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## Next generation database relational solutions for ATLAS distributed computing

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The ATLAS Distributed Computing (ADC) project delivers production tools and services for ATLAS offline activities such as data placement and data processing on the Grid. The system has been capable of sustaining with high efficiency the needed computing activities during the first run of LHC data taking, and has demonstrated flexibility in reacting promptly to new challenges. Databases are a vital part of the whole ADC system. The Oracle Relational Database Management System (RDBMS) has been addressing a majority of the ADC database requirements for many years. Much expertise was gained through the years and without a doubt will be used as a good foundation for the next generation PanDA (Production ANd Distributed Analysis) and DDM (Distributed Data Management) systems.

In this paper we present the current production ADC database solutions and notably the planned changes on the PanDA system, and the next generation ATLAS DDM system called Rucio. Significant work was performed on studying different solutions to arrive at the best relational and physical database model for performance and scalability in order to be ready for deployment and operation in 2014.

**Author:** DIMITROV, Gancho (CERN)

**Co-authors:** MAENO, Tadashi (Brookhaven National Laboratory (US)); GARONNE, Vincent (CERN)

**Presenter:** DIMITROV, Gancho (CERN)

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