



Science and
Technology
Facilities Council

GOCDDB Roadmap

EGI Conference 2020: EGI Core Service
Roadmap – Part 1

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GOCDDB

- GOCDDB is the official repository for storing and presenting EGI and WLCG topology and resource information.
- It is a definitive information source, with the emphasis on infrastructures and service operators to maintain their own data.
- It is intentionally designed to have no dependencies on other operational tools for information.

Welcome to GOCDDB

GOCDDB is the official repository for storing and presenting EGI topology and resources information.

What information is stored here?

The GOCDDB data consists mainly of:

- Participating National Grid Initiatives (NGI)
- Grid Sites providing resources to the infrastructure
- Resources and services, including maintenance plans for these resources
- Participating people, and their roles within EGI operations

Data are provided and updated by participating NGIs, and are presented through this web portal.

Please note:

- It is a "catch-all" service. This means it is centrally hosted on behalf of all NGIs.
- If an organisation deploys and uses their own system or a local GOCDDB installation, their data won't appear here.

*** Notification:** You have pending role requests - [Manage Roles](#)



GOCDDB

- Currently co-funded by EGI.eu and the EOSC-hub project until the end of 2020.
- Roadmap of work proposed as part of EGI-ACE and EOSC-Future.
- Exact roadmap is dependant on the exact outcome from those proposals.

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Roadmap

As proposed in EGI-ACE:

- Integrating web portal and API with OIDC based authentication.
- Account linking with GOCDB to allow X.509 users to link new OIDC credentials to existing accounts
- Evolving the database abstraction layer to allow large scale use of the Write API

OIDC Based Authentication

Motivated by both EGI's and WLCG's long-term aim of using OIDC-based authentication mechanisms across the core services.

Reworking existing portal integration with the EGI Check-In service to use OIDC instead of SAML.

Allowing access to the API via non-X.509 credentials for the first time.

Users using non-X.509 credentials will have to choose their IdP before proceeding (i.e. EGI Check-In, WLCG IAM, other OIDC providers as appropriate.)

Account Linking

Currently, registering with GOCDB via EGI Check-In (as opposed to X.509 certificates) creates a new user account.

Users *can* migrate their old accounts such that they can *only* login via EGI Check-In.

We will add the ability to link existing GOCDB accounts to new OIDC credentials from multiple IdPs.

Supporting large scale use of the Write API

GOCDDB allows programmatic updating of data via the [Write API](#). Usage of this functionality is currently low, but we expect this to change.

When the service was first designed, this use case was to store mostly static data with infrequent updates, as such in order to support large scale use of the Write API, the database abstraction layer will need to evolve to solve data consistency issues.

Roadmap

As proposed in EOSC-Future:

- Integrating web portal and API with future EOSC AAI solution.
- To support the increase of service endpoints, data stored and transactions the EOSC will bring, replace our legacy Model-View-Controller layer with modern framework.
- Re-architecting the failover to be Read/Write.

Re-architecting the Failover

Increasing usage of the Write API will mean that the current read-only failover model would no longer be sufficient.

Implement a more resilient architecture that allows write access to data in the event of outages of a GOCDDB instance.

Roadmap

Other work over the next 12 months:

- Migrating to a new (read-only) Failover
- Continuing work on [personal data privacy within GOCDB](#).
- Working with STFC's [IRIS](#) project.
 - Deploying an instance of GOCDB within the IRIS project
 - Supporting the OIDC authentication and account linking enhancements



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Questions?



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Thank you



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@STFC_Matters



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