Contribution ID: **141** Type: **poster**

Data storage layout and architecture of the German T1

Monday 3 September 2007 08:00 (20 minutes)

The grid era brings upon new and steeply rising demands in data storage. The GridKa project at Forschungszentrum Karlsruhe delivers its share of the computation and storage requirements of all LHC and 4 other HEP experiments. Access throughput from the worker nodes to the storage can be as high a 2 GB/s. At the same time a continuous throughput in the order of 300-400 MB/s into and out from GridKa must be guaranteed for several months without interruption. The scalable storage and networking concept is based on modular storage units that offer dCache, xrootd and NFS access to over 1000 clustered hosts.
dCache directs over 300 pools with a total of 600 TB of disk storage.
The tape connection via separate SAN is managed by Tivoli Storage Manager (TSM) using storage agents. The talk describes software and hardware components, their integration and interconnects, then focuses on the design criteria of the architecture. Plans for enhancements and directions based on current experiences, future expansion are also discussed.

Primary author: Dr RESSMANN, Doris (Forschungszentrum Karlsruhe)

Co-authors: Mr VAN WEZEL, Jos (Forschungszentrum Karlsruhe); Dr HALSTENBERG, Silke (Forschungszentrum Karlsruhe); Ms MEIER, Stephanie (Forschungszentrum Karlsruhe)

Presenter: Dr RESSMANN, Doris (Forschungszentrum Karlsruhe)

Session Classification: Poster 1

Track Classification: Computer facilities, production grids and networking