




Indigo IAM Test and LOFAR workflow

TA2 Technical Chat

Benoit Roland, Hubert Simma, Manuel Giffels | 29. April 2025

Where we stand

- Identity and Access Management (IAM) solution for scientific computing 
- **Policy engine embedded by default** 
 - Define scope policies
 - Issue authorization by evaluating requests against policies
- ILDG Indigo IAM instance hosted at CNAF/INFN 
- Hubert offered us to register - Access via eduGAIN and institution IdP
- S4P-ILDG client available and registered to the Mytoken service
- Client can be used after registration to ILDG Indigo IAM

Parametric scopes

■ Define scopes missing in Helmholtz AAI

■ Available to all PUNCH members:

- `compute.cancel, compute.create, compute.modify, compute.read`
- `storage.{read, stage}:/public/`
- `storage.{read, stage, create, modify}:/punch/public/`

■ Available to LOFAR members only - to protect data under embargo:

- `storage.{read, stage, create, modify}:/punch/embargo/`

Test LOFAR workflow with Indigo IAM

- C4P HTCondor updated to accept both ILDG Indigo IAM and Helmholtz AAI
- Implementation successfully tested using Dimuon Spectrum Tutorial [↗](#)
- **Now want to test policy engine using LOFAR calibration workflow**
- LOFAR data (120 files) made available on ILDG storage at DESY HH
- Goal: read LOFAR data from ILDG storage and store results on ILDG storage as well
- Indigo access token used to access data and store results

Outlook

- ILDG Indigo IAM has custom scopes missing in Helmholtz AAI
- Possible to submit C4P HTCondor jobs using S4P-ILDG client
- Need to harmonise storage base-URL
- Need to define/harmonise directory structure/hierarchy
- Need to define scopes and policies for new use cases
- Need to set up a dedicated client for PUNCH
- Need to set up dedicated clients for LOFAR, CMS, ...