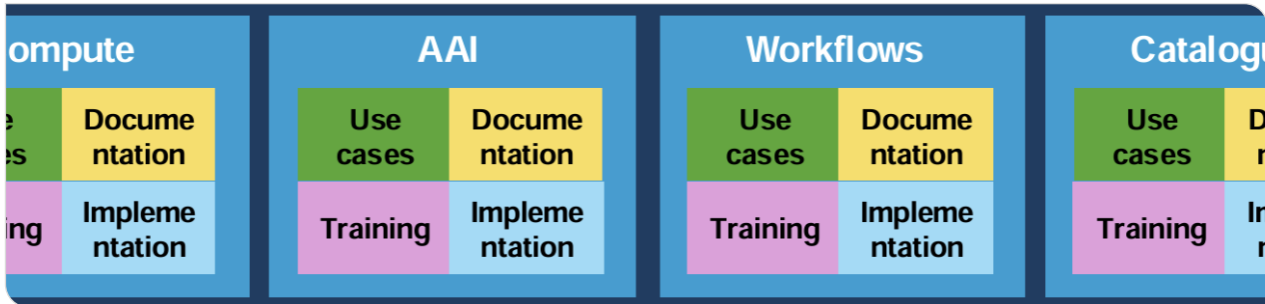# AAI Component

PUNCH 2.0 proposal preparation - 4th meeting

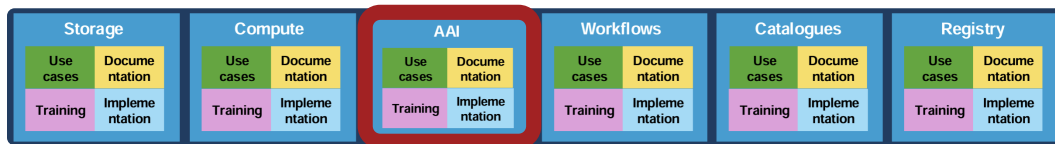Benoit Roland (KIT), Kilian Schwarz (DESY) | 14th April 2025

AAI Component: Accomplished in PUNCH 1.0

- AAI with group-based (local) and scope-based (central) authorisation

  - Reduced permissions via filtering

  - Storage scopes

- Compute scopes for remote job submission

- Harmonisation of storage elements

  - Names

  - Directory structure

AAI Component: Content of the box

PUNCH Authentication and Authorisation Infrastructure (PUNCH AAI)

- **Unified access** to PUNCH login nodes, compute resources and storage elements

- **OIDC token-based**

- AAI (Helmholtz and/or Indigo) in production with **policy engine fulfilling all the needs of PUNCH**

- **Mytoken service** for access token renewal

Storage		Compute		AAI		Workflows		Catalogues		Registry	
Use cases	Docume ntation	Use cases	Docume ntation	Use cases	Docume ntation	Use cases	Docume ntation	Use cases	Docume ntation	Use cases	Docume ntation
Training	Impleme ntation	Training	Impleme ntation	Training	Impleme ntation	Training	Impleme ntation	Training	Impleme ntation	Training	Impleme ntation

PUNCH 1.0 ○   **Content** ●   Deliverables ○   Resources ○   Institutions ○   Community coverage ○   Gap analysis ○

AAI Component: 3 main deliverables

- **1. Consolidation and Interoperability of the PUNCH AAI infrastructure**

  - User friendly AAI interaction for admins (APIs) and users / Potential adjustments of client tools

  - Increase security via Two-Factor Authentication

  - Embedding into interoperable NFDI AAI infrastructure

- **2. Support infrastructure, existing and new use cases with respect to their AAI needs**

  - Training / PUNCH and non-PUNCH members / Multiple client instances

- **3. Extension to new services and infrastructures**

  - Federated to local mapping or extended rights for federated accounts (external VO members)

  - Interconnection with established services

| PUNCH 1.0 | Content | Deliverables | Resources | Institutions | Community coverage | Gap analysis |
| ○ | ○ | ● | ○ | ○ | ○ | ○ |

3/7   14. 04. 2025   AAI Component   Benoit Roland (KIT)

AAI Component: Approximative resource requirements

- 2 FTE for the entire period

- 15 kEuro for the external development requests

AAI Component: Involved institutions

- Bonn, DESY, KIT, FZJ, HIFIS (external member), . . .

AAI Component: Community coverage

- Aim to avoid leaving any community behind via continuous support

- Address missing use cases and related developments via Incubator projects (IAM4NFDI)

AAI Component: Gap analysis

- Ensure gap analysis via a cross-check by external members?