INDIGO - DataCloud

RIA-653549

Feature highlight in INDIGO-2 Release: WP5

Giacinto Donvito

INDIGO-DataCloud WP5 Leader and TD

giacinto.donvito@ba.infn.it

INDIGO-DataCloud is co-founded by the Horizon 2020Framework Programme

Orchestrator

- Support for multi-site cluster based on OpenVPN overlay network
- Test the support for direct interaction with TOSCA-enabled Heat endpoints

CloudProviderRanker: roadmap

- The studying of the possibility to improve the ranking algorithm's performance in case of high load from multiple Indigo Orchestrator's connections.
- Increasing the supported rules according to the user’s needs

IAM: roadmap

- **Multi-tenancy**: currently one IAM instance, one organisation. We want to let one IAM instance manage multiple organisations
- **More external AuthN**: Github, ORCID
- Attribute query against enabled SAML AAs after a successful SAML authentication.
- **Dynamic attribute mapping policies**: add the ability for the user to choose which attributes are exposed and mapped in IAM tokens/userinfo/token introspection endpoints
- Support for displaying and managing hierarchical groups

Monitoring: roadmap

- Releasing Onedata monitoring

SLA Manager

- Roadmap:
  - Definitition and implementation of SLA for storage resources
    - the way of integrating with ONEDATA was agreed and tested
  - Implementing mechanism for resource quota based on accounting service
  - Integration with SLA violation detection based on monitoring/accounting
  - Improvement in usability

Onedata

- New own Couchbase driver to avoid problems of overloading Couchbase running on slow cloud storage drives
- Docker volume plugin
- Windows native version of Oneclient
- Full refactoring Onepanel GUI to make it working with new design
- Integrating existing externally managed collection into the system
- Further performance optimization
- Limited tokens
- Promises for storage support delegation
- Extended support for xattrs command line management working as alternative to the current metadata operations

Conclusion

- We need to work in order to test/prove the scalability of the system, reliability
- To improve the logging, traceability, errors management and propagation, etc
- Try to support the requirements coming out from the users communities