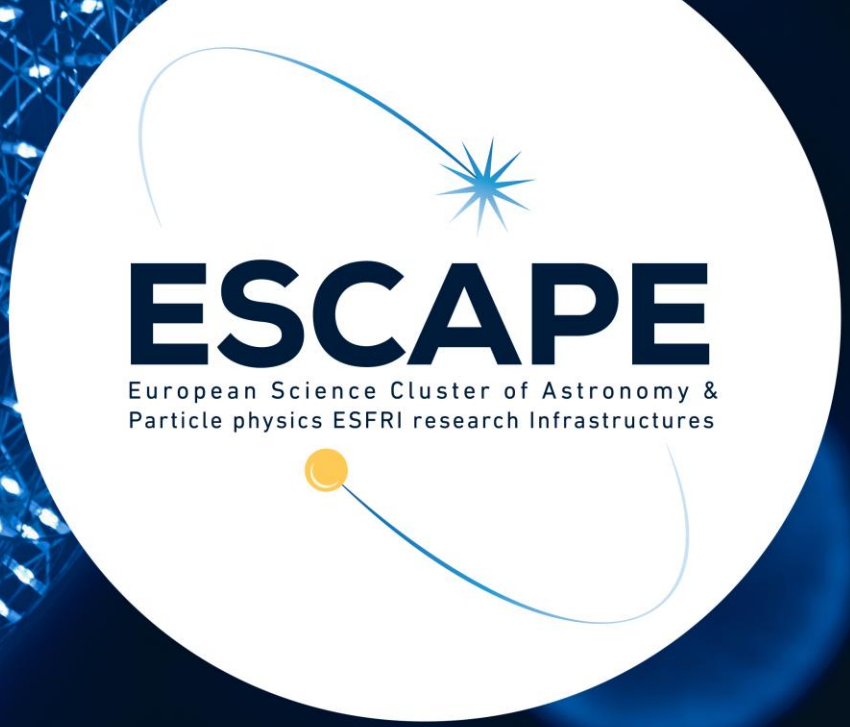

Indigo-IAM: an IAM service for your Community to enjoy the EOSC?

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3rd ESCAPE DIOS Workshop

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Outline

- What is Indigo-IAM
- The ESCAPE IAM in the EOSC AAI Federation
- How to run your IAM instance
- Indigo-IAM development status

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What is Indigo-IAM

- Indigo-IAM is an Identity and Access Management Service that provides support to manage:
  - identities, enrollment, group membership and other attributes of people who are part of a Community, aka Virtual Organization (e.g. a scientific experiment)
  - (coarse-grain) authorization policies on distributed resources
- In EOSC terms, it is a *Community AAI*, such as the ESCAPE IAM
- It supports authentication via identity federations (e.g. EduGAIN) and other mechanisms (e.g. user/password, X.509 certificates, social login)
- It is an OpenId Connect Provider and an OAuth Authorization Server
  - It can issue Id Tokens and Access Tokens to clients (typically services, e.g. a Jupiter Hub)
- It is **not** a SAML Identity Provider
  - It is **not** able to directly issue SAML assertions
  - But it can consume SAML assertions
- Originally developed within the INDIGO-DataCloud EU Project

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What is Indigo-IAM

- Indigo-IAM comes with optional components that:
  - Issue VOMS proxy certificates
  - One-way synchronize the IAM database from a VOMS database
- Ideal solution to implement a migration path from a Grid/Cloud based on VOMS proxies to one based on OAuth tokens
- About 20 deployments at CNAF for various experiments/projects (on k8s), two at CERN for ATLAS and CMS (on k8s), others in France and UK, …

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EOSC AAI Federation

- "*The ambition of the European Open Science Cloud (EOSC) is to provide European researchers, innovators, companies and citizens with a **federated** and open multi-disciplinary environment where they can publish, find and reuse data, tools and services for research, innovation and educational purposes.*"
- Resources in EOSC can be EOSC-provided (core resources) or be made available by multiple Science Clusters/Research Infrastructures/Communities and shared with others
- A first fundamental step to enable the EOSC is to federate the *Community AAIs* of the participants, so that a researcher authenticated through their own AAI can access resources **not** belonging to their own Community
- Matter of discussion in EOSC-Future

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EOSC AAI Federation

- The federation of AAIs will be initially based on SAML technology
  - OpenId Connect (OIDC) federation is not yet a reality
- Proposal agreed within EOSC-Future
  - Start with ESCAPE IAM as entry point in the EOSC AAI Federation
  - Through a SAML-OIDC proxy
    - Indigo-IAM is **not** a SAML IdP
  - Initially the proxy will be deployed by Géant, to meet the April milestone
  - People who want to join the EOSC now, need to register in ESCAPE IAM

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How to deploy your IAM

- Follow the documentation :-)
  - https://indigo-iam.github.io/v/current
- We are improving/extending it also thanks to contributions by people who have tried it
- The easiest is to deploy the docker images, possibly on Kubernetes
  - We may provide a configuration template, based on kustomize

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Indigo-IAM Development Status

- Current stable version is 1.7.2
- Version 1.8.0 about to be released. Highlights:
  - Upgrade of Spring dependencies
  - Improved client management and registration
  - Session externalization
  - JWT-based client authentication
- Next:
  - Compliance with AARC guidelines for EOSC AAI federation
  - High-availability deployment
  - Multi-Factor Authentication

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