

# Tools for offline access and visualization of ATLAS online control and data quality databases .

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Data describing the conditions of the ATLAS detector and the Trigger and Data Acquisition system are stored in the Conditions DataBases (CDB), and may include from simple values to complex objects like online system messages or monitoring histograms. The CDB are deployed on COOL, a common infrastructure for reading and writing conditions data. Conditions data produced online are saved to an intermediate file based buffer called ONASIC, relieving possible pressure on the online informations bus. Configuration data are managed by OKS classes and instances, that are made persistent into the CDB by the OKS2COOL application. By the end of each run, monitoring histograms are stored by a collector process, and references to the histogram's location are stored on the CDB. NODE is an application capable of reading back the histogram's information from the databases, fetch the histogram and present it to the user. The three applications developed by our group - ONASIC, OKS2COOL and NODE - share an underlying database API, the TIDB2, characterized by its multi-backend plugins, and scientific objects handling orientation. Databases created by TIDB2 based tools can be browsed through a graphical application called KTIDBExplorer. There are standing issues accessing Conditions data stored in CDB by ONASIC and OKS2COOL from the ATLAS offline framework ATHENA. The design of future interfaces to recreate usable detector configurations needs to be evaluated. NODE also presents constraints to be overridden. On this paper it is described solutions to these problems, along with recent developments of the ONASIC, OKS2COOL and NODE applications, exposing as well new features/functionalities of the underlying TIDB2 API and explorer.

## Summary

## Presentation type (oral | poster)

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