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## The LHCb Bookkeeping: a new Metadata Catalog for LHCb files

*Tuesday 23 September 2008 17:01 (1 minute)*

**Describe the activity, tool or service using or enhancing the EGEE infrastructure or results. A high-level description is needed here (Neither a detailed specialist report nor a list of references is required).**

The LHCb Bookkeeping (Bkk) 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 has been completely renewed to provide users a better functionality to access the data and also to streamline the interaction with DIRAC, the workload management system of LHCb. The new service is now deployed on a test system and will be soon delivered.

**Report on the impact of the activity, tool or service. This should include a description of how grid technology enabled or enhanced the result, or how you have enabled or enhanced the infrastructure for other users.**

The impact of a new Bkk service is immediate for the physics community of the LHCb experiment since physicists are direct users of this service.

The access to data provided by the Bkk is a key point in a distributed system for data analysis, and it is a fundamental requirement for the LHCb experiment.

On the other side, for the interaction of the BKK with the production system, the new implementation of the Bkk offers a more stable and reliable service which is fully integrated with the DIRAC framework.

**Describe the added value of the grid for your activity, or the value your tool or service adds for other grid users. This should include the scale of the activity and of the potential user community, and the relevance for other scientific or business applications.**

The Bkk has a twofold role in the LHCb software infrastructure: it is necessary for the production activity, as it registers and uploads to the database all newly produced files and provides information about the files to be processed. On the other hand, it is crucial 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. This report is the follow up of a work presented at the last EGEE User Forum, where the problems of the current implementation of the Bkk were analyzed and the status and future planning of the activity were reported. Now the development of the new service is almost finished and the new Bkk is foreseen to be released to users by the summer. After an initial phase of testing with simulated data, we foresee to have the new Bkk fully operative before the LHC starts to take data.

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