Workshop on "Porting Applications on Computational Grids"

11/13 December 2006

University of Colombo School of Computing (UCSC) Sri Lanka

PURPOSE AND NATURE

Grid computing is rapidly establishing itself as the fundamental tool for computational science in the next years. Regional grid infrastructures are developing in many areas of the world, among which is the Indian subcontinent. The Workshop aims at offering an opportunity to learn how grid computing works to computational scientists from different areas, providing an overview of the Grid services and discussing and experimenting on the constraints that the grid paradigm imposes on applications, and the requirements that their applications present to the grid infrastructure.

MAIN OBJECTIVES

The Workshop aims at offering computational scientists and researchers a general introduction to how Grid Computing technologies can be exploited for intensive computational scientific applications and tasks. The goal is to give a practical experience of the current middleware and GRID infrastructures available in the Indian subcontinent, namely Swelanka and EUINDIAGRID, focusing on a few case studies where scientific applications were ported and successfully executed on Grid infrastructure. The porting strategies, the technical tools used and the results obtained will be discussed and analyzed in details in order to offer participants a concrete idea on how to benefit from grid technologies.

PROGRAMME & FORMAT of the WORKSHOP

The workshop will span two and a half days. The first half day introduces the main concepts of grid computing giving an overview of the main projects (SweLanka and EUINDIAGRID) and the middleware associated. A general overview about authorization policy and mechanism for grid computing, workload management systems, data management and the information system will be presented.

A second half day track will be fully devoted to hands-on sessions that should enable attendees to connect and use some GRID infrastructure.

The rest of the workshop has an application development focus. In the first part of this session examples and success stories will be presented together with a few ideas/recipes/tools to illustrate how easy is the porting of scientific applications on such an infrastructure. In the other two half day sessions participants will be invited to analyze their own applications in the light of the information received and to start to develop a strategy to port them on the GRID taking into account the locally available GRID resources and what is available in the region and elsewhere.

AUDIENCE & PARTICIPATION

This workshop is offered to motivated computational scientists from all the scientific areas with a strong need of computational resources and eager to learn about the opportunity offered by grid computing technologies.

During to the hands-on sessions participation is limited to at most 15 people and a selection procedure will be applied if more applications will be received while the introductory session could be open to a wider section.

Applications (by e-mail only) to be addressed to:

gridws@ucsc.cmb.ac.lk indicating full name, affiliation, contact, postal address and phone number, and the application area to be considered for porting.

Organizers

Abhaya S. Induruwa

(Canterbury Christ Church University, UK)

S. Cozzini

(INFM-Democritos ICTP, Italy)

Richard Wait

(Uppsala University, Sweden)

Local Organizer

D.N. Ranasinghe (UCSC, Sri Lanka)

Co sponsored by:

ICTP, Trieste

SPIDER

(Swedish Program for ICT in Developing and Emerging Regions)

NSF, Sri Lanka

IEEE-SL Chapter