

Experiment Dashboard - monitoring system for the LHC experiments

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Describe the scientific/technical community and the scientific/technical activity using (planning to use) the EGEE infrastructure. A high-level description is needed (neither a detailed specialist report nor a list of references).

LHC experiments are depending on the distributed EGEE infrastructure for their core activities. The Experiment Dashboard is a monitoring framework aiming to provide for the LHC experiments the overview of their activities on the EGEE infrastructure with a special emphasis in support for users community.

Report on the experience (or the proposed activity). It would be very important to mention key services which are essential for the success of your activity on the EGEE infrastructure.

Experiment Dashboard is currently in production and is used by LHC users with different roles for their everyday work.

With a forward look to future evolution, discuss the issues you have encountered (or that you expect) in using the EGEE infrastructure. Wherever possible, point out the experience limitations (both in terms of existing services or missing functionality)

The whole EGEE monitoring infrastructure can be considerably improved. Very often the error messages indicating various failures are not clear and do not point to a real problem. The variety of the local fabrics monitoring systems used by local sites complicates the task of creation of the common framework for aggregation of the monitoring data in the central repository. Transparent navigation of the monitoring data provided by different monitoring systems is often not possible.

Describe the added value of the Grid for the scientific/technical activity you (plan to) do on the Grid. This should include the scale of the activity and of the potential user community and the relevance for other scientific or business applications

Existing monitoring tools are usually focusing onto a specific usage like specific Grid middleware/infrastructures, specific submission tool, etc. The Experiment

Dashboard has been built to aggregate the existing monitor infrastructure (from experiment specific software, infrastructure itself, monitoring tools) and provide unified views and information correlation. Experiment Dashboard is covering different areas of the LHC activities - job processing, data transfer, data publishing. It is deployed for four LHC experiments (CMS, ATLAS, LHCb, ALICE). Some of the core functionality of the Experiment Dashboard like job monitoring can be used for other virtual organizations.

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