

Report on GridUNESP workshop Dec 2008, Sao Paolo Brazil

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Scope and description of activity

OSG has been invited to help organize and deliver the Second Brazilian LHC Computing Workshop, held in Sao Paolo, Brazil December 8–12 2008 in partnership with GridUNESP, to enable the development of the Brazilian regional Grid Infrastructure.

Specifically, the aim of the workshop was to provide training for the local researchers and system administrators that are involved in data processing for all LHC experiments at the newly acquired cluster in Sao Paolo, whose task is to provide support to experiments such as ALICE, LHCb (also supported by a cluster in Rio de Janeiro), and to GridUNESP that will be deployed with OSG middleware.

GridUNESP is a campus grid initiative composed of seven clusters distributed in different cities of São Paulo State, all running OSG middleware. The cluster consists of: a central cluster with 2048 processing cores and 256 worker nodes interconnected through gigabit Ethernet and Infiniband, and 7 secondary clusters spread over the Sao Paulo State system. The workshop will train the staff responsible for the configuration and operation of the grid infrastructure currently being deployed in the São Paulo State University (UNESP). All recently hired GridUNESP staff members will attend the II BLHCCW workshop and will benefit from the theoretical and practical knowledge distribution from the US team towards the implementation of the different aspects of the grid infrastructure.

Specific features of the grid infrastructure regarding each LHC experiment were explored during the week long workshop. On behalf of OSG, Horst Severini (University of Oklahoma) led the Atlas discussion, and Brian Bockelman (University of Nebraska – Lincoln) was responsible for the CMS module.

Another important goal of the workshop was identifying a general strategic plan for efficiently sharing computing resources available in Brazil. System administrators benefited from customized training required to ensure the good operation of the Brazilian LHC clusters.

Audience was about 40 people, from CMS Tier2 (SPRACE and UERJ), ALICE (a group from São Paulo), LHCb (a group from Rio), and system administrators from GridUNESP. A few of these participants already attended a 3-day workshop organized in the US by OSG in January 2008, and also as part of our collaboration with Brazil, a Brazilian/OSG Grid School is scheduled for 2009, where the target audience will be grid end users.

More information at:

<http://www.sprace.org.br/workshops/IIBLHCCW/>

Lesson learned:

- o overview and installation talks were useful
- o it is advisable to leave more time for impromptu discussions, allowing people to interact with the speakers and to ask advice and catch up with the presented material (lighter teaching load is preferred)
- o it would be very useful to have a pool of talks about the more generic subjects would be useful to draw from for the future (such as Introduction to the OSG, User Tools, and other topics)
- o greater flexibility in presenting the material: presenters should be able to skip over planned talks/discussions if there is no interest, and adjust to the topics requested by audience (on-the-fly redesign might pose problems though)
- o grid-in-a-box virtualization has proven to be very interesting, and the OSG education will follow up on this
- o OSG installation documentation needs to be improved (on going effort)
- o more time should be allocate for work on the local grid and more discussions should be targeted towards future plans