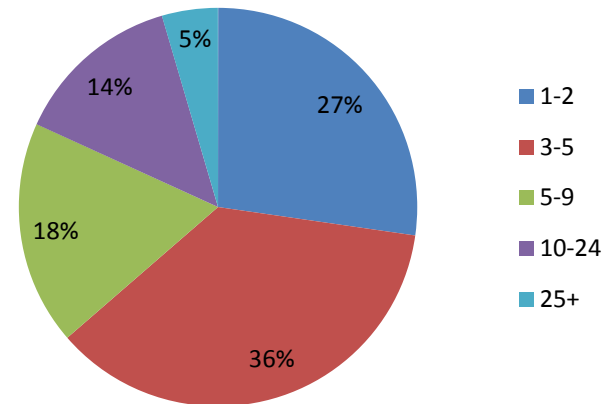
Deployment Time by Site Size



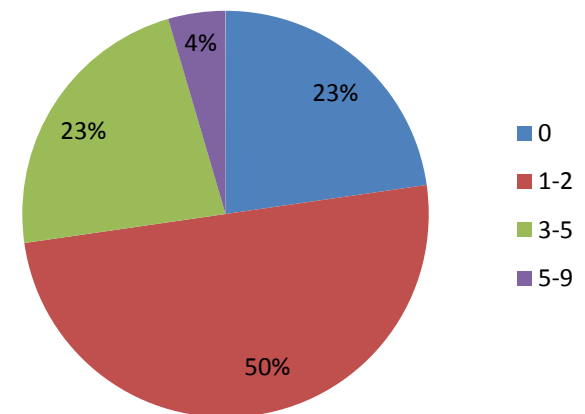
Quattor Users

- Used by small teams (<5) in 2/3 of sites
- 1/4 of sites without a Quattor expert on site
 - Rather positive than negative...
 - But the community must face the challenge

Number of users

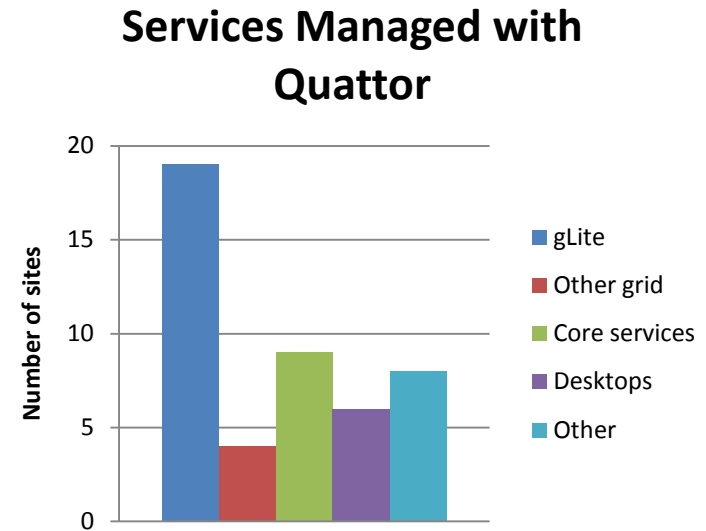


Number of Experts



Type of Services

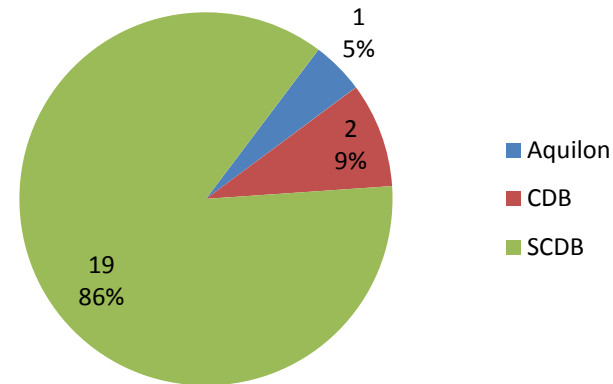
- gLite dominating but other significant usages
 - At almost every site



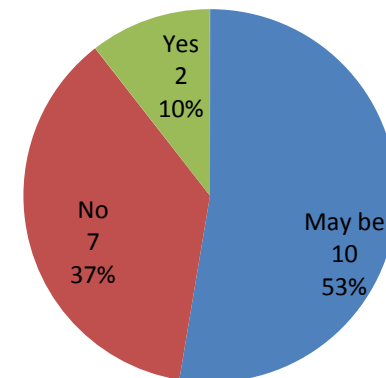
Configuration DB

- Vast majority using SCDB
 - CDB at Leuven?
- But a large interest for Aquilon

Configuration DB



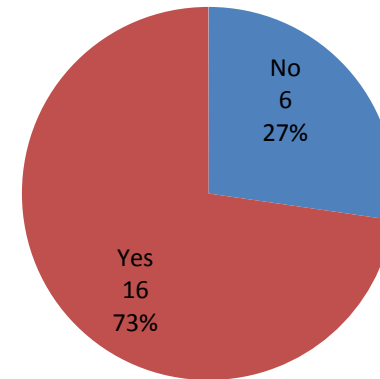
Considering Aquilon



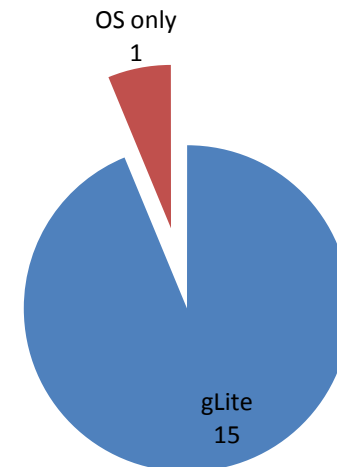
QWG Usage

- $\frac{3}{4}$ of sites using QWG
- QWG usage driven by gLite configuration
 - Includes OS configuration
- « OS only » site is also a gLite site managed by YAIM
 - Add YAIM support in QWG?

Sites using QWG

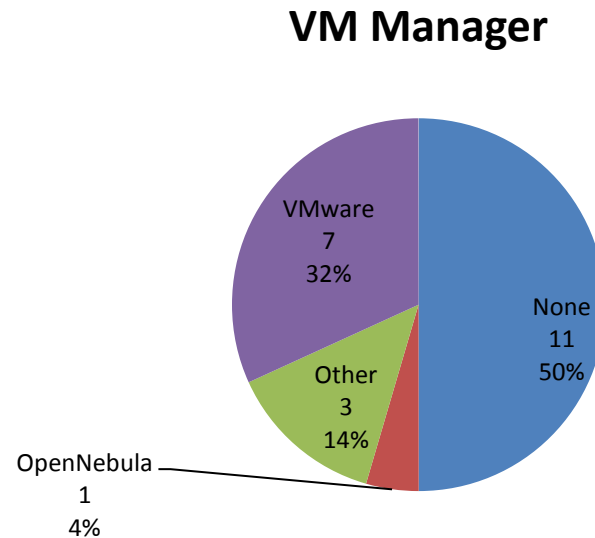


What is QWG used for?



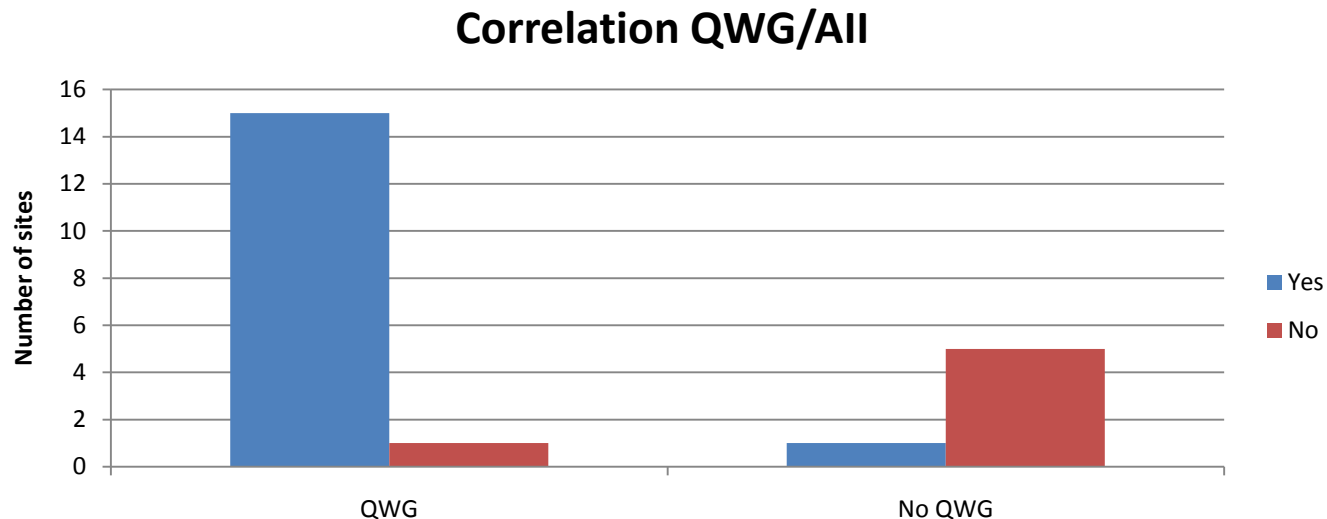
Management of VMs

- 80% of the sites use Quattor to configure VMs
- Mostly a few tens of VMs
 - Main exception : MS (2,5K)
 - CERN planning a few 100s
 - Golden images?
- 50+% of the sites are not using a VM Manager
 - Other = None?
 - But hypervisor-related QWG templates are not used
 - 1 request for KVM support
- All VMs managed separately



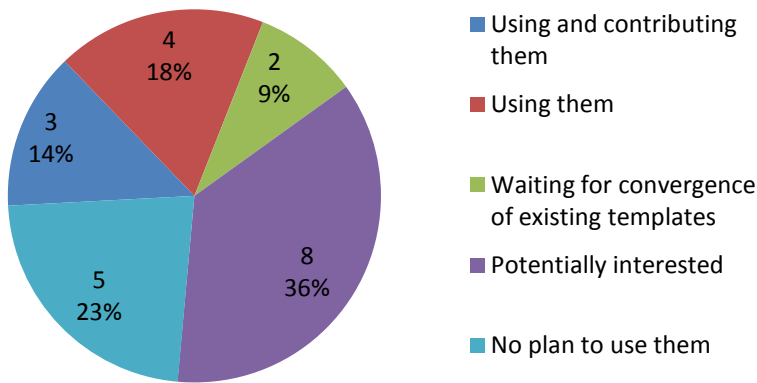
Initial Installation

- All used everywhere except CERN
 - A couple of sites who didn't answer still use it only for that
- Sites using QWG handle file system partitioning using the standard templates

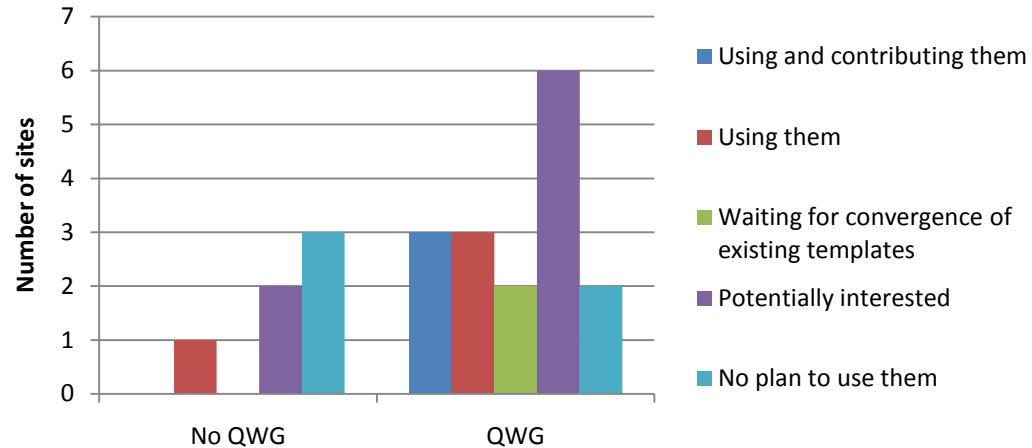


Monitoring in QWG

Monitoring in QWG



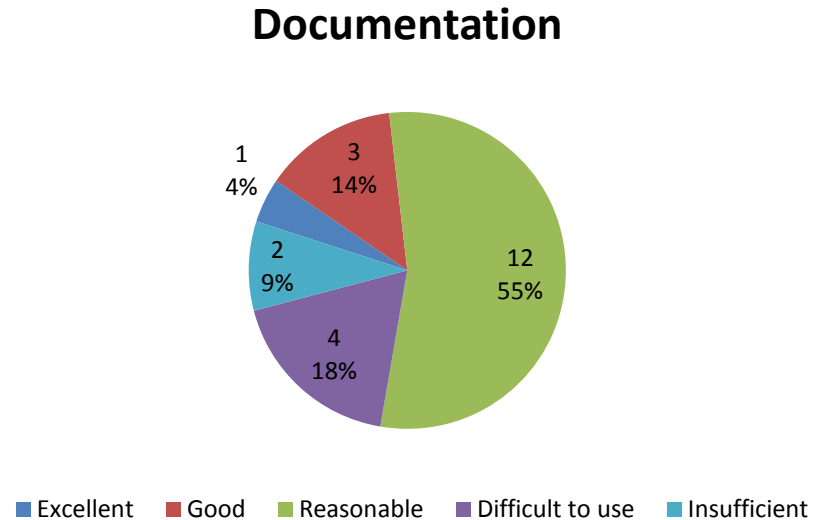
Correlation with QWG Use



- Current monitoring templates used by 30% of sites
 - Half of them contribute to the templates
- Almost 50% sites potentially interested
- No strict correlation between interest and use of QWG templates

Documentation

- Effort paid: majority of sites consider the documentation at least reasonable
- But the majority would also not rate it as good
- An area that we should focus on in the next months/years
 - Several suggestions/requests



Miscellaneous

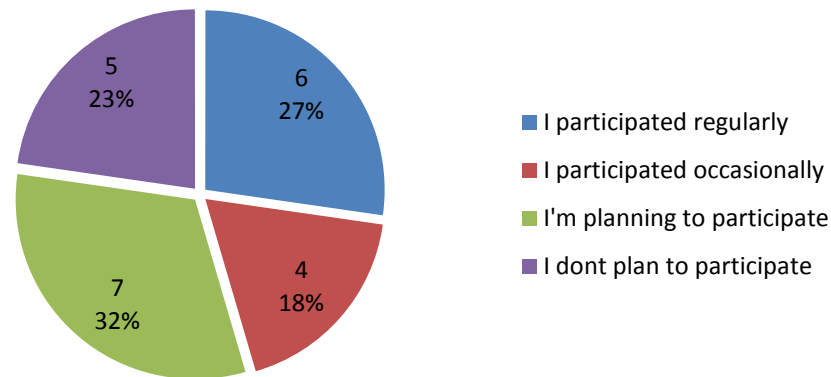
- Several open questions about wishes and main issues
- Main complain remains the steep learning curve and the difficulty to get new people in
 - Difficulty to debug problems, trace variable used...
- Several wishes related to package deployment
 - Easily trace what is installed
 - Reduce the number of packages installed
 - Support for non-RPM packages

Monthly Meetings...

- A decision from the last meeting in Thessaloniki
 - Attempt to follow-up on actions decided at a workshop to increase our efficiency as a community
 - Discuss new needs
 - Have more collective decisions
- Succeeded to have 1 meeting every month since Bruxelles meeting
 - Held by video-conference (EVO)
 - Attended by 5-10 people, most of them regularly
 - Some progress on monitoring, still many actions requiring effort...

... Monthly Meetings

Monthly Meetings



- Some others may join in the future
- It's good not everybody willing to join...

Contributors

- A few new contributors to QWG
 - RAL (Ian/Derek), Strasbourg (Jérôme)
 - Very few left so far...
- MS contributing new components
 - Still not a seamless process to integrate them on SourceForge
- Quattor still depends on a very limited number of persons
 - Despite Ohloh says we are 1 of the largest project in the world...!!! (<http://www.ohloh.net/p/quattor>)
 - Several of them having other responsibilities
 - Enlarging the community is the main response

Conclusions

- The survey gives a comprehensive view of the Quattor community status
- Overall feedback is encouraging
 - Nobody saying he is about to abandon Quattor
- Room and suggestions for improvements
 - Need to use as efficiently as possible our limited effort
 - Monthly meeting is critical to plan and coordinate our work
- Enlarging the community remains the principal challenge to ensure Quattor's future