Status Update

Kilian Schwarz April 14, 2023 DESY@FIDIUM(2)

FIDIUM participation

- Work packages
 - Bereich 1: AP1 (Einbindung von opp. Ressourcen)
 - Bereich 2: WP2: caching technologies
 - KIT, FFM, Mainz, LMU, HH, GSI, DESY, GridKa
 - Bereich 2: WP3: data lake data and workflow management
 - KIT, Mainz, HH, Göttingen, GSI, CERN, DESY, GridKa
 - Bereich 2: WP4: data lake prototype, QoS and efficient interconnection
 - FFM, Mainz, LMU, GSI, CERN, DESY, GridKa
 - Bereich 3: AP1 (Integration/Tests), AP2 (Anpassung), AP3(Support)

DESY

- DESY is associated partner
- Contributing with experience in opportunistic usage of heterogeneous resources
- Contributing with long term experience in operating large scale computing and storage resources
- Contributing with long term experience in handling big data
- Contribution with experience in setting up and operating monitoring infrastructures
- DESY takes part in the work packages
 - See slide before

Status DESY

- Concrete results
 - Integration of DESY resources in Cobald/Tardis ongoing
 - Ongoing tests with AAI and dCache storage infrastructures
 - Participation with dCache resources in federated Data Lake testbed
 - Successful FIDIUM overall workshop at DESY
 - Co-Coordination of FIDIUM project
 - Co-Cordination of Area2

DESY: plans for FIDIUM2

Identified topics

- Optimising workflows for Green and sustainable IT
 - Machine learning in resource management
 - Monitoring and optimising integrated store+core systems
 - Efficient usage of Green electricity
- How to operate central data cloud via HGF centres
- How to operate IT resources through HPC centres
- Usage of accelerators as GPUs, FPGAs
- Efficient usage of virtualisation infrastructures

priorities and tools need to be identified

DESY @ FIDIUM2

 DESY is in a very good position being a big infrastructure provider and being very well connected to ATLAS and CMS and WLCG including the computing & operations management. That can be instrumental to sustain solutions out of FIDIUM (2) into solution adopted on a larger scale.