TA2 Storage & Compute Prototyping
PUNCH general meeting, 16 November 2021

Particles, Universe, NuClei and Hadrons for the NFDI

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PUNCH
4NFDI

Storage Prototyping

- 1st deliverable in WP1 is a prototype Data Lake setup for PUNCH
- Started "adhoc" working groups
- Setup of first test systems
  - Configure 1st authentication setup via PUNCH AAI
  - Enable reading and writing
  - Limited capacity
  - Existing test system at DESY (dCache based) being configured
  - Likely soon similar test system at GSI (xrootd based)
  - More test systems to join, e.g. Bielefeld, Bonn

- Identify initial (small) use-cases

- Link to CPU resources

- Description of "howto" for other systems, e.g. TA4 services

Compute4PUNCH Demonstrator (our ideas so far, not yet discussed with partners):

- Set-up central services for the HTCondor Overlay Batch System
  - Add shared KIT HTC resources to this infrastructure
  - Add one additional „remote" HTC resource
  - Add one cloud resource
  - Add one „smaller" HPC resource
- Set-up entry points to the infrastructure
  - Login node (not fully featured)
  - Potentially a first version of JupyterHub (surely not fully featured)
- Demonstrate capabilities of the system
  (demo analysis workflows, i.e. CERN OpenData, Radio Astronomy, …)

Set up a small ad-hoc group for prototyping:

- Decide on a common work plan and discuss ideas
- First meeting this week
- Establish regular more technical meetings between partners

Reminder: Compute4PUNCH - Infrastructure