

# Migration of ATLAS PanDA to CERN

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The ATLAS Production and Distributed Analysis System (PanDA) is a key component of the ATLAS distributed computing infrastructure. All ATLAS production jobs, and a substantial amount of user and group analysis jobs, pass through the PanDA system which manages their execution on the grid. PanDA also plays a key role in production task definition and the dataset replication request system. PanDA has recently been migrated from Brookhaven National Laboratory (BNL) to the European Organization for Nuclear Research (CERN), a process we describe here.

We discuss how the new infrastructure for PanDA, which relies heavily on services provided by CERN IT, was introduced in order to make the service as reliable as possible and to allow it to be scaled to ATLAS's increasing need for distributed computing.

The migration involved changing the backend database for PanDA from MySQL to ORACLE, which impacted upon the database schemas. The process by which the client code was optimised for the new database backend is illustrated by example. We describe the procedure by which the database is tested and commissioned for production use.

Operations during the migration had to be planned carefully to minimise disruption to ongoing ATLAS operations. All parts of the migration had to be fully tested before commissioning the new infrastructure, which at times involved careful segmenting of ATLAS grid resources in order to verify the new services at scale.

Finally, after the migration was completed, results on the final validation and full scale stress testing of the new infrastructure are presented.

## Presentation type (oral | poster)

oral preferred

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