Commission funds project to establish leading European computing grid network

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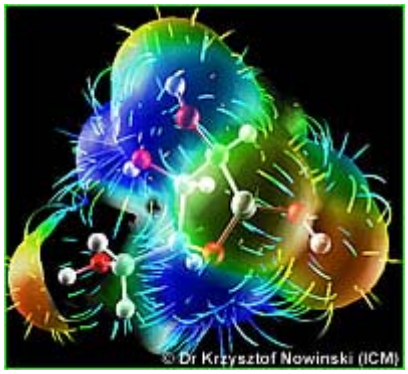

An EU funded project has demonstrated the viability and benefit to end-users of a transnational computing grid in four specific areas of application.

The ***EUROGRID*** project brings together 11 partners from six European countries, with the aim of creating an international network of high performance computing centres. The project has received just over two million euro in funding from the IST programme of the Fifth Framework Programme.

Computational grids are fast becoming the standard for high-performance computing research and infrastructure. However, the wide adoption of grid technology in the scientific community has yet to happen, and industrial users are lagging even further behind. The ***EUROGRID*** project demonstrates the use of grids in four selected scientific areas in an attempt to highlight the advantages of the technology.

The use of simulation and visualisation technology, alongside molecule databases, is a regular feature of modern biomolecular research, but the differences and incompatibility of many of the packages can create real problems for users. The Bio-GRID section of the project has developed standard user interfaces for selected biomolecular packages and compatibility interfaces for their databases. The result is a toolkit allowing streamlined work processes and access to all systems in the Bio-GRID with a uniform and intuitive user interface.

The CAE-GRID section of the project is focussed on delivering solutions for small and medium sized enterprises (SMEs) that use computer aided engineering tools within, for example, the aerospace and automotive industries. Often these smaller companies lack in-house computer systems of sufficient power, so the ASP (application service provider) scheme allows external providers of computing power to run their job and bill them according to the resources used.

Key issues in the success of such a scheme include the confidentiality and security of client data and accuracy of billing. Therefore, accounting and billing functions are integrated into the ***EUROGRID*** system, and an ASP system for computer aided engineering packages has also been developed.

EUROGRID relies on a proven grid system consisting of three distinct software tiers: a client that the user interacts with to execute computational jobs, a gateway acting as a single point of entry into the protected domains of the supercomputing centres, and a server that schedules and executes the jobs on the local high-performance platform.

The three year ***EUROGRID*** project will run until October 2003, and there will be an opportunity to see a demonstration of the software at the ***EUROGRID*** workshop which will be held prior to the Euroweb 2002 conference at St Anne's college Oxford on 16 December.

For further information, please consult the following web address:
http://www.eurogrid.org/

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