



I N T E G R A L
SCIENCE DATA CENTRE

Centre attaché à l'Observatoire de Genève



**UNIVERSITÉ
DE GENÈVE**

FACULTÉ DES SCIENCES
Département d'astronomie

COMPUTING SEMINAR



Thursday, 7 June 2007 at 14:00

The Worldwide LHC Computing Grid - What? Why? How?

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Abstract 1st talk. In order to process and analyse the multi-PetaBytes of data from the LHC – the world's largest scientific machine – a worldwide grid service has been established, building on two main production infrastructures: those of the Open Science Grid (OSG) in the Americas, and the Enabling Grids for E-sciencE (EGEE) Grid in Europe and elsewhere. Over the past 3 years, the Worldwide LHC Computing Grid (WLCG) services have undergone a series of so-called 'service challenges' designed to ramp the service up to the required degree of availability and performance. This talk summarises the main lessons learnt from deploying WLCG production services. In particular, we discuss how the somewhat ambitious service and availability targets of the WLCG collaboration are addressed and the various deployment strategies that are required. Finally, a simple analogy is drawn with the Web in terms of usability.

Abstract 2nd talk. The computational and storage capability of the Grid are attracting several research communities. This talk discusses the general patterns observed in supporting new applications and porting them on the EGEE environment. We present the general infrastructure we have developed inside the application and support team at CERN to merge all these applications inside the Grid, as for example Geant4, HARP, Garfield, UNOSAT or ITU. All these communities have different goals and requirements and the main challenge is the creation of a standard and general software infrastructure for the immersion of these communities onto the Grid. This general infrastructure does effectively "shield" the applications from the details of the Grid and is stable enough to require few control and support, while being flexible and general enough to match the requirements of the different productions without including major changes in the design of the tool.

Additional Information

The seminars are given in the ISDC "Pavillon" building
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WWW: ISDC Seminars: <http://isdc.unige.ch/?Science+seminars>