

# The ALICE Online-Offline Framework for the Extraction of Conditions Data

*Monday 23 March 2009 15:20 (20 minutes)*

The ALICE experiment is the dedicated heavy-ion experiment at the CERN LHC and will take data with a bandwidth of up to 1.25 GB/s. It consists of 18 subdetectors that interact with five online systems (DAQ, DCS, ECS, HLT and Trigger). Data recorded are read out by DAQ in a raw data stream produced by the subdetectors. In addition the subdetectors produce conditions data derived from the raw data, i.e. calibration and alignment information, which have to be available from the beginning of the reconstruction and therefore cannot be included in the raw data. The extraction of the conditions data is steered by a system called Shuttle. It provides the link between data produced by the subdetectors in the online systems\*\* and a dedicated procedure per subdetector, called preprocessor, that runs in the Shuttle system. The preprocessor performs merging, consolidation and reformatting of the data. Finally, it stores the data in the Grid Offline Conditions Data Base (OCDB) so that they are available for the Offline reconstruction. The reconstruction of a given run is initiated automatically once the raw data are successfully exported to the Grid storage and the run has been processed in the Shuttle framework. While data-taking, a so-called quasi-online reconstruction is performed using the reduced set of conditions data that is already available during the current run.

The talk introduces the quasi-online reconstruction strategy within the ALICE online-offline framework, i.e. the Shuttle system. The performance of such a complex system during the ALICE cosmics commissioning and LHC startup is described. Special emphasis is given to operational issues and feedback received. Operational statistics and remaining open issues are presented.

\*\* Processing in the ALICE DAQ is discussed in a separate talk

## Presentation type (oral | poster)

oral

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**Session Classification:** Online Computing

**Track Classification:** Online Computing