

## Planning of the FZK // Service Challenges // February 2005

### **SC1**

*500 MB/s to disk sustained for 2 weeks*

FZK is still in progress for this challenge. At the time of writing the network bandwidth of GEANT has not been more than 200MB/s. Investigations and discussions are pending. Results are expected in 2<sup>nd</sup> week of February. If the network issue has been resolved, FZK will request another time slot to run the SC1 test in February.

Plans for SC1 completion (500 MB/s): February05

### **SC2**

*500 MB/s from CERN to 5 Tier 1 sustained for 2 weeks*

FZK is ready to start this test after successful completion of SC1. Accepting a smaller stream does change the setup or methods used at FZK. The equipment of SC1 remains available for SC2 but we need **at least 2 weeks advanced notice** of the SC2 start for final preparation.

Plan for SC2: 100 MB/s from CERN in March05

### **SC3**

*50 MB/s (2ndQ/05) to 100 MB/s (4thQ/05) to tape at tier1*

For the SC3 FZK will install a dedicated tape library with 4 AIT1 drives. Delivery is expected March05. It will take till June to install and setup the proper scalable environment with multiple tape connections and dCache. Expansion to 100MB/s will be straightforward after the planned addition or exchange of tape drives in November05.

Plan for SC3: 50 MB/s in June, 100-150 MB/s in December05

### **People involved**

Doris Ressmann – tape and disk storage, dCache

Bruno Hoeft – network and transfer runs

Jos van Wezel - coordination

### **Equipment**

Available equipment for the service challenges

5 \* 8+P RAID3 arrays of SATA disks with 8 FC connections

4 \* single Xeon 2.4 G, 1 MB mem, SCSI disk

4 \* dual Xeon 2.8 Ghz, 2.5 MB mem, SCSI disk

2 \* dual Xeon EMT64 3.0 Ghz, 2.5 MB mem, SCSI disk

RAIDs are accessed in parallel via GPFS  
AIT Library with 4 to 6 FC drives  
All equipment is coupled over a non-blocking 2 Gb SAN

## **Other issues**

GridKa accepted the request of Kors Bos to take part in an SC2 testrun with SARA. It involves only SARA and GridKa.

During the 2<sup>nd</sup> SC meeting Kors Bos proposed to have a background data stream that would flow continuously. The idea was to keep the data flowing and to simulate a production environment. What has happened to this idea.

At HEPiX 04 in Edinburgh we agreed on having the service challenges as they seem inevitable for a successful deployment of the LCG software. GridKa willingly offered equipment, manpower and cooperation to proof the capabilities of its cluster. At the same time everybody at HEPiX recognized the limited time and money available for these tests. Let it be absolutely clear that production will have priority above the service challenge. This includes hardware and working hours.

JvW 03/02/05