

## ALICE Tier2 at GSI

*Tuesday 24 March 2009 08:00 (20 minutes)*

GSI Darmstadt is hosting a Tier2 centre for the ALICE experiment providing about 10% of ALICE Tier2 resources. According to the computing model the tasks of a Tier2 centre are scheduled and unscheduled analysis as well as Monte Carlo simulation. To accomplish this a large water cooled compute cluster has been set up and configured consisting of currently 200 CPUs (1500 Cores). After intensive I/O tests it has been decided to provide on site storage via a Lustre cluster, at the moment 150 TB disk space, which is visible from each individual worker node. Additionally an xrootd managed storage cluster is provided which serves also as a Grid Storage Element. The central GSI batch farm can be accessed with Grid methods from outside as well as via LSF methods for users from the inside of the centre. Both is used mainly for simulation jobs. Moreover for interactive access a PROOF analysis facility, GSIAF, is maintained on a subset of the same machines. On these machines the necessary infrastructure has been statically installed providing to each user 160 PROOF servers and the possibility to analyse 1700 events per seconds. Also the alternative to create a PROOF on demand cluster dynamically on the batch farm machines is supported. The coexistence of interactive processes and batch jobs has been studied and can be dealt with by adjusting the process priorities accordingly. All relevant services are monitored contineously, to a large extend based on MonaLisa.

Detailed user experience, data transfer activities, as well as future and ramp up plans are reported also in this presentation.

GSI will profit from the expert knowledge it will gain during the set up and operation of the ALICE Tier2 centre for the upcoming Tier0 centre for FAIR.

### **Presentation type (oral | poster)**

oral

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