

# ATLAS operation in the GridKa Tier1/Tier2 cloud

*Monday 23 March 2009 08:00 (20 minutes)*

The organisation and operations model of the ATLAS T1-T2 federation/cloud associated to the GridKa T1 in Karlsruhe is described. Attention is paid to cloud level services and the experience gained during the last years of operation.

The ATLAS GridKa Cloud is large and divers spanning 5 countries, 2 ROC's and is currently comprised of 13 core sites. A well defined and tested operations model in such a cloud is of the utmost importance.

We have defined the core cloud services required by the ATLAS experiment and ensured that they are performed

in a managed and sustainable manner. Services such as Distributed Data Management involving data replication, deletion and consistency checks, Monte Carlo Production, software installation and data reprocessing are described in greater detail.

In addition to providing these central services we have undertaken several cloud level stress tests and developed

monitoring tools to aid with cloud diagnostics. Furthermore we have defined good channels of communication

between ATLAS, the T1 and the T2's and have pro-active contributions from the T2 manpower.

A brief introduction to the GridKa cloud is provided followed by a more detailed discussion of the operations model and ATLAS services within the cloud.

Finally a summary of our experience gained while running these services is presented.

## Presentation type (oral | poster)

oral

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**Session Classification:** Poster session

**Track Classification:** Distributed Processing and Analysis