

High Performance Computing systems Laboratory, HPCL, (Department of Computer Science, University of Cyprus) is organizing a Training the Trainers event on May 6, 2009. The event will take place at Room 146, Department of Computer Science, UCY New Campus, Nicosia.

The event is divided in three major subjects:

- * Preparing and structuring a training event in EGEE-III
- * Introduction to Grids (security, applications, logging, ...)
- * Grid in action (training, data management and job submission)

Registration via <http://cygrid.org.cy/trainings/may09.php> or sent email to the Event Coordinator: Dr. Stylianos Nikolas

Registration Fees: Attendance at this event requires no fees.
Attendance Certificate: **YES**, for attendants who will be registered before 01/05/2009

Registration 08:30 – 09:00		
	Training	09:00 – 17:00
	Welcome & Overview	09:00 - 09:15
A.1	Training in EGEE-III, training procedures	09:15 – 10:00
A.2	Structuring an EGEE-III course and NA3 resources	10:00 – 10:45
	Coffee Break	10:45 – 11:00
B.1	Introduction to grids (applications, glite, security, WMS)	11:00 – 13:00
	Lunch Break	13:00 – 14:00
B.3	GILDA t-Infrastructure	14:00 – 14:30
B.2	gLite Logging and Bookkeeping service	14:30 – 15:15
	Coffee Break	15:15 – 15:30
C.1	Data Management	15:30 – 16:30
C.2	gEclipse tutorial	16:30 – 17:30
	Discussion	17:30 – 18:15

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A.1 Training in EGEE-III, training procedures

Abstract: *Running training courses takes effort and time, knowing the technology is just the start. This section will take you through the organisational procedures involved in running an EGEE-III training event.*

Speaker: Robin McConnell

A.2 Structuring an EGEE-III course and NA3 resources

Abstract: *Advice on how to design your training course, and some of the available resources within NA3 to assist you in ensuring your event is a success*

Speaker: Robin McConnell

B.1: Introduction to Grids

Abstract: *In this session an overview of the grid computing in general and grid computing with the EGEE infrastructure in particular will be discussed. First we will discuss what grid computing is and what its current and future challenges are. The main components of grid computing which deals with the security, computing and data resource management will dominate the presentation. How Glite is used as EGEE middleware to solve grid computing challenging complex problems will be illustrated using some examples to show which components are interacting during the job management life cycle.*

Special attention will be given to the Workload Management Service which will be presented in a short (15 minutes) but comprehensive session.

Speaker: Hamza Mehammed

B.2: gLite Logging & Bookkeeping service

Abstract: *Logging and Bookkeeping is a grid service that keeps a short-term trace of grid jobs as they are processed by individual grid components.*

This talk aims at:

- 1) *Introducing L&B and job state computation principles*
- 2) *Introducing user interaction interfaces, namely:*
 - *UI L&B querying suite (+ WS interface)*
 - *lightweight HTTPs querying interface*
 - *notification interface*

Speaker: Zdenek Sustr

B.3: Gilda t-Infrastructure

Abstract: *GILDA is the training infrastructure used within several EU-funded projects, EGEE and EELA primarily. It is made up of a testbed providing computing and storage resources spread around Europe, central services and Certification Authorities that release X.509 certificates to Grid users. It offers training resources such as how-tos on gLite for users, sysadmins, developers, video-tutorials, pre-configured virtual machines, web portals, high-level framework based on gLite APIs, support system and multi-middleware support.*

Speaker: Emidio Giorgio ; Antonio Calanducci

C.1: **Data Management**

Abstract: *Grids provide heterogeneous and distributed storage resources that could use different technologies and have no common file systems. There is a need to have a common storage interface and a way to keep track of where files are actually located. Additionally, there is the need of a way to describe file contents. gLite offers tools and services to cope with the previous issues: support to SRM interfaces and GridFTP, a File and Replica Catalog, Metadata Catalogue, File Transfer Service.*

Speaker: Emidio Giorgio ; Antonio Calanducci

C.2: **gEclipse Tutorial**

Abstract: *Distributed computing and collaborative work on scientific and commercial tasks has taken on greater significance in the past few years. The technical backbone of this trend is represented by so called Grids. Therefore worldwide Grid infrastructures evolved and are now ready to be used for mainly scientific but also industrial and commercial applications. The g-Eclipse project provides a variety of tools to access such worldwide Grid infrastructures in a user friendly way. It is built on top of the Eclipse platform; therefore it is extensible to be adapted to many different middle-ware. The framework itself comes with exemplary gLite support and support for GRIA is underway. Grid users are supported in order to easily access their personalized Grid resources, Grid resource providers profit from a shortening of the "service-to-market" time and Grid application developers benefit from the seamless integration of the remote development process into the existing Eclipse development environments using g-Eclipse. This tutorial will introduce the g-Eclipse framework by enabling the participants to access a Grid infrastructure using g-Eclipse.*

Speaker: Harald Gjermundrod ; Nikolas Loulloudes



- ❑ Cyprus Grid Initiative: <http://cygrid.org.cy>
- ❑ Training binary repository: <http://cygrid.org.cy/repo> (login: trainee, password: gEclipse)
- ❑ Training Material: <http://indico.cern.ch/conferenceDisplay.py?confId=55625>
- ❑ High Performance Computing systems Laboratory: <http://grid.cs.ucy.ac.cy>
- ❑ CyGrid Certification Authority: <http://cygrid.org.cy/CyGridCA/>
- ❑ EGEE local site: <http://www.grid.ucy.ac.cy/egee>
- ❑ Grid cafe: <http://gridcafe.web.cern.ch/gridcafe>
- ❑ Open Grid Forum: <http://www.gridforum.org/>
- ❑ gLite v3 User Guide: <http://glite.web.cern.ch/glite/documentation>
- ❑ EGEE (Enabling Grids for E-science): <http://www.eu-egee.org>
- ❑ Gridtoday: <http://www.gridtoday.com/gridtoday.html>
- ❑ Grid Computing: http://en.wikipedia.org/wiki/Grid_computing
- ❑ Distributed Computing: http://en.wikipedia.org/wiki/Distributed_systems
- ❑ Supercomputing: <http://en.wikipedia.org/wiki/Supercomputing>
- ❑ g-Eclipse project: www.eclipse.org/geclipse
- ❑ g-Eclipse Downloads: <http://www.geclipse.eu/index.php?id=downloads>
- ❑ Contact CyGrid: grid@cs.ucy.ac.cy
- ❑ Contact CyGrid CA: cygrid-ca@cs.ucy.ac.cy
- ❑ Contact g-Eclipse: contact@geclipse.eu