

New developments on the LHCb Bookkeeping

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The Bookkeeping (Bkk) is a crucial component in the LHCb software infrastructure, both for the production, as it registers and uploads to the database all newly produced files, as well as for the data analysis, since it is the tool which allows physicists to retrieve datasets and their metadata.

The motivation for this activity on the Bkk arises from requirements of the physicists, who outlined a lack of efficiency of the service. Issues raised include the current user interface, implemented as a web page, is not flexible enough and has broken functionality. Furthermore, the service does not provide exhaustive information on the metadata and returns the output to the user in a rather cumbersome way. The objective now is to provide a new client to allow physicists to search for data and relative metadata in the most flexible and efficient way possible. The new client is implemented in Python, for consistency with the rest of the LHCb software infrastructure

3. Impact

The impact of a restructuring of the Bkk is immediate for the physics community of the LHCb experiment since physicists are direct users of this service. The new client of the Bkk will be also implemented in the Ganga framework, easing the way LHCb physicists can construct their analysis jobs and improving the functionality to search for replicated data at different sites

4. Conclusions / Future plans

A new client for the BKK is being developed. The client is implemented as a python module, and includes all the functionality required by the LHCb physicists. The implementation of the module inside Ganga is still ongoing

Provide a set of generic keywords that define your contribution (e.g. Data Management, Workflows, High Energy Physics)

Bookkeeping, LHCb, Metadata Catalog, Data Management, Ganga

1. Short overview

The LHCb Bookkeeping is the service which aims to keep the data of the LHCb experiment coherently organised. It provides information on the provenance of data and all kinds of metadata to allow for the characterisation of the data. This service is undergoing a restructuring and reorganization to optimise its functionality and to make it suitable for handling the forthcoming data taking. In particular, the functionality which allows users to search for datasets has been replaced with a new client

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