Contribution ID: **42** Type: **Workshop**

UNICORE for the end users - Tutorial

Tuesday, 12 April 2011 11:00 (1h 30m)

Overview

UNICORE (UNiform Interface to COmputing REsources) is part of the European Middleware Initiative's middleware distribution. Several UNICORE Clients exist to access resources managed by UNICORE services.
This presentation is a tutorial for users of the EGI infrastructure who are using or want to use such resources. It will cover the command line (UCC) and the Eclipse-based rich client (URC) in presentation and hands-on practical.

Impact

This tutorial will enable users of the EGI infrastructure to exploit data and compute resources available through UNICORE and other services offering the OGSA-BES (Open Grid Services Architecture - Basic Execution Service) interface.

Description of the work

Services of the UNICORE grid middleware are part of the EMI Distribution.
UNICORE comes with a history of more than 10 years. Originally initiated in the Supercomputing domain, today UNICORE is a general-purpose Grid technology. In its recent version, UNICORE 6 follows the latest standards from the Grid and Web Services world and offers a rich set of features to its users.

UNICORE is used in Grid infrastructures of different nature and without limitations on the type of computing resources such as NGI-PL, NGI-DE or DEISA. Being Java-based UNICORE is portable. In order to achieve interoperability it uses HTTPS-based Web services as well as several common open Grid standards. UNICORE provides users with a strong security based on a rule-based access control engine (SAML).

UNICORE provides an easy-to-use Grid system that focuses on the end users, allowing them to use powerful tools in an efficient and transparent way. Intuitive, task-oriented user interfaces allow the users to focus on their work, keeping the Grid related complexity hidden.

The UNICORE tutorial is dedicated to the Grid users and will allow for practical examination of the UNICORE tools. The tutorial will briefly cover prerequisites to using the clients such as the installation and the general process of the obtaining an X509 certificate necessary to access Grid resources. Users will get familiar with the different clients, especially the UNICORE Command line Client (UCC) and the Eclipse-based UNICORE Rich Client (URC). The users will be instructed how to prepare a job description including the related data management instructions, submit

it to the grid and monitor its execution. The results retrieval will be presented as well. A part of the tutorial will be dedicated to workflow creation and its execution on the grid infrastructure. The tutorial will also cover the integration of user application in the client and UNICORE core services.

URL

http://www.unicore.eu/

Conclusions

http://www.unicore.eu/documentation/

Primary authors: Dr BENEDYCZAK, Krzysztof (ICM University of Warsaw); Ms BORCZ, Marcelina (ICM University of Warsaw); Prof. BALA, Piotr (ICM University of Warsaw)

Co-authors: Ms ROMBERG, Mathilde (JSC, Forschungszentrum Juelich GmbH); Ms BREU, Rebecca (JSC, Forschungszentrum Juelich GmbH)

Presenters: Dr BENEDYCZAK, Krzysztof (ICM University of Warsaw); Ms BORCZ, Marcelina (ICM University of Warsaw)

Session Classification: Tutorials: Users & Developers

Track Classification: User Support Services - Application/Community