Grid Computing, EGEE and the gLite middleware - Introduction

Report of Contributions

Contribution ID: **1**   Type: **not specified**

Introduction

Wednesday, 22 November 2006 09:00 (15 minutes)

Session Classification: EGEE Tutorial: Introduction to Grids and to EGEE

Contribution ID: **2**   Type: **not specified**

Authentication, Authorisation and Security

Wednesday, 22 November 2006 10:30 (30 minutes)

The fundamental challenges of grid computing are described: how can trust be established between sites and users?? How can security be protected when communication is across a public network? How are users authorised to use computers and data?

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Contribution ID: **3**   Type: **not specified**

What is Grid Computing?

Wednesday, 22 November 2006 09:15 (45 minutes)

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Contribution ID: **4** Type: **not specified**

An overview of the EGEE project and middleware

Wednesday, 22 November 2006 10:00 (30 minutes)

EGEE has established an international grid infrastructure. This talk describes the activities and objectives of EGEE. It then outlines the major middleware services:
Authorisation and Authentication
Information Services
Data Managament
Workload management

These will be used during the practicals later in the day on the GILDA grid.

GILDA is a grid provided for training by the University of Catania and INFN, with partner sites in many countries.

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Contribution ID: **5**   Type: **not specified**

Information systems on EGEE

Wednesday, 22 November 2006 12:15 (45 minutes)

An outline is given of information systems. The "BDII Information System" commands will be used to explore the GILDA grid.

Grid monitoring tools are used to display the current state of the GILDA and EGEE production grids.

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Contribution ID: **6** Type: **not specified**

Closing discussion

Wednesday, 22 November 2006 17:15 (15 minutes)

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Contribution ID: **7**   Type: **not specified**

MyProxy and Portals: using GENIUS on GILDA

Wednesday, 22 November 2006 16:30 (45 minutes)

The MyProxy server stores and issues credentials. One of its uses is to allow users to access grid services from a browser, through a portal.

In this practical MyProxy is introduced, and then the GENIUS portal on GILDA is used.

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Contribution ID: **8** Type: **not specified**

Further exercises with gLite

Wednesday, 22 November 2006 15:45 (45 minutes)

So far we have looked at the different services of the
EGEE middleware. Now we run a number of simple
exercises and
applications that show how to:
1. submit jobs that read/write files held on the EGEE
Grid
2. use a script to submit jobs to run concurrently.

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Contribution ID: **9**　　　　　　　　　　　　　　　　　　　Type: **not specified**

Using a certificate and simple job submission

Wednesday, 22 November 2006 11:15 (1 hour)

We will use the basic commands for certificate management and for workload management.

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Contribution ID: **10** Type: **not specified**

Data management

Wednesday, 22 November 2006 14:00 (1h 30m)

The management of files is described. Commands are used to read, write, replicate and list files on GILDA's storage.

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Contribution ID: **11**   Type: **not specified**

Metadata: an introduction to AMGA

Thursday, 23 November 2006 09:15 (45 minutes)

Session Classification: EGEE Tutorial: EGEE practical continued

Contribution ID: **12** Type: **not specified**

GFAL API: accessing files on storage elements

Thursday, 23 November 2006 11:15 (30 minutes)

Session Classification: EGEE Tutorial: EGEE practical continued

Contribution ID: **13**   Type: **not specified**

Using R-GMA to monitor applications

Thursday, 23 November 2006 10:00 (1 hour)

Session Classification: EGEE Tutorial: EGEE practical continued

Contribution ID: **14**   Type: **not specified**

Application development for the EGEE grid

Thursday, 23 November 2006 11:45 (1h 15m)

This talk explores the challenges of application
development for grids, outlines some of the uses that
different communities make of the EGEE infrastructure,
and finally introduces some workload management
functionality that will soon be available.

Session Classification: EGEE Tutorial: EGEE practical continued

Contribution ID: **15**   Type: **not specified**

Porting your applications to the GILDA grid

Thursday, 23 November 2006 14:00 (1h 30m)

Participants are asked to bring their own code and data for this practical.

Programs should only take input from files and write output to files. (No interactive programs)
They should compile on LINUX.

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Contribution ID: **16**   Type: **not specified**

Porting applications, continued

Thursday, 23 November 2006 15:45 (1h 15m)

Session Classification: EGEE Tutorial: EGEE practical continued

Contribution ID: **17**   Type: **not specified**

End-of-day discussion

Thursday, 23 November 2006 17:00 (15 minutes)

Session Classification: EGEE Tutorial: EGEE practical continued