

Swiss ATLAS Grid computing in preparation for the LHC collision data

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

Computing for ATLAS in Switzerland has two Tier-3 sites with several years of experience, owned by Universities of Berne and Geneva. They have been used for ATLAS Monte Carlo production, centrally controlled via the NorduGrid, since 2005. The Tier-3 sites are under continuous development.

In case of Geneva the proximity of CERN leads to additional use cases, related to commissioning of the experiment. The work requires processing of the latest ATLAS data using the latest software under development, which is not distributed to grid sites. We rely on the AFS file system to have the software and we are planning to rely on the ATLAS Distributed Data Management for what concerns latest data. An SRM interface will be installed in Geneva for this purpose.

The Swiss Tier-2 at the CSCS centre has a recent and powerful cluster, serving three LHC experiments, including ATLAS. The system features two implementations of the grid middleware, NorduGrid ARC and the LCG gLite, which operate simultaneously on the same resources.

In this talk will present our implementation choices and our experience with hardware, middleware and ATLAS-specific grid software. We will discuss the requirements of our users and how we meet them. We will present the status of our work and our plans for the ATLAS data taking period in 2009.

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Session Classification: Poster session

Track Classification: Hardware and Computing Fabrics