Challenges

- Middleware can be really tricky to configure
- To deliver new services without new human resources
- Respond to continuous evolution and security updates
- Rapid technological changes
- Many solutions for configuration management
Several options available

- By hand (the worst practice)
- With YAIM (historical tool, but unmaintained)
- Using an infrastructure as code tool (Puppet, Ansible, Quattor, ...)
- At higher level with Simple Framework
Making a choice is not easy

- Some middleware already provide its own recipes for specific tool (i.e. DPM with Puppet)
- No central / reference repository for sharing or providing recipes
- Documentation may not be up to date
- Site administrators are mostly not objective with regard to their configuration management software
Quattor

Key points

- First release in 2003 for configuring grid software
- For RedHat and derivatives
- Based on the PAN language, centralised repos on Github
- Highly reproducible configuration
- But difficult to get started (small community, outdated documentation, ...)

https://www.quattor.org
Ansible

Key points

- Since 2012, now owned by RedHat
- Very large community
- Simple and lightweight
- Based on the use of playbook (reusable modules)
- Agent-less architecture (based on the use of SSH)
- https://galaxy.ansible.com/
Ansible

Glasgow

- https://github.com/uki-scotgrid-glasgow/ansible/tree/master/playbooks

CSC

- https://github.com/CSCfi/ansible-role-bdii
- https://github.com/CSCfi/ansible-role-arc-frontend

Lancaster University

- https://github.com/lancsgrid/
## Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Link</th>
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<tbody>
<tr>
<td>10:00</td>
<td><strong>Introduction to session</strong></td>
<td>Jerome Pansanel</td>
<td><a href="http://go.egi.eu/zoom4">http://go.egi.eu/zoom4</a></td>
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<tr>
<td>10:05</td>
<td><strong>Configuration management with Puppet at PIC</strong></td>
<td>Bruno Rodriguez</td>
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<td>10:15</td>
<td><strong>Configuration management made Simple</strong></td>
<td>Maarten Litmaath et al.</td>
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<td>10:35</td>
<td><strong>Automation at EGI</strong></td>
<td>Vincenzo Spinoso</td>
<td><a href="http://go.egi.eu/zoom4">http://go.egi.eu/zoom4</a></td>
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<td>11:00</td>
<td><strong>Coordination of infrastructure management</strong></td>
<td>Bruno Rodriguez et al.</td>
<td><a href="http://go.egi.eu/zoom4">http://go.egi.eu/zoom4</a></td>
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