LHCbDirac: distributed computing in LHCb

LHCbDirac is a DIRAC extension to support LHCb specific workflows

LHCbDirac for LHCb specific workflows:

- Productions
- Data Management
- Users
- Testing

Application Managers

Steps Manager

Requests Manager

Production Managers

Data Management Workflow:
- replication
- removals
- archivals
- checks

Data Managers

Production Templates

Productions Workflow:
- request
- submission
- monitoring

Testing Workflow:
- SAM jobs
- tests for space usage
- availability of resources.

LHCb Users

Ganga

LHCbDirac APIs (extension of DIRAC APIs)

Sites Manager

Users Workflow:
- jobs submission
- jobs monitoring

LHCbDirac Transformation Sys (TS) (extension of DIRAC TS)

LHCbDirac Bookkeeping

Productions page

All LHCbDirac Services and Agents have been developed using the DIRAC Framework. The DIRAC Configuration System (CS) is the backbone of all configurations and operations

LHCbDirac WMS (extension of DIRAC WMS)

LHCbDirac Data Mgnt (DMS) (extension of DIRAC DMS)

LHCb and DIRAC Resource Status (RSS)

LHCbDirac Resources abstraction (extension of DIRAC Resources abstraction)

DIRAC Computing

Job description

App Step 1
App Step 2
Finalization Step

Production, User and Test Jobs: DIRAC workflows executing LHCbDirac code.

LHCb and DIRAC Storage

LHCb and DIRAC Catalog

More detailed, technical information can be found on the paper

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