Synergies and coupling to other use cases

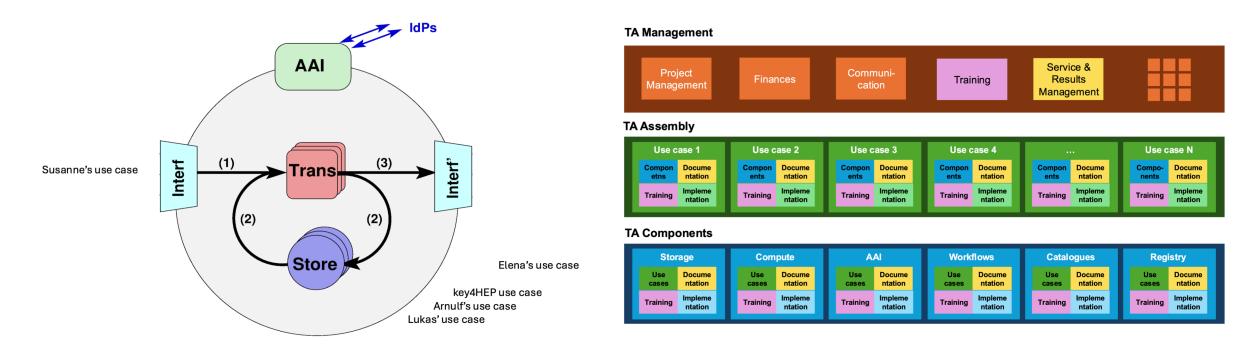
TA5 WP4 meeting

Andreas Redelbach (FIAS)

14/08/2024

Overview

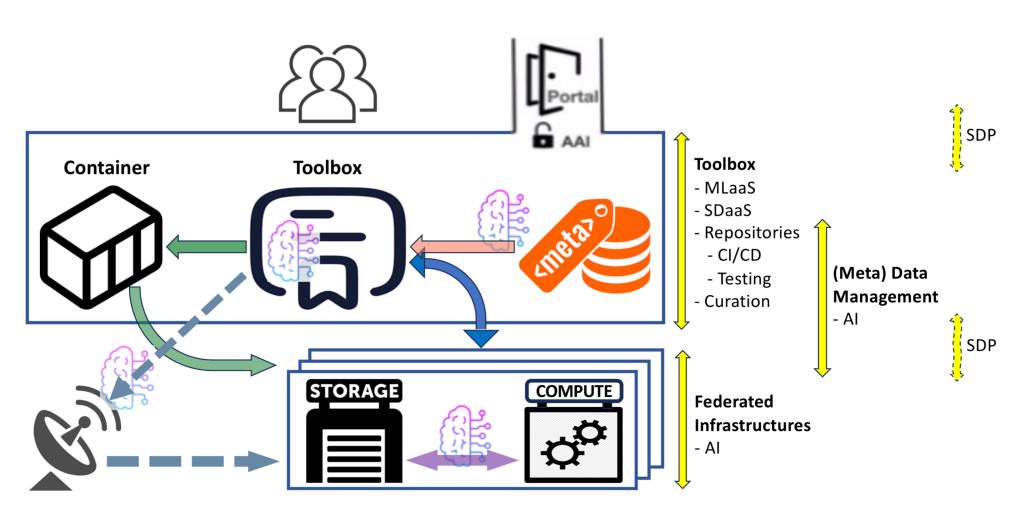
- Use case meeting: https://indico.desy.de/event/48530/
- Summary of current plans: https://indico.desy.de/event/48406/contributions/184108/attachments/96512/132461/PUNCH.GM-TA1-PUNCH-2.0.20250328.pdf
- Some synergies identified:



→ Coupling of "Workflow for future observation" to other use cases and building blocks of PUNCH 2.0?

Illustration of Workflow for future observation

Workflows for future observations



Key aspects of Workflow for future observation

Simulations

Metadata → ILDG

C4P → Containerization (Intertwin)

Fast ML

FPGAs

Resource efficiency \rightarrow compute cost

Dynamic archiving

Real-time data

To be discussed

Aspects: Partially covered by others

Simulations

Metadata → ILDG

C4P → Containerization (Intertwin)

Fast ML

FPGAs

Resource efficiency → compute cost

Dynamic archiving

Real-time data?

Aspects: Exclusive

```
Simulations

Metadata → ILDG

C4P → Containerization (Intertwin)

Fast ML

FPGAs

Resource efficiency → compute cost

Dynamic archiving

Real-time data

Memory-based computing?
```

For discussion

List of features to be consolidated

Balance of common and exclusive aspects

Which communities are included?

Preparations until next use case meeting April 14?