



**Science and
Technology
Facilities Council**

An Accounting Dashboard for IRIS

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WLCG Accounting Task Force Meeting
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**IRIS is a cooperative community creating
eInfrastructure to support STFC science**

STFC eInfrastructure

The hardware, software, people, policies and communities required to support computing for STFC's scientific activities.



IRIS helps coordinate STFC eInfrastructure Providers



Who work to support the STFC Science Programme



So what does IRIS actually do?

- Grow STFC's scientific computing community
 - Encourage trust, cooperation and expertise sharing
 - Facilitate technical discussion and problem solving
- Support the future planning of eInfrastructure
 - Understand what resources the community needs
 - Establish common practices and policies
 - Form a bottom up roadmap to help shape tomorrow's eInfrastructure

Invest in hardware & software

In 2018 IRIS received a £16 million grant from BEIS over 4 years.

To enhance, augment & improve federation of the STFC eInfrastructure.

Some deployed as Grid resources, some as Cloud resources.



IRIS Hardware

Currently active:

- 3 hardware locations
- 8,500 physical CPU cores
- 9.9 petabytes of disk storage

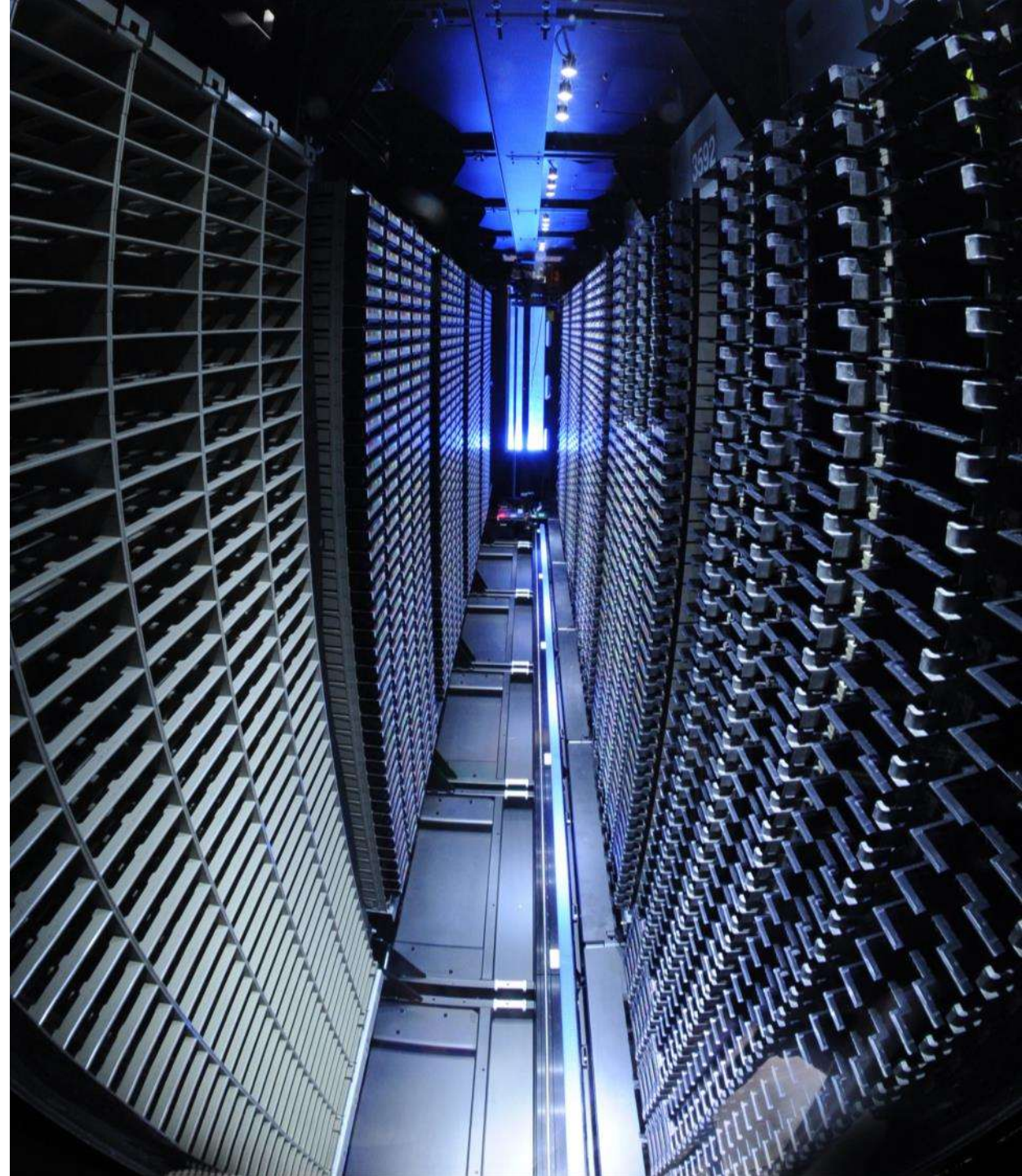
In Q1 2020 we plan to bring online:

- 3 new hardware locations
- 6,500 extra physical CPU cores
- 4.2 petabytes extra disk storage



Allocate and oversee use of hardware

- Robust, fair allocation process
- ‘Match-make’ providers and activities
- Accounting system to see usage in one place



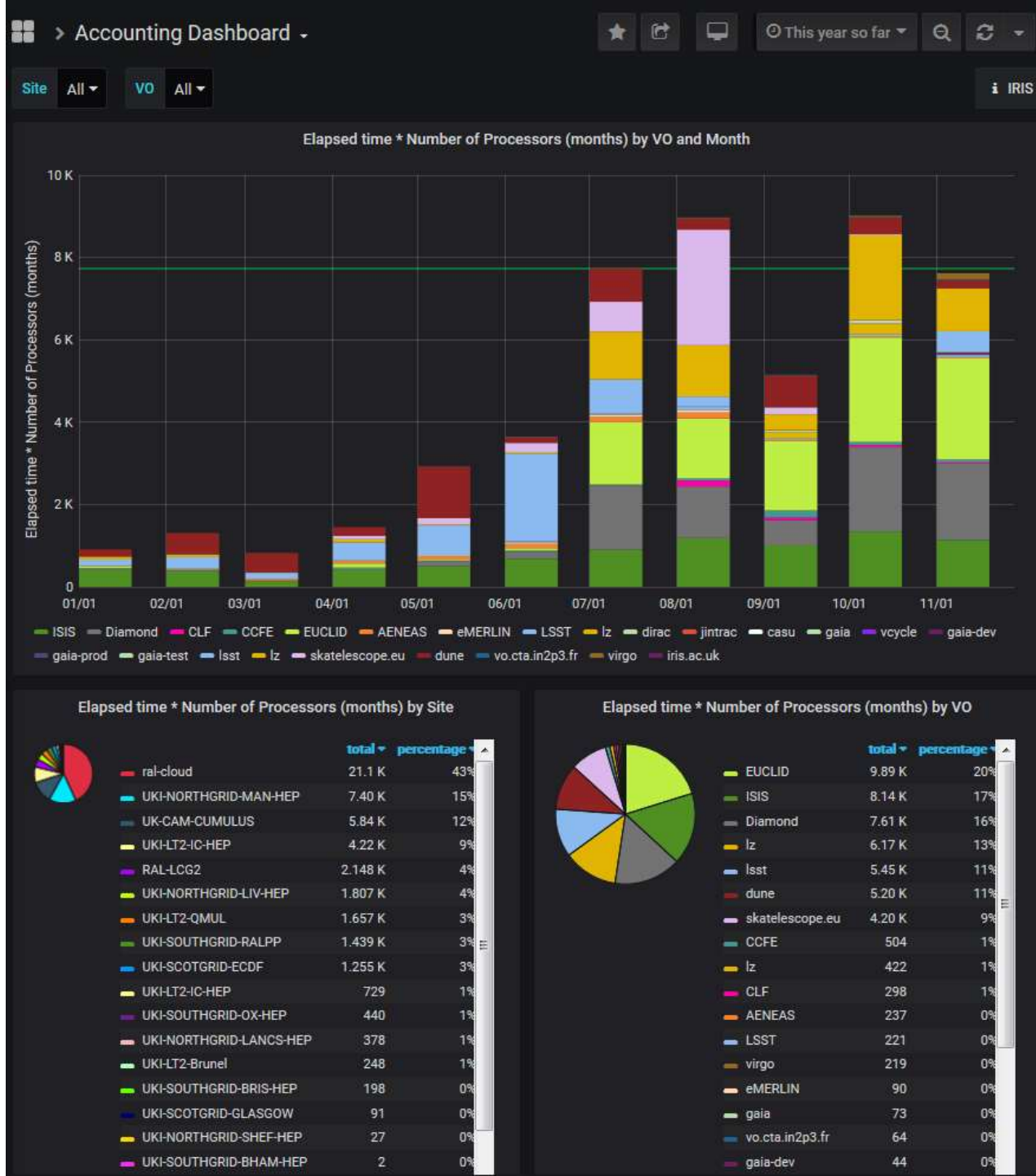
The IRIS Accounting Dashboard

Proposal

- Like any distributed eInfrastructure, IRIS needs a way to track how the resources it's funding are being used.
- The APEL team proposed a solution based on the existing Repository software and database schemas but with a new bespoke dashboard to interact with the data.
- Granted Digital Asset funding in late 2018.

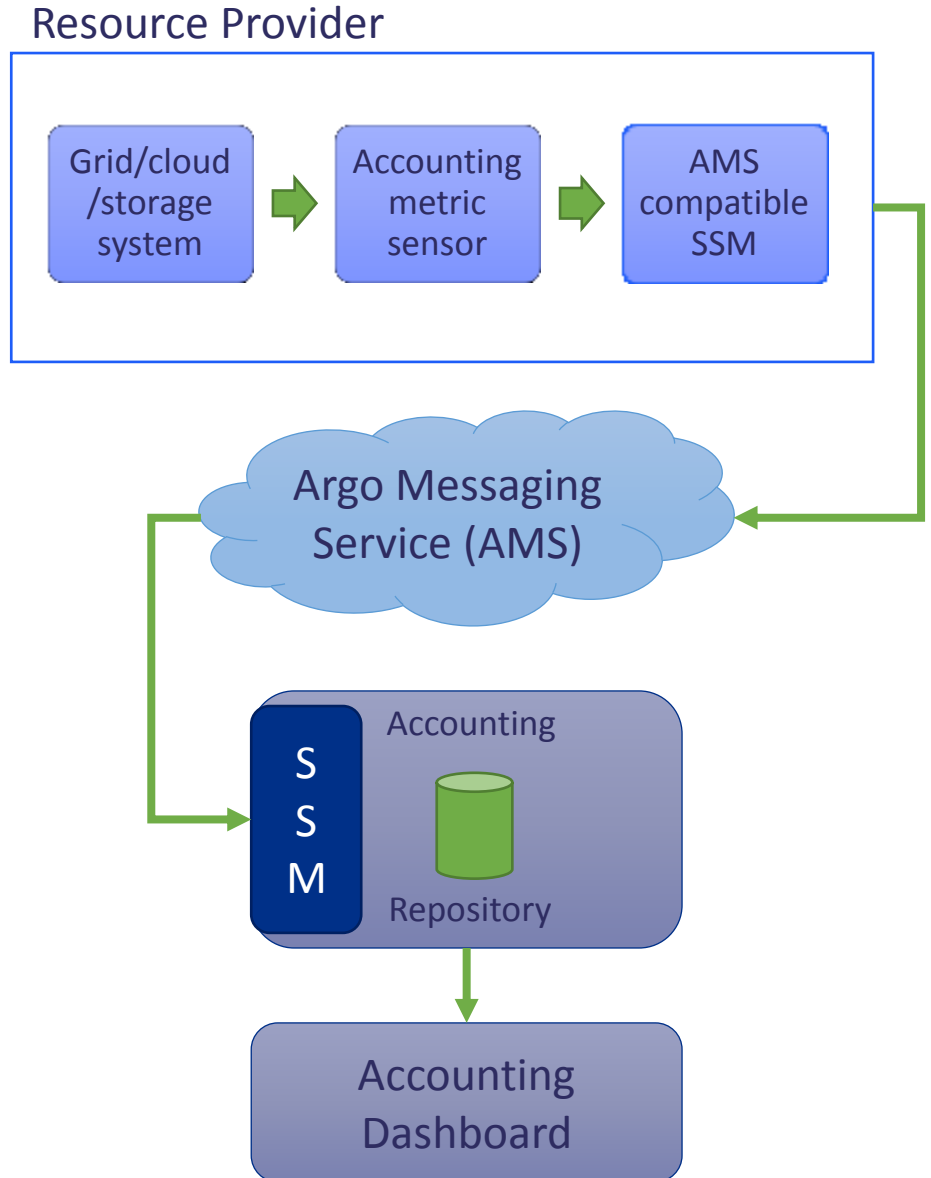
Solution

- Dedicated IRIS Accounting Repository using MariaDB.
- Grafana dashboard on top of that.
- AMS for exchanging accounting records.



Architecture

- Familiar architecture, mainly with a different layer for displaying the data.
- Good test-bed for using AMS as the messaging component for Accounting (which is coming to WLCG/EGI accounting soon).





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Thank you

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