Erste Ideen aus Freiburg für neuen Verbund „Federated Infrastructures and Science Cloud Computing"

Albert-Ludwigs-Universität Freiburg

Physikalisches Institut
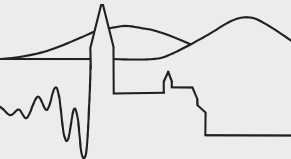Albert-Ludwigs-
Universität Freiburg

UNI FREIBURG

Markus Schumacher

Kick-Off-Meeting für neuen Verbund

4. September 2020

Some first ideas

Optimized and efficient use of heterogeneous compute clusters:
→ Continue adaption of meta scheduler for COBalD/TARDIS
   (developed in G.Quast' group) for ATLAS uses case / ATLAS Nemo environment / …

Optimized and efficient use of "on fly caching" prototype based on Xroot
→ Continue adaption work from prototypes
   (developed by groups of G. Quast and K. Schwarz)
   for ATLAS use case / ATLAS Nemo/ … environment

Contribute to development and evaluation of combined tests
with focus on developing, implementing and using monitoring and benchmarking tools

More specific ideas (M. Böhler)

➢ Automated tests -> Event Handler
  (less maintenance via self-correcting system)

➢ Implementation of modules for automized installation and
  maintenance (puppet/ansible module) for all used software

➢ Implementation of monitoring packages for use in open-source
  programs (as e.g. Zabbix)

➢ Inclusion of data science tools in workflow (anaconda, Spark, ...) ..
  [to enable closer connection with data science community, industry]

➢ Use of ML tools for analysis of log files (follow up on project developed
  by G. Duckeck's group and others)