A User Portal at CC-IN2P3

Cyril l’Orphelin, Gino Marchetti, Renaud Vernet

HEPiX Fall ‘17
CC-IN2P3 at a glance

- Academic data centre in Lyon, France
- Compute (30kslots)
- Storage (Disk 25 PB, MSS 50 PB)
- IT services
- LHC Tier-1
- + many other experiments (~70)
  - Mainly HEP
• Different physics, different sizes, different needs
A User Portal: what for?

- Because we don’t have any!

- Current situation for our users
  - Several monitoring pages
  - Information & documentation not centralized

- Help users make a good usage of our resources

- We want first:
  - Monitoring-at-a-glance
  - Central access to information, services, documentation
Needs & choices

• Short deadline
  – A few months of work before production
  – K.I.S.S. approach

• Simple monitoring views
  – Easy to spot problems
  – Focus on the essential stuff

• Alerts
  – Notify user in case of events/incidents/action needed
    • Batch jobs failures, password expiration, downtimes...
Needs & choices

- Information / news
  - Downtimes, general communications to users…

- Homegenous presentation of data
  - Style, graphics

- Widget-based web pages
  - Paging, scrolling & scaling on devices (desktop vs phone)
Demo
Storage of vernet

<table>
<thead>
<tr>
<th>Directory</th>
<th>Usage</th>
<th>Usage (%)</th>
<th>Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>/afs/in2p3.fr/home/v/vernet</td>
<td>611.3 MiB</td>
<td>63 %</td>
<td>Home AFS</td>
</tr>
<tr>
<td>/sps/hep/alice</td>
<td>27.3 KiB</td>
<td>0 %</td>
<td>SPS</td>
</tr>
<tr>
<td>/afs/in2p3.fr/throng/ccin2p3</td>
<td>20.3 KiB</td>
<td>0 %</td>
<td>AFS</td>
</tr>
</tbody>
</table>

News

Arrêt - Scheduled Outage : 2017-11-28

Le Centre de Calcul sera en maintenance du 2017-11-28T08:00:00Z au 2017-11-28T19:00:00Z

The Computing Center will be in scheduled outage from 2017-11-28T08:00:00Z to 2017-11-28T19:00:00Z
### Storage of `vernet`

<table>
<thead>
<tr>
<th>Directory</th>
<th>Usage</th>
<th>Usage (%)</th>
<th>Space</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>/afs/in2p3.fr/home/v/vernet</code></td>
<td>611.3 MB</td>
<td>63 %</td>
<td>Home AFS</td>
</tr>
<tr>
<td><code>/sps/hep/alice</code></td>
<td>27.3 KB</td>
<td>0 %</td>
<td>SPS</td>
</tr>
<tr>
<td><code>/afs/in2p3.fr/throng/ccin2p3</code></td>
<td>20.3 KB</td>
<td>0 %</td>
<td>AFS</td>
</tr>
</tbody>
</table>

### Storage of `ccin2p3`

<table>
<thead>
<tr>
<th>Directory</th>
<th>Usage</th>
<th>Usage (%)</th>
<th>Space</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>/afs/in2p3.fr/throng/ccin2p3</code></td>
<td>600.8 GB</td>
<td>1367 %</td>
<td>AFS</td>
</tr>
<tr>
<td><code>/hpss/in2p3.fr (ccin2p3)</code></td>
<td>16.7 TIB</td>
<td>100 %</td>
<td>HPSS</td>
</tr>
<tr>
<td><code>/ccin2p3/home</code></td>
<td>108.3 GB</td>
<td>no quota</td>
<td>iRODS</td>
</tr>
<tr>
<td><code>/neuro/common</code></td>
<td>18.3 KB</td>
<td>no quota</td>
<td>iRODS</td>
</tr>
<tr>
<td><code>/neuro/home</code></td>
<td>1.1 GB</td>
<td>no quota</td>
<td>iRODS</td>
</tr>
<tr>
<td><code>/rhone-alpes/bundle</code></td>
<td>12.8 TIB</td>
<td>no quota</td>
<td>iRODS</td>
</tr>
</tbody>
</table>
How?

Do something -> Show it to users

feedback
Feedback

- 15 beta testers
  - Active users
  - Group managers

- Feedback globally positive
  - Useful, simple and clear
  - Some more advanced functionalities needed (for group managers)
  - Much more focused on content than form

- Physicists
  - Information must be: readable, relevant, explained
Software architecture

- **OpenIDM**
  - identity management
- **Home-made scripts**
  - Harvest data
- **Lavoisier : data aggregation framework**
  - Data aggregation
  - Data parsing (XML/XSL) & HTML rendering
    - http://software.in2p3.fr/lavoisier/
    - https://indico.cern.ch/event/274555/contributions/615694/attachments/495740/685005/LavoisierHEPIX.pdf
- **Bootstrap**
- → User Portal service : one VM
Software architecture

Identities

Storage services
Batch system
News

... raw data streams

Transformed data (XML)

template (XSL engine)

Views

HTML Templates

Lavoisier

Identities
Future functionalities

- Workflows
  - Change password, extend account duration etc.
- SSO
  - Better integration with other services
- Ticketing system
  - API
Summary / Prospects

- CCIN2P3 will provide a User Portal service
- Goal: Single (main) entry point for users
- Current features:
  - Monitoring
  - Access to documentation
  - Notifications
- To be put online in the coming weeks

- Looking forward to user feedback
  - → Will drive future functionalities
QUESTIONS?