DevelOpment of GRID Environment for InteRaCtive ApplicationS

Results in Brief

Enabling new possibilities in Grid computing

Aiming to explore the benefits of sharing distributed resources and hide the complexities of parallel job submission, an advanced Graphical User Interface enabling user-friendly and intuitive access to Grid environments has been developed.

DIGITAL ECONOMY

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The CROSSGRID project has ended with Grid-enabled solutions for computer- and data-intensive applications that are distributed, but require near real-time responses. Applications that have already been ported to Grid computing environments include pre-treatment planning in vascular intervention and surgery, high energy physics simulations and real-time filtering, as well as weather forecasting.

The 'Migrating Desktop' is a user-friendly tool for accessing Grid resources with customised environments for individual users. More specifically, this Java-based Graphical User Interface (GUI) has been designed at the Institute of Bioorganic Chemistry in Poznan, Poland to provide remote and individual access, independently of the original location. Grid users' private settings, application parameters along with the parameters of transfer protocols and session can be saved and restored in every place with available network access.

Being independent of platform and hardware, this complex environment, integrating a

variety of tools allows working with many Grids transparently and simultaneously. Its main functionalities include authorisation of access to resources and applications, local and grid file management, as well as local and interactive grid application support and security assurance. On the other hand, for specialised requirements that cannot be fulfilled by portal interfaces nor by the 'Migrating Desktop' the 'Roaming Access Server' web-services can be used.

The 'Roaming Access Server' consists of plug-ins for interoperability with separate Grids and several independent modules responsible for job submission and retrieving job status information. Additional functionalities allow for managing all the essential information that define current users' working environment. More importantly, the 'Roaming Access Server' as well as of the 'Migrating Desktop' are available as open source codes at http://gridportal.fzk.de under the General Public Licence (GPL).

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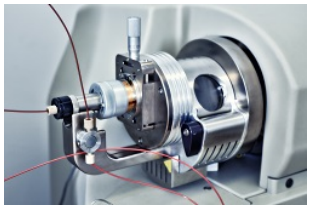

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Project Information

CROSSGRID

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