

First experience in operating the population of the "condition database" for the CMS experiment

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Reliable population of the condition database is critical for the correct operation of the online selection as well as of the offline reconstruction and analysis of data.

We will describe here the system put in place in the CMS experiment to populate the database and make condition data promptly available online for the high-level trigger and offline for reconstruction.

The system has been designed for high flexibility to cope with very different data sources and uses Pool-ORA technology to store data in an object format that matches best the object oriented C++ programming paradigm used in CMS offline software. To ensure consistency among the various subdetectors, a dedicated package, PopCon (Populator of Condition Objects), is used to store data online. The data are then automatically streamed to the offline database and so immediately accessible offline worldwide. This mechanism has been intensively used during 2008 in the test-runs with cosmic rays. The experience of this first months of operation will be discussed in details.

Summary

The experience of this first months of operation of condition databases for the CMS experiments will be discussed in details.

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