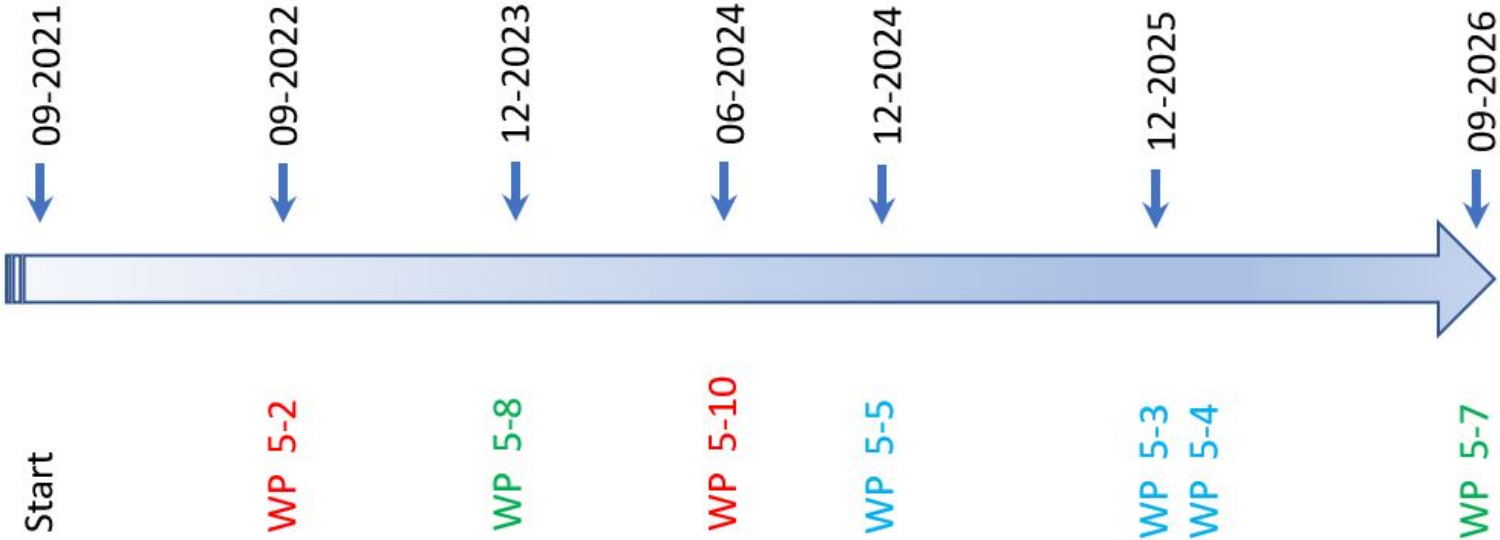
TA6 WP5 Meeting

07.04.22

Overview

WP5 is about integration of heterogeneous resources and accessible services



- WP5-2,-10: storage
- WP5-3,-4,-5: compute resources
- WP5-7,-8: tools and scientific software

Guiding questions for today

- Names of coworkers from each institute
- Content of the various deliverables
- Relation to other TAs (e.g. technical preparation, what remains in our field?)
- Kind of service: individual service (AAI access) / interfaced service (e.g. via overlay batch system) / transparent to user
- Documentation for users, marketplace registration
- AUPs
- Monitoring

=> Will collect information on Intranet: https://intra.punch4nfdi.de/?md=/docs/TA6/WP5/deliverables.md

WP5-2 (09-2022)

Contact: …

According to reduced work plan:

```
Dynamic disk cache for including opportunistic storage resources
```

- Transparent to users, no documentation for users / AUP
- Relation to other TAs?
- Monitoring?
- Which opportunistic resources do we expect?

WP5-8 (06-2023)

Contact: …

According to reduced work plan:

```
Connect very different domains of IT resource providers like those of PUNCH with microservices as the software
architecture within cloud environments to connect services (with limited scope) via clearly defined APIs.
```

- Current status depends on progress with (STORAGE|COMPUTE)4PUNCH
- Via PUNCH gitlab already some integrations on the way
- Formation of groups in AAI will support first runs
- Access via portal (=> TA4)

WP5-10 (06-2024)

Contact: …

According to reduced work plan:

```
Set-up of FTS and Rucio for evaluation purposes inside the PUNCH consortium. Activities beyond need additional
resources.
```

- No resources where AUP apply
- At the given stage (only development), transparent to users, no documentation for users
- Relation to other TAs?
- Monitoring as far as it comes as a byproduct with the evaluation

WP5-5 (12-2024)

Contact: …

According to reduced work plan:

```
Management of decentralised community specific resources via the COBalD/TARDIS compute resource management
software framework and application to CERN open data platform for third-party users including the general
public.
```

- Adding compute resources?
  - To be integrated into overlay batch system via TA2 Compute4PUNCH, no separate access point needed
  - AUP certainly relevant, to be discussed with the single sites and solutions need to be found in Compute4PUNCH
- Documentation or links to it for using CERN open data

WP5-4 (12-2025)

Contact: sebastian.wozniewski@uni-goettingen.de

According to reduced work plan:

- Interfaces to the supercomputer ”HLRN - High Performance Computing in northern Germany” in Göttingen to science community will be developed and provided to the PUNCH4NFDI communities, initially for development purposes.
- Access interfaces to the GPU cluster in Göttingen will be developed and provided for education and development purposes to the PUNCH4NFDI communities.
- A fraction of the GoeGrid grid computing cluster in Göttingen will be provided to PUNCH4NFDI and beyond for analysis of the CERN open data to users without explicit CERN or experiment affiliation.

- To be integrated into overlay batch system via TA2 Compute4PUNCH, no separate access point needed
- No specific documentation needed, but probably for overlay batch system in total. Specific contents may be prepared in TA7.
- AUP certainly relevant, to be discussed with the single sites and solutions need to be found in Compute4PUNCH
- Monitoring by GoeGrid for its own purposes and within PUNCH4NFDI probably in the context of overlay batch system => consult Compute4PUNCH

WP5-3 (12-2025)

Contact: …

According to reduced work plan:

```
The consortium Gen-Z is developing an open standard for memory-based computing (since 2016). Upcoming
extensions are explored concerning their relevance for TA5 where, inter alia, the astronomical framework CASA
is optimised for analysing ”data monster” (SKA will provide single images from the cosmos that may be as large
as 1 PB). This may also serve as a prototype for genome research.
```

- …

WP5-7 (09-2026)

Contact: …

According to reduced work plan:

```
Integration of standard analysis software and newly developed tools into the JupyterHub platform via use case specific notebook images.
```

- JupyterHub prepared by Compute4PUNCH (=> integration into SDP)
- Licenses of ‘input’ to be checked, notebooks to be licensed (=> integration in DRP concept)
- Documentation probably within notebooks and registration e.g. in market place for raising user attention envisaged