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Monte Carlo Production Management at CMS

The analysis of the LHC data at the Compact Muon Solenoid (CMS) experiment requires the production of a large number of simulated events. During the runI of LHC (2010-2012), CMS has produced over 12 Billion simulated events, organized in approximately sixty different campaigns each emulating specific detector conditions and LHC running conditions (pile up).

In order to aggregate the information needed for the configuration and prioritization of the events production, assure the book-keeping and of all the processing requests placed by the physics analysis groups, and to interface with the CMS production infrastructure, the web-based service 'Monte Carlo Management' (McM) has been developed and put in production in 2012.

McM is based on recent server infrastructure technology (CherryPy + java) and relies on a CouchDB database back-end.

This contribution will cover the one and half year of operational experience managing samples of simulated events for CMS, the evolution of its functionalities and the extension of its capability to monitor the status and advancement of the events production.

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