

The WLCG Common Computing Readiness Challenge: CCRC'08

Tuesday 12 February 2008 16:00 (1 minute)

The LHC machine will produce some 15PB of data per year. The management and the analysis of these data relies on a worldwide production Grid service involving hundreds of sites from EGEE and collaborating Grids. One significant challenge remains: to demonstrate that these computing facilities can be used to satisfy simultaneously the needs of the 4 major experiments of the LHC at full 2008 rates. During the CCRC'08 we will demonstrate precisely this. Given the importance of the challenge, two phases are foreseen: an initial run in February, when not all sites will have their full 2008 resources in place and a second period in May, when the full 2008 capacity is required to be in place

1. Short overview

The World's biggest machine - the Large Hadron Collider (LHC) at CERN, Geneva, Switzerland- will enter operation in 2008. Using the Grid infrastructure provided mostly by EGEE and OSG, the WLCG project has been chosen to provide the computational and storage resources needs for the 4 experiments of the LHC. The goal of the Common Computing Readiness Challenge (CCRC'08) is to demonstrate that these computing facilities can be used to satisfy the needs of the experiments

3. Impact

The challenge will stress all aspects of the experiments' offline computing production and batch analysis systems. Furthermore, it will require the effort of teams spread around the entire planet, working closely in harmony. As such, it will bring together a gamut of activities, most of which have been extensively tested, but not necessary at the full 2008 scale, not for all experiments and for all activities simultaneously. To achieve these goals, the infrastructure developed within EGEE over the past years will be exploited to the full. The results of this challenge will demonstrate the readiness of the Grid infrastructure provided by EGEE during a real data taking approach.

In addition, state-of-art techniques for the design, implementation of highly reliable and resilient services, equally relevant to other application domains, are required

URL for further information:

<https://twiki.cern.ch/twiki/bin/view/LCG/LCGServiceChallenges>

4. Conclusions / Future plans

The stress of the services under a real condition approach will allow to the WLCG to understand better the computational and storage needs in real conditions using already the Grid infrastructure that will be provided to the 4 experiments. A draft Schedule including the agreement of key services and goals, the setup of an integration plan, the review of metrics, tools for testing and monitoring, before the integration in February 2008 are the major plans to cover in a short time

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

WLCG, LHC experiments, Grid services, EGEE resources, Challenge, real data taking,

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