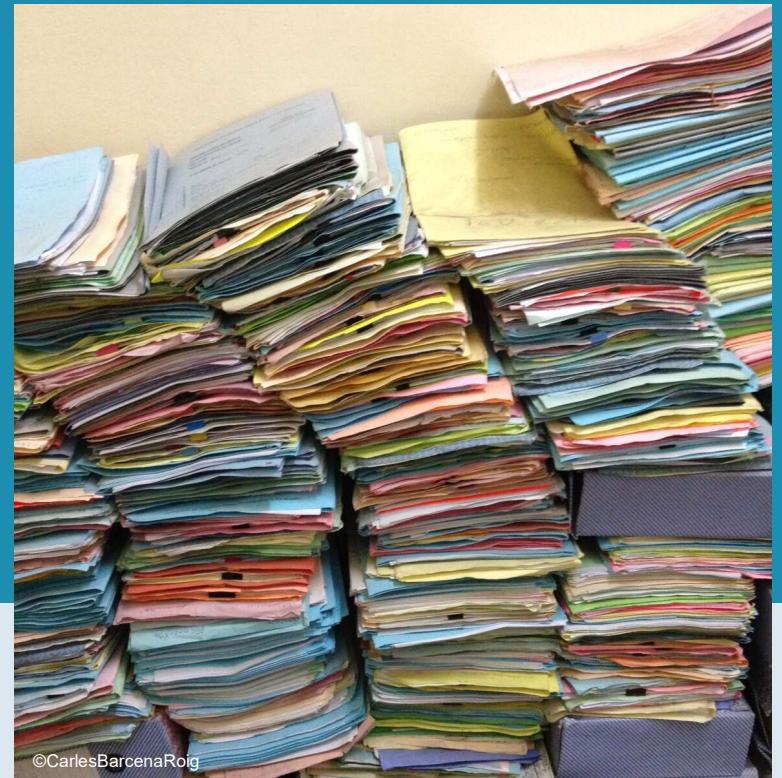
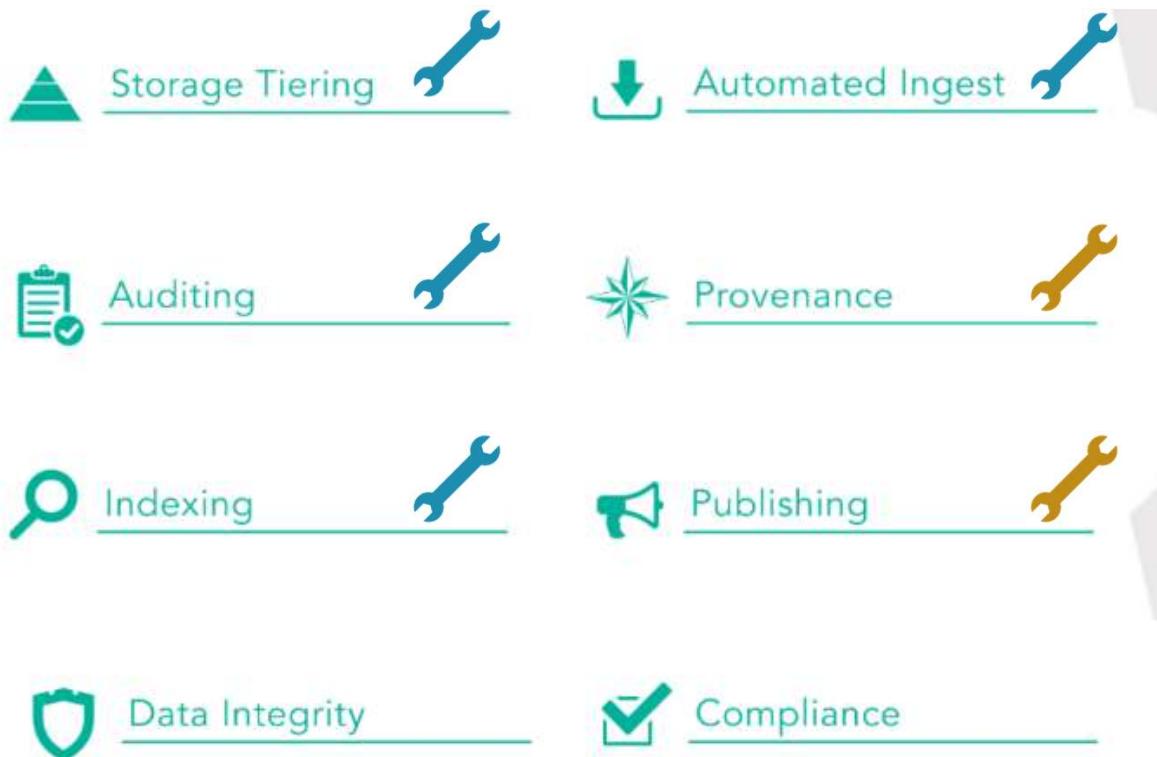


## 11. Other capabilities



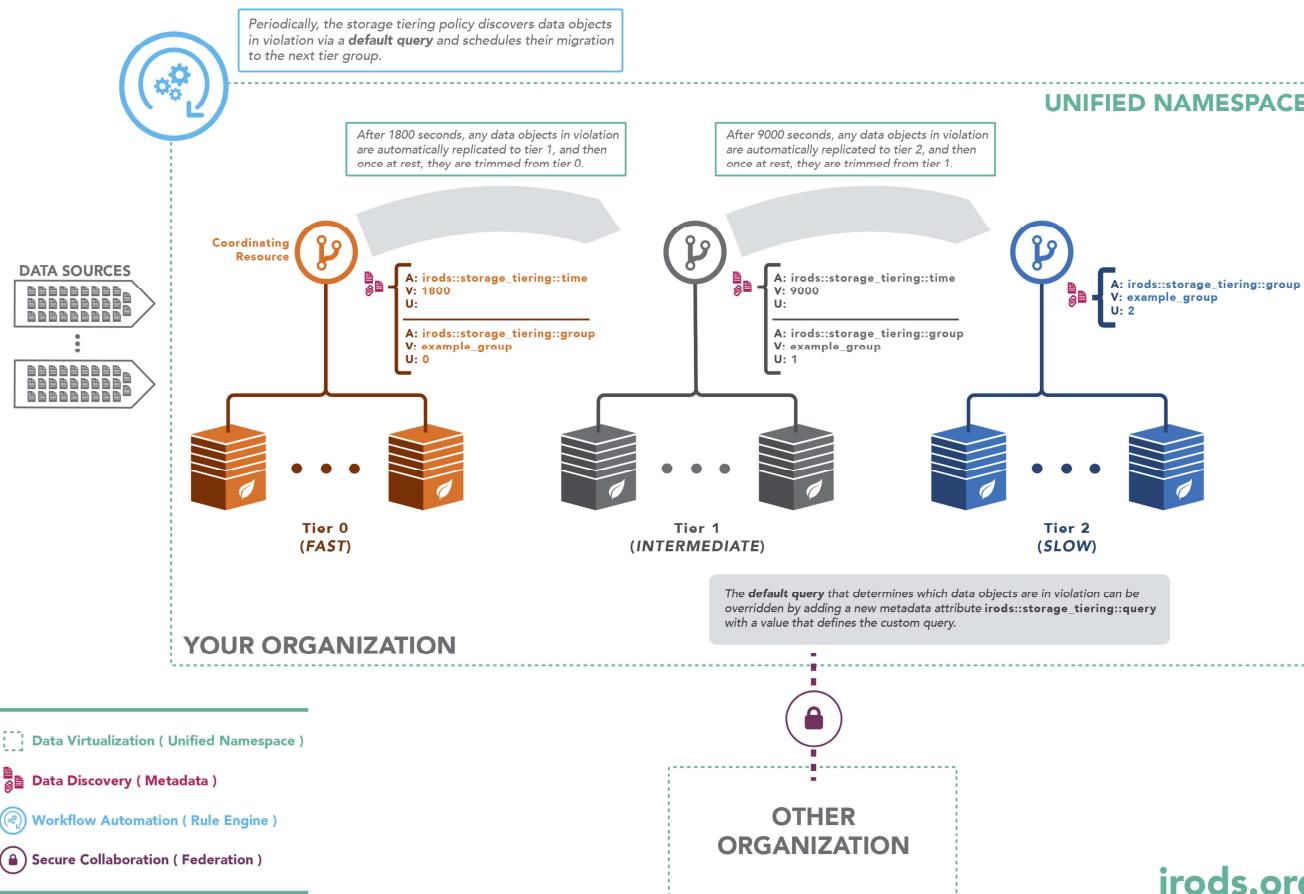
©CarlesBarcenaRoig

# Other iRODS capabilities



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# Storage Tiering



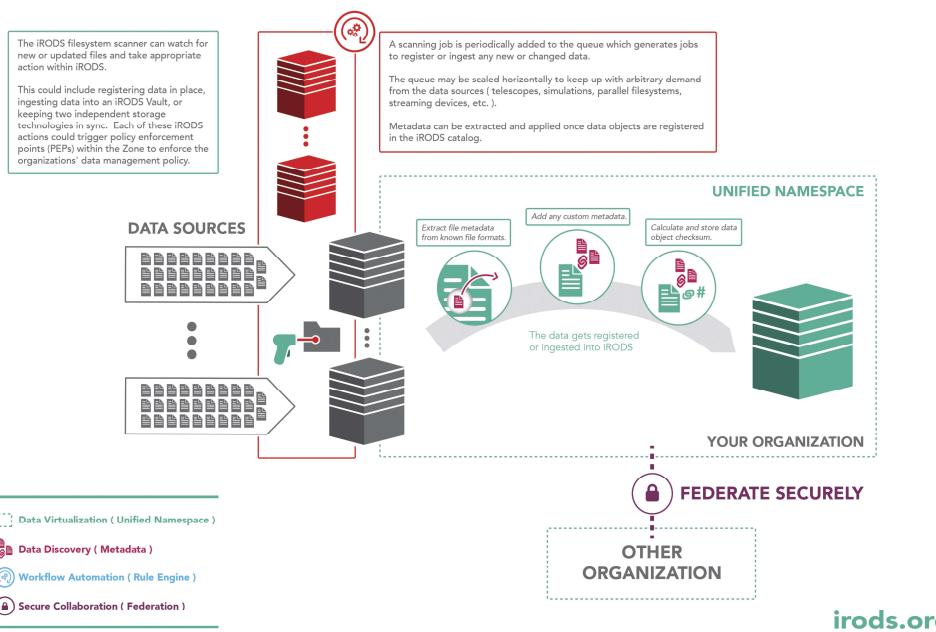
In test in the Tier-1 Data platform

Use case:

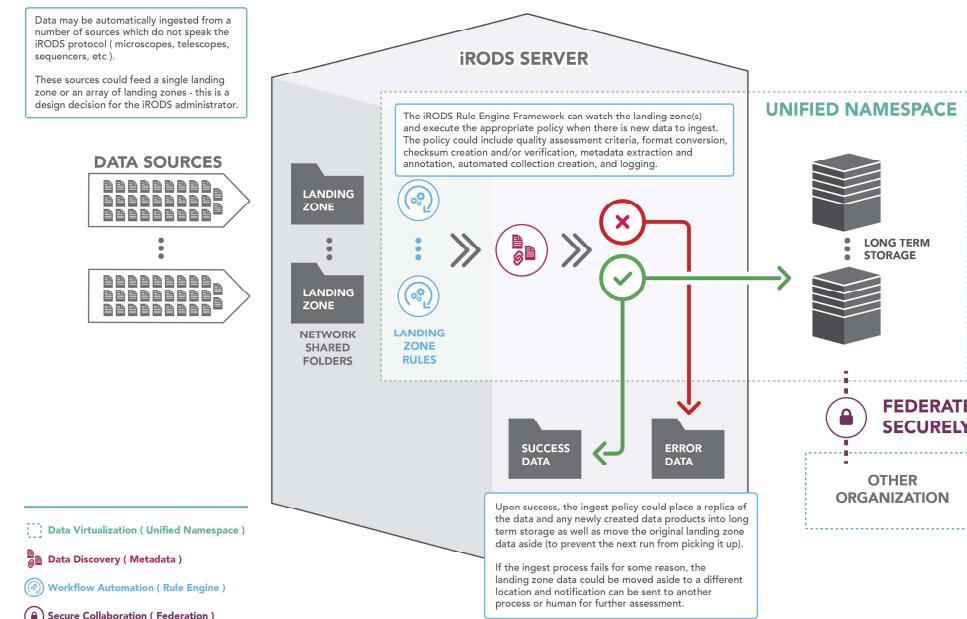
Production environment  
Move data between 2-3 types od storage:

Hot - warm - cold

# Automated ingest/Landing zone

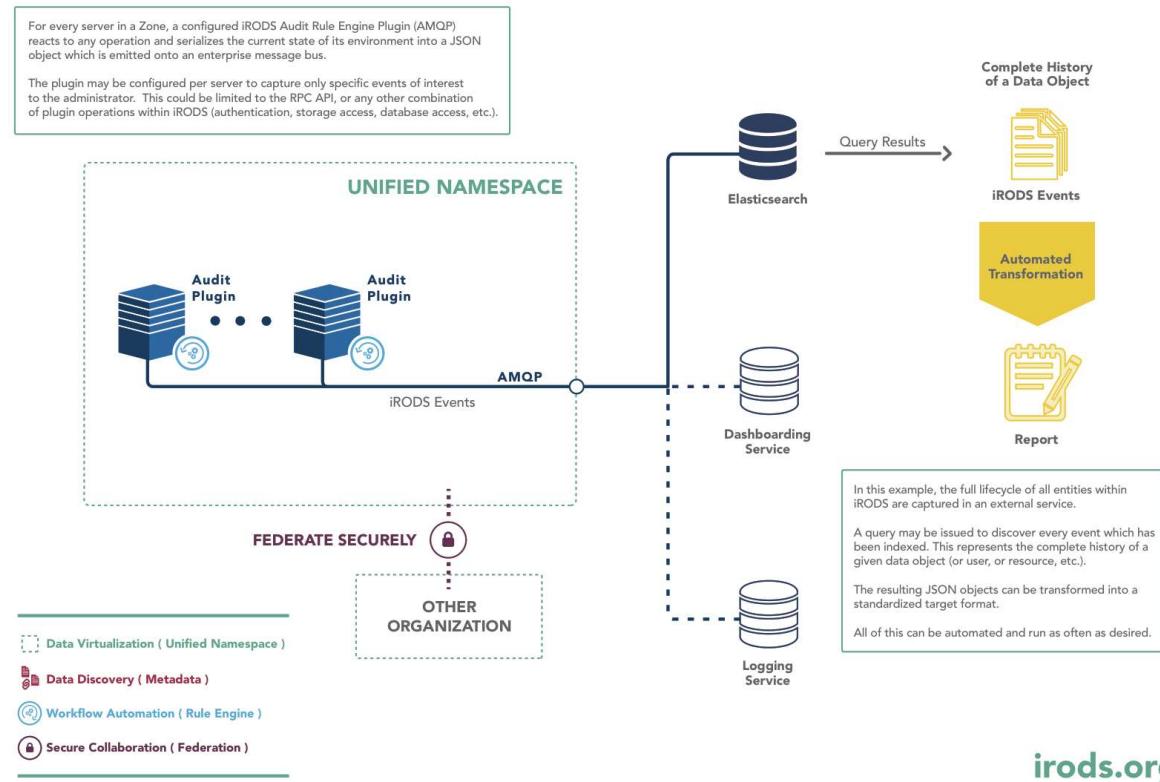


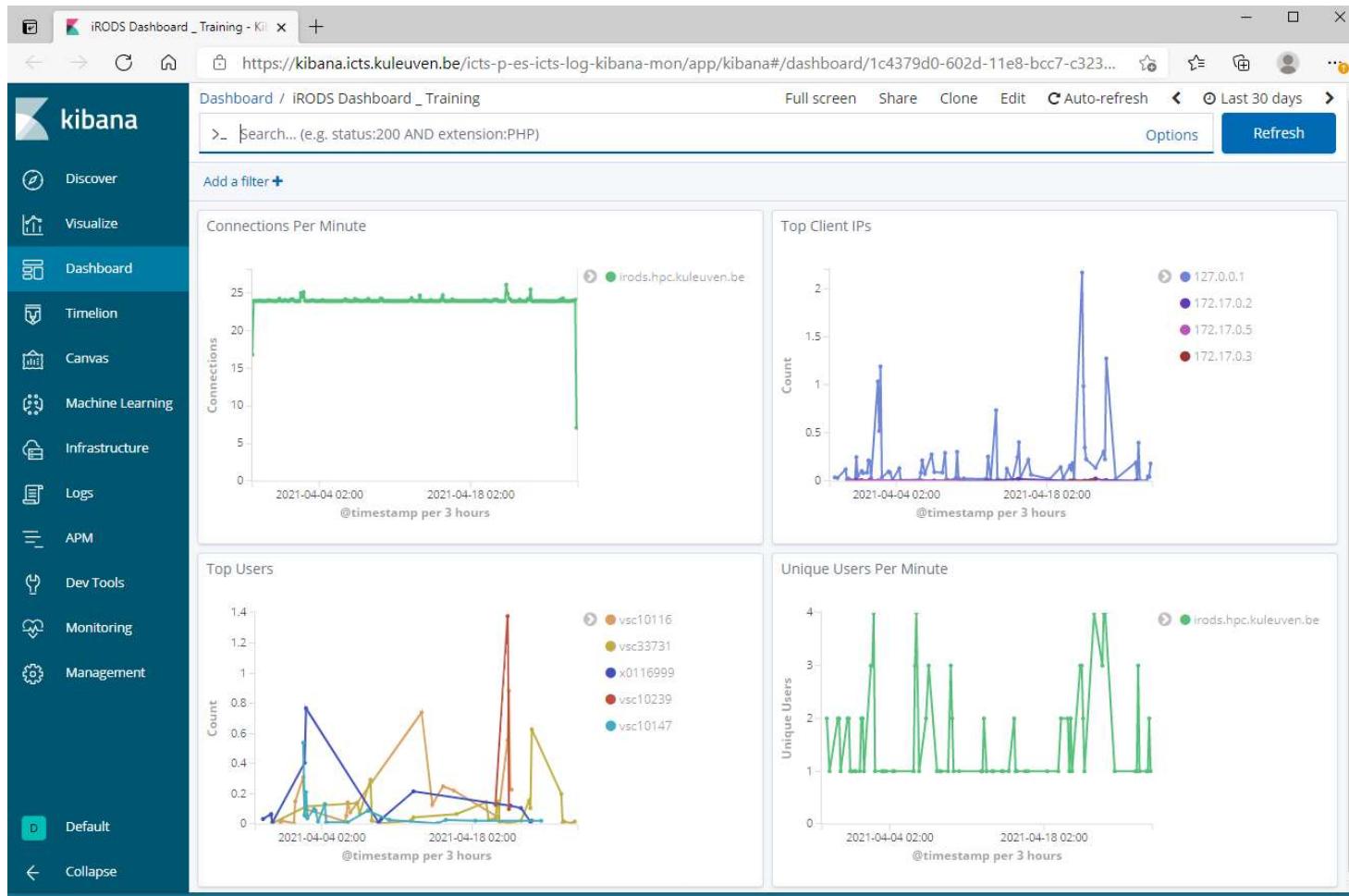
irods.org



irods.org

# Auditing/Provenance





Kibana dashboard

# Indexing

The iRODS Indexing Capability provides a policy framework around both full text and metadata indexing for the purposes of enhanced data discovery.

Logical collections are annotated with metadata which indicates that any data objects or nested collections of data objects should be indexed given a particular indexing technology, index type, and index name.

From the configured metadata, the framework composes a rule name and then delegates to the policy implementation through the rule engine.

A new indexing technology can be supported via a rule base or policy engine which provides policy implementations of the form:

- `irods_policy_indexing_object_index_<technology>`
- `irods_policy_indexing_object_purge_<technology>`
- `irods_policy_indexing_metadata_index_<technology>`
- `irods_policy_indexing_metadata_purge_<technology>`

 Data Virtualization ( Unified Namespace )

 Data Discovery ( Metadata )

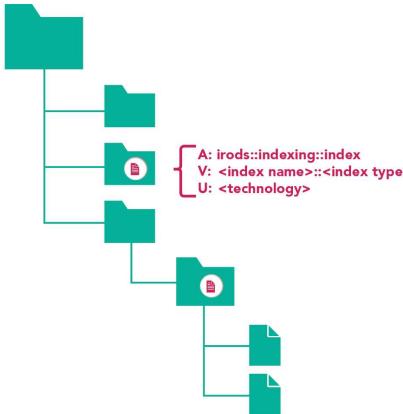
 Workflow Automation ( Rule Engine )

 Secure Collaboration ( Federation )

## UNIFIED NAMESPACE

Metadata takes the form:

- `<index name>` is the name of the index created
- `<index type>` is either "full\_text" or "metadata"
- `<technology>` is the targeted indexing service



⋮



## FEDERATE SECURELY

OTHER ORGANIZATION

Once indexing metadata is applied indicating that a collection should be indexed, a job is submitted to the iRODS delayed execution queue which will perform the requested action asynchronously.

[irods.org](http://irods.org)

# Publishing

The iRODS Publishing Capability provides a metadata driven policy framework for the implementation of data publication to external services.

The policy framework provides:

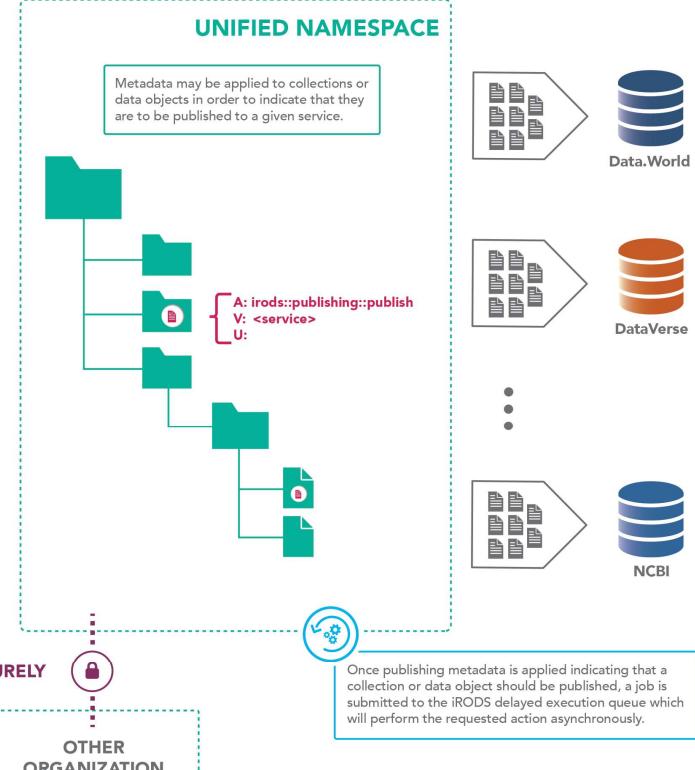
- Protection for published data, which prevents future modification
- Invocation of secondary policy for the generation and application of persistent identifiers
- Advertisement and possible movement of published data to external catalogs

From the configured metadata, the framework composes a rule name and then delegates to the policy implementation through the rule engine.

A new publishing service can be supported via a rule base or policy engine which provides policy implementations of the form:

- `irods_policy_publishing_object_publish_<service>`
- `irods_policy_publishing_object_purge_<service>`
- `irods_policy_publishing_collection_publish_<service>`
- `irods_policy_publishing_collection_purge_<service>`

- Data Virtualization ( Unified Namespace )
- Data Discovery ( Metadata )
- ⌚ Workflow Automation ( Rule Engine )
- 🔒 Secure Collaboration ( Federation )



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