VAPOR
Vo Administration and operations PORtal

EGI Community Forum 2013
Franck Michel, CNRS
Observations & motivations

• Running scientific experiments requires costly IT support
  • Achievable for large organized communities
  • Out of reach of smaller/younger communities

• How to sustain existing communities
• How to recruit new ones?
  • Find out ways to administrate/operate a VO with reduced human cost

• Virtual Research Community model
Targeted communities

- Small to medium-size user VOs
- No or few dedicated support
  - Volunteering contribution
- Fragmented user groups
  - No control on submission tools, policies...
  - Difficult to plan needs
- Scattered scientific activities
- Opportunistic usage of resources
The LSGC use case

- Life Science Grid Community:
  - 5 VOs, ~500 users
  - biomed, lsgrid, medigrid, pneumogrid, vlemed
- biomed VO
  - Set up of technical support team in 2010
  - Volunteering-based model
  - Experience: time consuming activity
- Need to **mutualise the human effort with other VOs** within the VRC or beyond
Large variety of existing tools

- Nagios
- myEGI
- Dashboard
- VOMS admin
- EGI ACCOUNTING PORTAL
- CESGA
- GOCDB
- GStat 2.0
Large variety of existing tools

- Some tools are adapted to certain types of community
- Some usual administration/operation tasks are not addressed

*Do not reinvent the wheel: reuse, complement the existing*
Consortium

• Direct technical contributors:
  • I3S, CNRS (France)
  • CREATIS, CNRS (France)
  • GRyCAP, Universitat Politècnica de València (Spain)
  • Institut Pluridisciplinaire Hurbert Curien (France)
  • EGI Operations Portal team
Consortium

- Use cases, contribution to the design and test
  - France Grille VO (NGI France)
  - Academic Medical Centre, VLEMD VO, University of Amsterdam (Netherlands)
  - COMPCHEM VO, University of Perugia (Italy)
  - WeNMR, 7th FP, VRC
VAPOR features

• Community users management
  • Users database
  • Interface with VOMS, LFC, EGI Apps Database
  • Identify users "behind" robot certificates
  • Track scientific production => acknowledgement

• Operations for technical support teams
  • Resources status indicators & statistical reports
  • Data Management: files migration, decommissioning, clean-up
VAPOR features

- Operations for technical support teams (cont’d)
  - Filter important info from mailing lists (e.g. downtimes that impact VO critical services)
  - Statistics on GGUS tickets

- Accounting:
  - Community resource usage, per VO resource usage, per VO sub-group resource usage
  - Projection of future needs for storage and computing resources
Organisation

• 12 months duration
• Start April 2013
  • survey of tools, features specifications
  • First use case and beta tester: biomed
• Budget
  • Total: 125 440€
  • Requested: 52 200€
  • Engineer position recruited for 12 month
• EGI contact: Diego Scardaci
Conclusion: impacts and benefits

• Mutualise admin/operation effort:
  • Help existing communities sustain their model, reach better QoS
  • Facilitate the outreach of new communities

• Apprehend the diversity of community users, foster resource usage acknowledgement

• Community-wide accounting, plan future needs for resources
Thank you
<table>
<thead>
<tr>
<th>Task 1: Features specification</th>
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<tbody>
<tr>
<td>Review of existing tools and portals</td>
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<tr>
<td>Definition and prioritization of features</td>
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<tr>
<th>Task 2: Software development</th>
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<tr>
<td>Community users management</td>
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<tr>
<td>Operations management</td>
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<td>Accounting</td>
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<th>Task 3: Platform deployment &amp; exploitation</th>
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<tbody>
<tr>
<td>Deployment on production platform</td>
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<tr>
<td>Update of VO operation procedures</td>
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<tr>
<td>Training of support and admin members</td>
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## Budget

### Human resources

<table>
<thead>
<tr>
<th>Human resources</th>
<th>num</th>
<th>unitary cost</th>
<th>60% overhead</th>
<th>total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software engineer recruited, I3S</td>
<td>(100%)</td>
<td>12</td>
<td>3 500,00 €</td>
<td>2 100,00 €</td>
</tr>
<tr>
<td>Franck MICHEL, research engineer, I3S</td>
<td>(33%)</td>
<td>4</td>
<td>5 000,00 €</td>
<td>3 000,00 €</td>
</tr>
<tr>
<td>Sorina Camarasu-Pop, researcher, CREATIS</td>
<td>(8.3%)</td>
<td>1</td>
<td>4 200,00 €</td>
<td>2 520,00 €</td>
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<tr>
<td>Jérôme Pansanel, operations manager, IPHC</td>
<td>(8.3%)</td>
<td>1</td>
<td>5 000,00 €</td>
<td>3 000,00 €</td>
</tr>
<tr>
<td>Ignácio Blanquer, professor and Enrique Bayonne, engineer, GRyCAP</td>
<td>(8.3%)</td>
<td>1</td>
<td>4 200,00 €</td>
<td>2 520,00 €</td>
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**Sub-total**

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<td></td>
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<td>13 140,00 €</td>
<td>120 640,00 €</td>
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### Hardware

<table>
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<tr>
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<tbody>
<tr>
<td>Laptop</td>
<td>1</td>
<td>1 500,00 €</td>
<td>900,00 €</td>
<td>2 400,00 €</td>
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**Total budget**

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<td></td>
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<td>125 440,00 €</td>
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**Requested budget: 75% of SA activities**

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<td>52 200,00 €</td>
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