



Science and
Technology
Facilities Council

EGI Core Services Roadmap - Accounting Repository (APEL)

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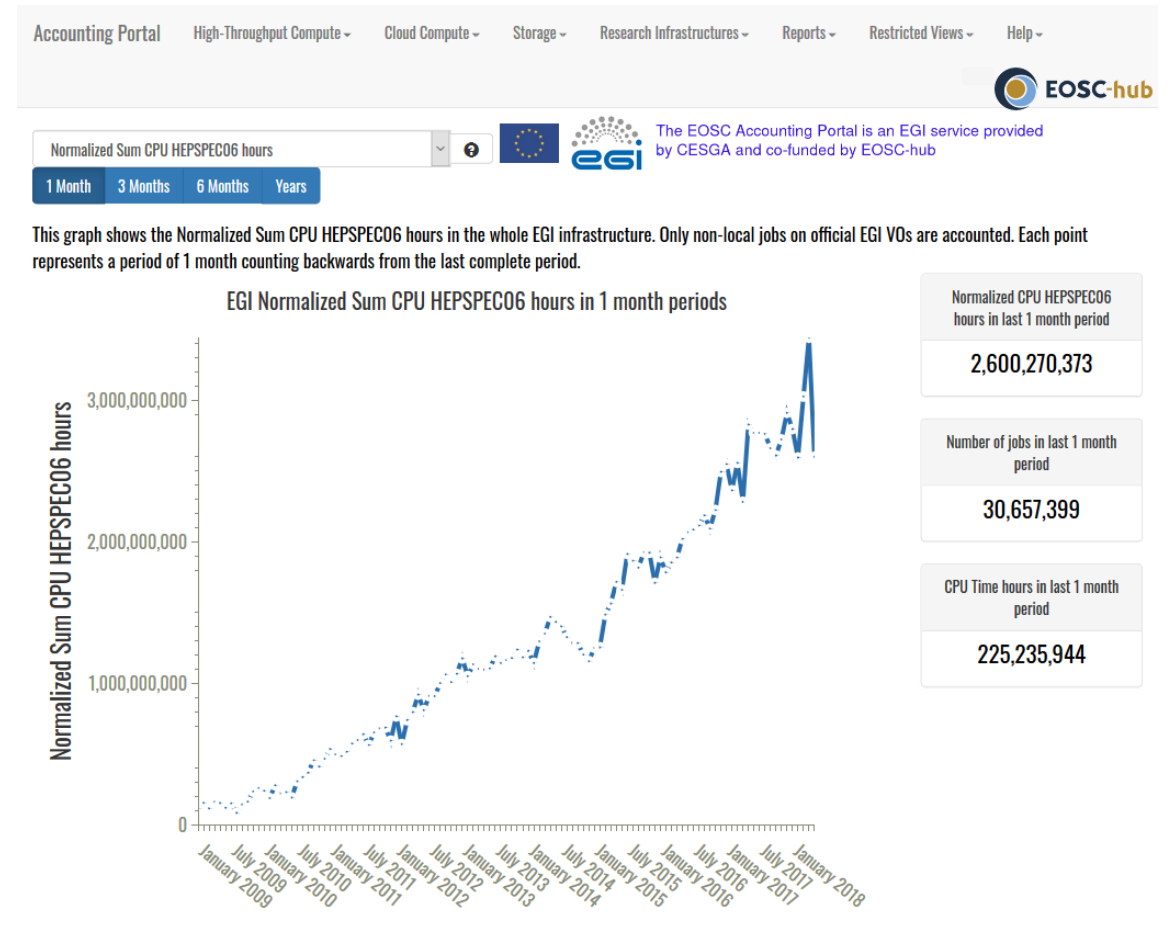
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Outline

- Introduction
- Main features
- High-level architecture
- On-going and recent work
- Future work

Introduction

- The EOSC Accounting service collects, processes and displays usage information on HTC compute, storage space and cloud VM resources
- Accounting is a central part of a federated e-infrastructure as it enables funders and users to check that resources are being delivered and used



Main Features

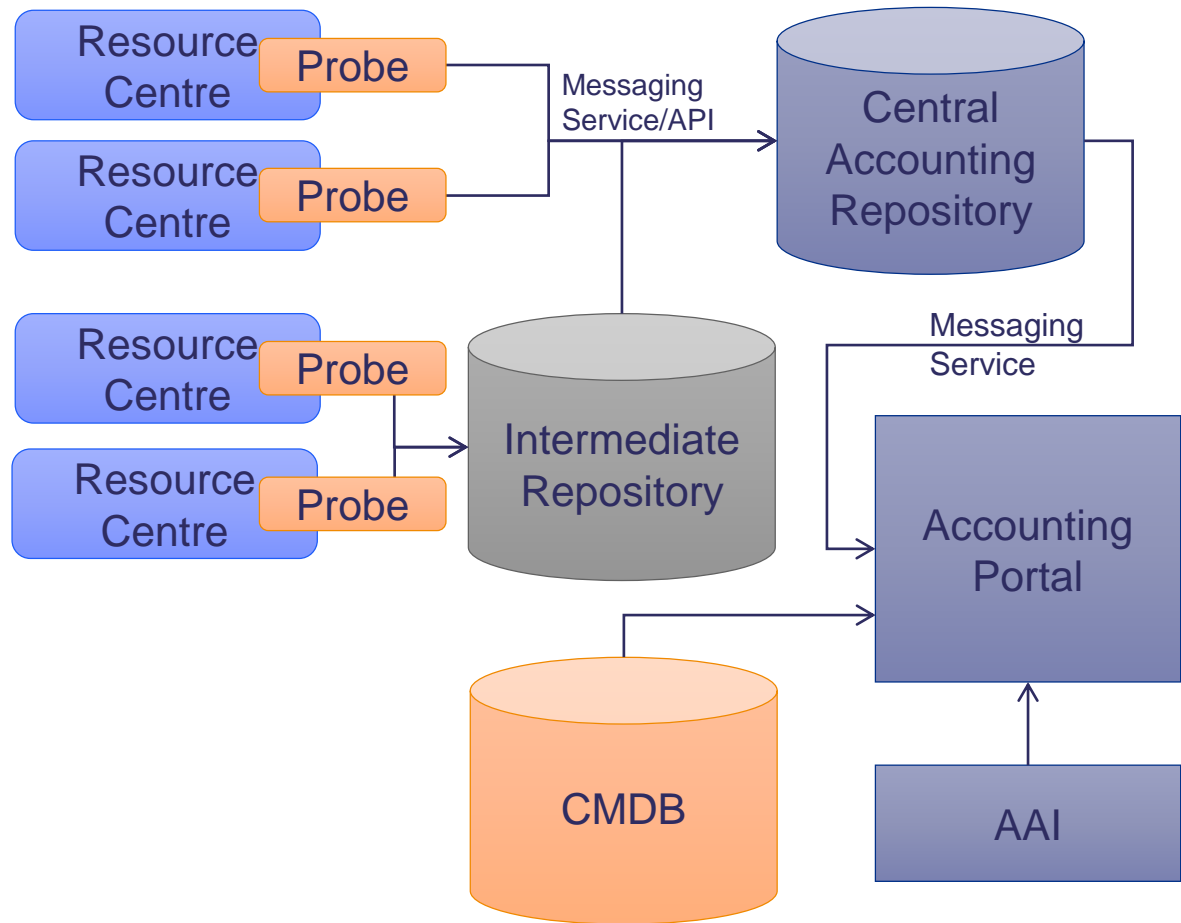
Main features offered to the user are:

- Aggregated views of their usage wherever that usage occurred
- Views that allow usage to be checked against allocation

Features for resource providers:

- Provider-centric views of resource usage by users
- Views that allow comparisons to be made between resource providers within and between regions and communities

High-level architecture



- Resource centres implement a collector that gathers metrics formatted into a standardised format
- Metrics are then sent via a messaging service to the Repository which produces aggregations across all centres to send to the Portal
- The Portal retrieves topology information and community affiliation from other services to properly organise the accounting data

On-going and recent work

- Greater usage of Kibana for internal monitoring
- Switchover to using the AMS for messaging
 - Better supported and future-proof system
- New publishing monitoring system (pub, sync tests)
 - Initially, a means to retiring old systems
 - In future, a platform for better service monitoring (e.g. more fine-grained)
- Move processing of storage records to the repository
 - Summary storage records

Future work

- Full Python 3 compatibility
- Better internal monitoring to pick up developing issues
- Ensure compatibility with the OIDC-based authentication solution that the WLCG community is adopting
- Design and implement support for multiple benchmarks
 - Align with the work of the WLCG in fast benchmarking
 - Plot out course to integrating benchmarking and GPU usage with cloud VM usage

Future work (cont.)

- Dataset accounting
- Merging in work developed under other projects such as IRIS (collaboration of STFC funded infrastructures)
- Capacity Management
 - Supporting the growth in volume of accounting data – increase capacity of the repository through new techniques such as database proxying and sharding
 - Containerised solutions, community specific dashboards – a way to distribute load by providing simple containerised accounting client



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Thank you

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