

## The SHUTTLE: the ALICE Framework for the extraction of the conditions Data

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ALICE will collect data at a rate of 1.25 GB/s during heavy-ion runs, and of 100 MB/s during p-p data taking. In a standard data taking year, the expected total data volume is of the order of 2PB. This includes raw data, reconstructed data, and the conditions data needed for the calibration and the alignment of the ALICE detectors, on top of simulated data. The raw data produced in the DAQ system are stored in the Grid, in order to be subsequently reconstructed. On its turn, the conditions data needed for reconstruction should be extracted from the raw data themselves. The Shuttle is the ALICE Online-Offline framework that handles and coordinates among the 18 ALICE detectors and the 5 online systems (DAQ, DCS, ECS, HLT and Trigger) the gathering, processing, and publication of the conditions data. The online systems and their databases are subject to stringent access control and have very limited outside exposure. The Shuttle is providing an interface between the protected online world and the external computing resources. All collected conditions data are exported on the Grid, thus making them accessible for the reconstruction and analysis. The Shuttle conditions data handling process consists of copying the data produced by the online systems for each subdetector (in whatever format), preprocessing them (e.g. performing consolidation, fitting...), reformatting them in ROOT files, and storing them in the Offline Condition Database (OCDB) in the Grid. The reconstruction of a given run is started automatically when the Shuttle processing of that run is finished, including the storage of the conditions data in the Grid. A constant monitoring of the Shuttle operation is performed through a MonALISA service. The talk describes the features of the Shuttle framework. The performance of such a complex system during the commissioning phase and at the LHC startup is presented. Operational statistics, issues, and problems encountered are discussed.

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