Accounting Portal

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CESGA
Outline

• Brief
• Background
• Objectives
  • Accounting Portal Advisory Group
  • Portal design and rewrite
• Deliverables
• Roadmap
• Next Steps
The Accounting Portal provides data accounting views for users, VO Managers, NGI operations and the general public.

The Accounting Portal is one of EGI core services and part of EGI Federated Operations service.

<table>
<thead>
<tr>
<th>Tool name</th>
<th>Accounting Portal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool Category and description</td>
<td>EGI Core service</td>
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<tr>
<td></td>
<td>The Accounting Portal provides data accounting views for users, VO Managers, NGI operations and the general public.</td>
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<tr>
<td>Tool url</td>
<td><a href="http://accounting.egi.eu/">http://accounting.egi.eu/</a></td>
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<tr>
<td>Email</td>
<td><a href="mailto:grid-admin@cesga.es">grid-admin@cesga.es</a></td>
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<tr>
<td>GGUS Support unit</td>
<td>Accounting Portal</td>
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<td>GOC DB entry</td>
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<td>Requirements tracking - EGI tracker</td>
<td><a href="https://rt.egi.eu/rt/Dashboards/5538/AccPortal-Requirements">https://rt.egi.eu/rt/Dashboards/5538/AccPortal-Requirements</a></td>
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<td>Issue tracking - Developers tracker</td>
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<td>Roadmap</td>
<td>TBD</td>
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<td><a href="http://accounting-devel.egi.eu/">http://accounting-devel.egi.eu/</a></td>
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<td>Documentation</td>
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<td>License</td>
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<td>Provider</td>
<td>CESGA</td>
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<td>Source code</td>
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Change, Release and Deployment

This sections are providing detailed agreement in terms of requirements gathering, release and deployment of Accounting Portal which extend Instructions for Operations Tools teams.

1. All requirements are gathered in EGI Request Tracker.
2. Prioritization and testing is done by dedicated Accounting Portal Advisory and Testing Board (AP OTAG) coordinated by EGI Operations team.
3. EGI RT statuses of requests are as follow:
   - New - newly recorded in system
   - Accepted - accepted by OTAG team
   - Rejected - rejected by OTAG team
   - Open - (In progress) development team is implementing change
   - Resolved - released
4. Priority of requests are as follow:
   - None - 0
   - Low - 1
   - Normal - 2
   - High - 3
   - Immediate (i.e. emergency) - 4
5. Standard changes (routine actions, no need for approval):
   - Changes related to database information update
   - Bug fixing - restoring service to expected functionality
6. Emergency changes (implemented without approval but subject of post-review):
   - Security incidents
7. Releases
   - Frequency: every 6 months
• Developed at CESGA since 2003
• Based on internal developments and portal for accounting of CESGA HPC infrastructure
• Nowadays they evolve separately
• Some knowledge comes and goes, for example:
  – Accounting of different data: cloud accounting, Big Data, etc..
  – “Billing” (cost estimation)
  – Data presentation and different views
• Accounting Portal main codebase is PHP5
• Some backend components are coded in Python, Bash and Perl
• With MySQL DB and Apache = LAMP
• PHP original code was refactorized and the model organized in clases (EGI-Inspire 2012)
Objectives

- Improve portal design: new and easier way to access and visualize data
- Develop unified views in the portal for different kind of resources
  - example: CPU usage for grid and cloud resources
- New views to show new types of data
  - Storage, GPGPU, data usage
- Develop API allowing third parties to gather accounting data from the portal
- Better Documentation!
Advisory Group (AP OTAG)

• Coordinated by Malgorzata Krakowian
  – Acc-portal-atb@mailman.egi.eu

• Requirements gathering:
  – https://rt.egi.eu/rt/Dashboards/5538/AccPortal-Requirements

• Based on the Requirements, agree on a Roadmap for the design document:
  – Number of interactions Acc Portal team and customers
  – Will become D3.1 deliverable at PM6
Portal design

• First Roadmap available
• To be discussed in Accounting Portal Advisory Board based on requirements
• Modern web framework
  – Django for the model/controller
  – Bootstrap for CSS/HTML visuals
  – Dojo for the AJAX, interaction and interactive graphs
  – jsPDF for PDF reports
• First release by PM12 (in production in PM14)
Accounting Portal rewrite

• The objective is to rewrite the base code to use a modern web framework
• This framework will make development, debuggind, and maintenance faster and easier
• Rewrite will include the backed for database update and gathering of information from several sources
• Communication with the new view and AJAX parts will be adapted using JSON
New types of accounting data

- Data Accounting session on Tuesday
- Production views will have to wait until new accounting data available
- Development views can be designed in advance
- First data accounting prototype PM20 – Oct 2016
  - Integrated in the portal
- Other accounting metrics
  - Storage
  - Cloud
  - GPGPU
  - Big Data
• Requirements from e-Grant/Elixir and other CC to provide API to get accounting data
  • “Logical” site would be the portal
  • Should provide all the accounting data
    – Requirements
Change, Release & Deployment

- All requirements are gathered in EGI RT
- Priorization and testing by AP OTAG
- Tickets (Requests) are prioritized
  - Emergency – High – Normal – Low – None
- Standard changes (bug fixing) don’t need approval
- Emergency changes implemented are subject to post-review
- Releases every 6 months

https://wiki.egi.eu/wiki/Accounting_Portal
Deliverables

• Technical design of the new Accounting Portal and Implementation Plan (R): M06
  — Live document with requirements and design document
• First release of the new Accounting Portal deployed in production (OTHER): M14
• Second release of the new Accounting Portal deployed in production (OTHER): M24
• Final release of the new Accounting Portal deployed in production (OTHER): M30
Roadmap

https://wiki.egi.eu/wiki/TASK_JRA1.3_Accounting

<table>
<thead>
<tr>
<th>Task number (3.2.X)</th>
<th>Task name</th>
<th>Start date (MM/YY)</th>
<th>Release Date (MM/YY)</th>
<th>Status (Planned/Done)</th>
<th>Dependencies from other tasks (insert only task number)</th>
<th>Issues</th>
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<td>Simplify access to some basic functionality. Avoid the use of complex forms for common statistics and get accounting information for some common queries</td>
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Roadmap
https://wiki.egi.eu/wiki/TASK_JRA1.3_Accounting

Tasks
• T1. Requirements collection (6m)
• T2. Modernize the accounting Portal with the adoption of technologies easier to maintain (6m)
• T3. Simplify access to some basic functionality. Avoid the use of complex forms for common statistics and get accounting information for some common queries (6m)
• T4. Define a complete API to get accounting data directly from the accounting portal (3m)
• T5. Integrate data in maps for a graphical distribution of the information (3m)
• T6. Integrate analytics to extract intelligence operation from the data (6m)

New data (when available in APEL)
• D1. Cloud (m14)
• D2. Storage (m20)
• D3. Data (m27)
• D4. GPGPU (m28)
• D5. Big Data Tools (m25)

Objectives
• M14: new technologies, simplify access to some basic functionality, cloud: T2, T3, D1
• M24: API to get accounting data, maps, storage, analytics: T4, T5, T6
• M30: Data, GPGPU, Big Data Tools: D3, D4, D5
Thank you for your attention.

Questions?