

Configuration management tools used in the EGI sites: survey result

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Disclaimer:

egi.eu run the survey

Peter Solagna evaluated the results

Peter Solagna made this summary

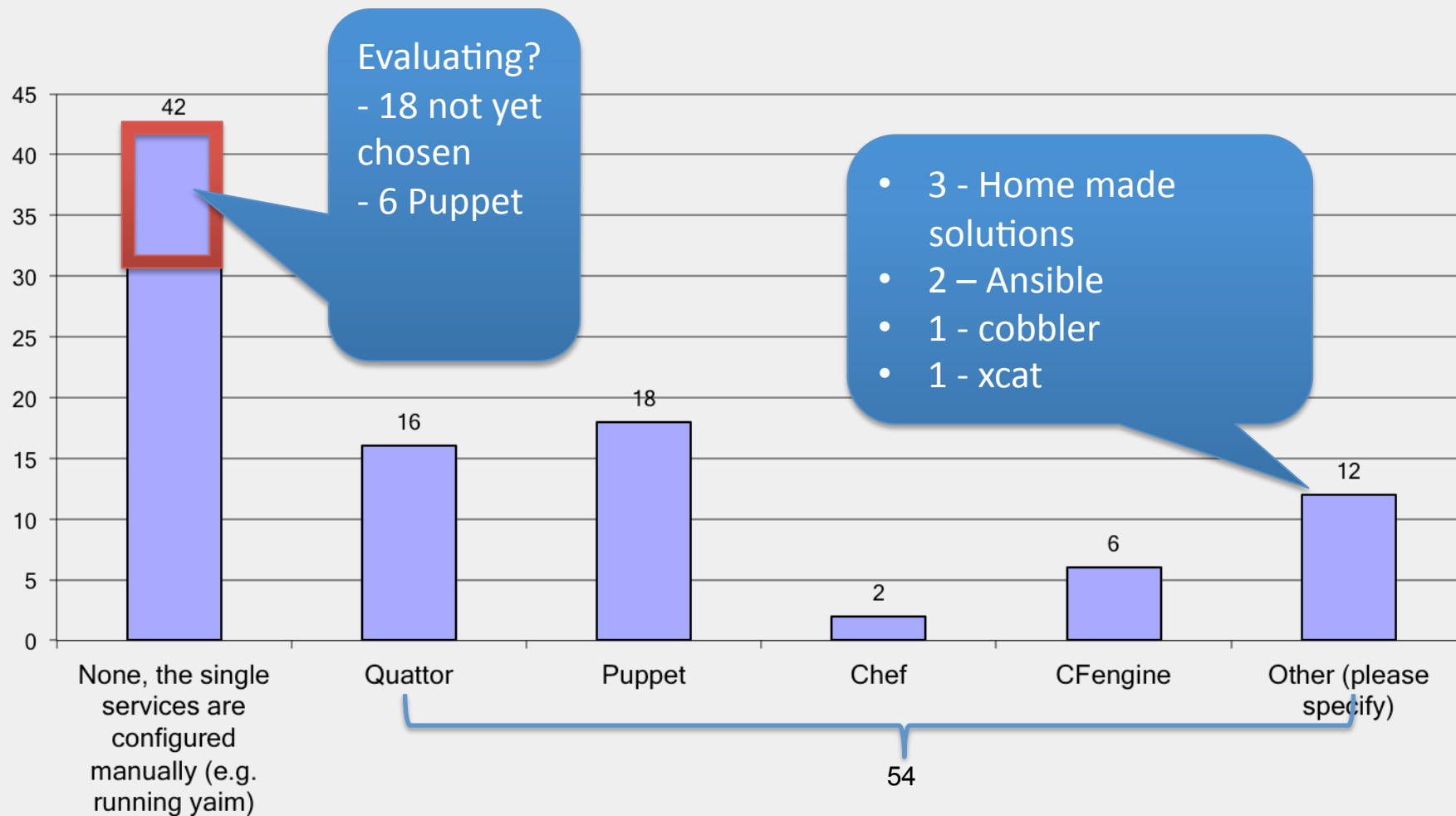
I am just presenting the summary

- Survey opened: Jan 28th, closed: Mar 24th
 - Circulated directly among EGI grid sites
 - 87 answers
- Questions:
 - Size of the sites: number of services / number of worker nodes
 - Configuration management tools used (or evaluated)
 - Pros and cons
 - Modules used
 - Product/specific
 - Developed by the site/NGI/others

Why the survey?

- Yaim goal is to configure grid services using an homogeneous set of variables
 - Future support of Yaim is uncertain
- Some EMI services are moving away from yaim to specific configuration files/scripts
 - Error prone, services requires uniform configuration parameters
- Configuration management tools use templates that can re-use the parameters shared between services
 - Allow uniform configuration

Is the site using configuration management tools?



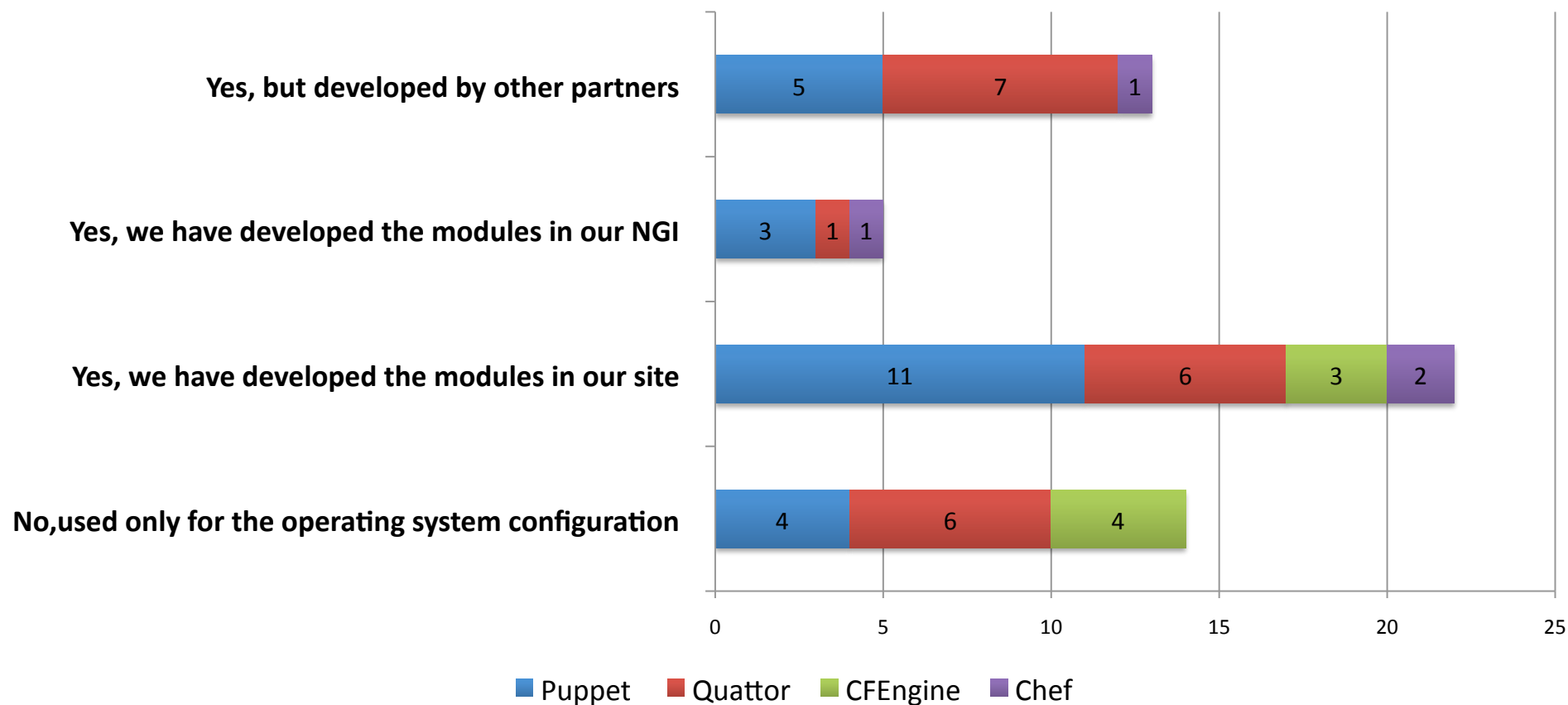


Number of services deployed vs conf. tool used

# of services deployed	Quattor	Puppet	Chef	CFengine	Total sites
Less than 10	8	8	0	3	59
Less than 30	5	7	1	3	29
Less than 50	0	0	0	0	1
More than 50	3	3	1	0	8

- Quattor (15)
 - + Already grid services templates available, knowledge base in grid community (QWG)
 - Small community, steep learning curve, complicated to update
- Puppet (16)
 - + Huge community, well documented, many plugins available
 - Lack of grid modules, initial configuration takes time ,one more tool to learn
- Chef (2)
 - + Reliable, mainstream, cloud interfaces available
 - Not widely used in the infrastructure, doesn't configure O.S.
- CFEngine (4)
 - + Flexible, easy alteration of config files
 - CFv2 →CFv3 difficult migration

Do you use specific modules developed for the grid services?



- Quattor: generally calling Yaim
 - Customizations for local monitoring, bugs workaround and fine tuning
- Puppet: most of the sites are using modules calling yaim
 - CERN is working on Yaim-free modules for: WN, CREAM, VOMS, MyProxy, BDII, DPM/LSF, Slurm, CVMFS, Argus, FTS, LFC
 - VU-MIF-LCG2, Yaim-free configuration for BDII
 - T3_CH_PSI, configuration modules for dCache and ARC
- Chef: Using Yaim

- Likely, there isn't a configuration tool good for all the grid sites ☹️
- But... Puppet is taking the lead:
 - Growing user community within EGI
 - Already a big user community worldwide (true also for other tools)
 - Big site ([CERN](#)) working on a set of templates (master/masterless)
 - Lot of templates, but not all the products are covered
 - Coordination work starting within an Hepix working group

- Cooperate with the Hepix WG
- Share the work done by site managers/NGIs
 - Re-use the modules already done, test and improve them
 - Try to fill the gaps, focusing on the missing services (focusing on yaim-free modules)

HEPiX WG on configuration management

- More and more sites start using Puppet
- Idea: Have some kind of coordination among sites
 - Exchange experience, exchange modules
- This is even more important in light of uncertain future of YAIM
 - CERN doing YAIM-less Puppet configurations
- Status of the WG: Basically just starting
 - Will set up infrastructure (mailing lists, web pages,...) after Bologna meeting
- **What do sites expect from the WG ?**