



Contribution ID: 241

Type: poster presentation

HappyFace as a monitoring tool for the ATLAS experiment

The importance of monitoring on HEP grid computing systems is growing due to a significant increase in their complexities. Computer scientists and administrators have been studying and building effective ways to gather information on and clarify a status of each local grid infrastructure.

The HappyFace project aims at making the above-mentioned workflow possible. It aggregates, processes and stores the information and the status of different HEP monitoring resources into the common database of HappyFace. The system displays the information and the status through a single interface.

However, this model of HappyFace relied on the monitoring resources which are always under development in the HEP experiments. Consequently, HappyFace needed to have direct access methods to the grid application and grid service layers in the different HEP grid systems. To cope with this issue, we use a reliable HEP software repository, the CernVM File System. We propose a new implementation and an architecture of HappyFace, the so-called grid-enabled HappyFace. It allows its basic framework to connect directly to the grid user applications and the grid collective services, without involving the monitoring resources in the HEP grid systems.

This approach gives HappyFace several advantages: Portability, to provide an independent and generic monitoring system among the HEP grid systems. Functionality, to allow users to perform various diagnostic tools in the individual HEP grid systems and grid sites. Flexibility, to make HappyFace beneficial and open for the ATLAS computing environments.

Different grid-enabled modules, to view datasets of the ATLAS Distributed Data Management system (DDM), to connect to the Ganga job monitoring system and to check the performance of grid transfers among the grid sites, have been implemented. The new HappyFace system has been successfully integrated and now it displays the information and the status of both the monitoring resources and the direct access to the grid user applications and the grid collective services in the ATLAS computing system.

Primary author: MUSHEGHYAN, Haykuhi (Georg-August-Universitaet Goettingen (DE))

Co-authors: QUADT, Arnulf (Georg-August-Universitaet Goettingen (DE)); Mr MAGRADZE, Erekle (Georg-August-Universitaet Goettingen (DE)); KAWAMURA, Gen (Georg-August-Universitaet Goettingen (DE)); NADAL SERRANO, Jordi (Georg-August-Universitaet Goettingen (DE))

Presenter: MUSHEGHYAN, Haykuhi (Georg-August-Universitaet Goettingen (DE))

Track Classification: Track4: Middleware, software development and tools, experiment frameworks, tools for distributed computing