

EVOLUTION OF THE RESOURCE MANAGER OF THE ATLAS TRIGGER AND DATA ACQUISITION SYSTEM

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The Resources Manager (RM) is one of the services provided by the Data Acquisition (DAQ) system of the ATLAS experiment the Large Hadron Collider (LHC). The ATLAS experiment contains many hardware and software resources which usage must be controlled to avoid conflicts during online operations. The purpose of the RM is to marshal multiple accesses to such resources. When new software process needs to be started or obtain exclusive permissions, the RM is queried to verify availability of the resources as they are described in the DAQ configurations database. This article talks about the evolution of the RM based on the operations experience and changes in the underlying DAQ system software towards improving of security, fault tolerance, error reporting, logging and test facilities.