



Contribution ID: 286

Type: oral presentation

## HLT Online Calibration framework in ALICE

*Wednesday, September 5, 2007 5:15 PM (15 minutes)*

The ALICE HLT is designed to perform event analysis including calibration of the different ALICE detectors online. The detector analysis codes process data using the latest calibration and condition settings of the experiment. This requires a high reliability on the interfaces to the various other systems operating ALICE.

In order to have a comparable analysis with the results from Offline, HLT requests the same storage for calibration data, Offline Calibration Database (OCDB). A local caching of its content guarantees a fast and permanent availability of the calibration data during a run. In addition, interactions with the other ALICE online systems (Detector Control System (DCS) and Experiment Control System (ECS)) provide current running conditions like temperatures, trigger settings or the current run number, and allow for synchronizing among the current states.

Calibration objects, which are produced online in the HLT cluster, have to be stored in the OCDB after each run, before they can be reused inside the HLT. This guarantees proper versioning of the data and correct assignments of the produced results to the applied settings.

A set of dedicated portal nodes of the HLT cluster cover these tasks and take care of the internal distribution and collection of the data as well as of communication and data transfer with the other online and offline systems. Fail safety and redundancy in the design of these interfaces avoids single points of failure and reduces the risk of time delays or data loss.

### Submitted on behalf of Collaboration (ex, BaBar, ATLAS)

ALICE

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**Session Classification:** Online computing

**Track Classification:** Online Computing