

High Performance Computing systems Laboratory, HPCL (Department of Computer Science, University of Cyprus) is organizing a two days workshop and user forum event on Dec 12-13, 2007 for Grid users. The event will take place at *Lab 201, Department of Computer Science, UCY New Campus, Nicosia*.

Registration link: <http://grid.ucy.ac.cy/egge/na3/registration-Dec07.php>

Registration Fees: Attendance at this event requires no fees.

Attendance Certificate: YES, for attendants who will be registered before 6/12/2007

User Presentations: If you are interested in presenting your work please contact Stylianos Nikolas (Email: nstyl@cs.ucy.ac.cy, Tel.: 22892723)

Event Agenda

12/12/07	
Training 10:00 – 12:30 (201)	<ul style="list-style-type: none"> • Course A.I (10:00 – 11:10) • <i>Short Break</i> (20') • Course A.II (11:30 – 12:30)
12:30 – 14:00 Coffee break – Lunch	
User Applications 14:00 – 16:30 (201)	<ul style="list-style-type: none"> • CyGrid User Applications (details will be included based on user interest)
13/12/2007	
Training 10:00 – 12:30 (201)	<ul style="list-style-type: none"> • Course B (10:00 – 10:30) • Course C (10:40 – 11:25) • <i>Short Break</i> (15') • Course D (11:40 – 12:30)
12:30 – 14:00 Coffee break – Lunch	
User Applications 14:00 – 16:30 (201)	<ul style="list-style-type: none"> • CyGrid User Applications (details will be included based on user interest)

People involved

	Name	Email	Institute
Speakers:	Loulloudes Nikolas	loulloudes.n@cs.ucy.ac.cy	UCY
	Georgatos Fotis	fotis.georgatos@cern.ch	UCY
	Katsifodimos Asterios	cs03ka2@CS.UCY.AC.CY	UCY
Coordinator:	Stylianides Nikolas	nstyl@cs.ucy.ac.cy	UCY

Training Courses

Course A

Title: **Building Applications on the Grid (I - II)**

Abstract: *This presentation covers: "Basics; the necessary concepts, The SEE environment, Workflows and parametric jobs, Data Management, Portals and job submission tools, Credential management, AMGA & Metadata management, Trade-offs and special topics (Performance Optimization, Security vs Performance, Information System consistency, Checkpointing) plus a list of other resources that could be useful, URLs etc.*

Speaker: Gergatos Fotis

Course B:

Title: **gLite Basic APIs**

Abstract: *gLite Basic APIs is a brief discussion which includes both elementary and expert knowledge regarding: Application definition, Environment configuration, Information discovery, Data management, Program definition, Program execution, Summary*

Speaker: Gergatos Fotis

Course C:

Title: **To script or not to script**

Abstract: *Scripting can save a lot of time on preprocessing of data, and automate the process of collecting and processing data from the grid. The problem is: When one should use scripting and when not? In this session it will be presented, how scripting can be used in a good way to help developers and Grid users automate routine tasks and speed up their work. Some useful real-life examples will be used that will show how bad or good you can do with scripting.*

Speaker: Asterios Katsifodimos

Course D:

Title: **g-Eclipse: “Not to script”**

Abstract: *The g-Eclipse project aims to build an integrated workbench framework to access the power of existing Grid infrastructures. The framework is built on top of the reliable ecosystem of the Eclipse community to enable a sustainable development. The framework aims to provide tools to customize Grid users' applications, to manage Grid resources and to support the development cycle of new Grid applications. The g-Eclipse framework will be middle-ware agnostic and its architecture is designed to be extended for many different Grid middle-wares (such as gLite, UNICORE and Globus toolkit). Current implementation of g-Eclipse supports the gLite middle-ware and as of October 2007, the g-Eclipse project initiated the support for the GRIA middle-ware*

Speaker: Nikolas Loulloudes

User Presentations

Presentation I:

- Title: **Utilizing multiple grid platforms in parallel overcoming the bottlenecks associated with each: A gene-gene interaction analyses for GWAS**
- Abstract: *Most common diseases that have a heritable component such as schizophrenia, diabetes and Dyslipidemia are influenced by mutations on multiple loci, interactions between loci and with the environment. Traditional analyses techniques have focused on discovering single locus effects rather than multi-locus effects due to the high computational complexity and loss of statistical power associated with multi loci analyses. In this presentation a simple and effective way of spanning the entire search space of two SNP interactions utilizing a Grid of corporate desktop PCs and independent dedicated clusters reducing the bottlenecks associated with each platform is presented. Analyses of two independent datasets of the same disease phenotype provides replication evidence of the performance of the algorithm in terms of statistical power*
- Duration: 30'
- Speaker: Athos Antoniadis, athos.2.antoniadis@gsk.com

Presentation II:

- Title: **Intensive Care Unit – Beyond Monitoring**
- Abstract: *Modern ICUs are fully equipped with sophisticated medical devices installed in hospital beds which provide among others 24/7 patient state monitoring, automatic drug infusion, breath support etc. These devices export large amount of data using, in most cases, customized non-standard protocols for communication. Although MD vendors provide solutions for long lived data storage, often hospital budgets come in short. Data records are overwritten every 2-3 days and vital information is lost. This presentation is: (a) an overview regarding the present state of medical device intercommunication infrastructure, technologies proposed and corresponding obstacles deploying such technologies in ICUs, (b) A description of the solutions proposed by the HPCL research team regarding data and meta-data storage, device communication proposed schema, data processing etc.*
- Duration: 30'
- Speaker: Nikolas Stylianides, nstyl@cs.ucy.ac.cy

Presentation III:

- Title: **g-Eclipse User perspective**
- Abstract: *This presentation gives an overview of the way that Grid users can access computational and storage resources in an easy and intuitive way. First, the JSDL multi-page editor is presented, which provides a nice graphical user interface to edit JSDL documents. Second, the authentication token and job submission wizards are presented. Finally, the wizards and views to manage files both locally and on the Grid are explained.*
- Duration: 30'
- Speaker: Harald Gjermundrod, harald@cs.ucy.ac.cy

