gLite sets the standard

Geneva, 28 September 2006 - Today the EGEE'06 conference opened with presentations on the theme of Grid middleware, the intermediary software between the users and the underlying computing resources. The gLite middleware distribution developed by the Enabling Grids for E-sciencE (EGEE) project was first released for production usage in May 2006 and is now deployed by about 80% of the sites connected to the EGEE infrastructure, making it the main middleware distribution used in production.

Grid middleware organises and integrates the disparate computational facilities on a Grid to present it as a homogeneous resource to the user. The gLite middleware distribution combines the consolidated middleware stack of the LCG project used on the production infrastructure for years with the re-engineered and custom-built solutions provided by the EGEE middleware teams. Distributed under a business friendly open source license, gLite is in daily use by scientific and industrial applications on the EGEE Grid and related infrastructures.

gLite makes use of components from other grid middleware projects and is designed as a modular system to allow users to tailor the system to their specific needs by deploying the services they require, rather than having to use the system as a whole. Services in gLite comprise security, monitoring, job and data management and were developed to follow a Service Oriented Architecture. Most of these services aim to be compliant with the Web Services Interoperability (WS-I) recommendations, thus building a standard layer on the Grid where adding functionality and components will ultimately become trivial.

A stable and pervasive Grid service needs to be built on standards. Therefore EGEE is working closely on a global level with projects such as Condor, Globus, Naregi, OSG, UNICORE, as well as Grid standardisation bodies such as the Open Grid Forum (OGF) to ensure interoperability of the different middleware implementations currently available and to work towards universally adopted standards for Grid middleware. Since the EGEE project is operating the largest multi-science Grid in production – with some 200 sites in 40 countries connected – it can provide unique input from an operations point of view, ensuring that that the needs of both users and site administrators are taken into account.

Notes to the Editor:

1. The Enabling Grids for E-sciencE (EGEE) project is funded by the European Commission and the second two-year phase of the project (EGEE-II) began on 1 April 2006. The project operates the largest multi-science Grid infrastructure in the world with some 200 sites connected around the globe, providing researchers in both academia and industry with access to major computing

resources, independent of their geographic location. For more information see http://www.eu-egee.org/ For more information about EGEE in general, contact Hannelore Hämmerle, EGEE Dissemination, Outreach & Communication activity manager, +41 22 767 4176 or email: hannelore.hammerle@cern.ch.

2. For more information about the gLite middleware see www.glite.org

3. The mission of the LHC Computing Project (LCG) is to build and maintain a data storage and analysis infrastructure for the entire high energy physics community that will use the Large Hadron Collider (LHC) being built at CERN in Geneva, Switzerland. For further information see http://www.cern.ch/lcg

4. WS-I is an open industry organization chartered to promote Web services interoperability across platforms, operating systems and programming languages. For more information see http://www.ws-i.org

5. The goal of the Condor project is to develop, implement, deploy, and evaluate mechanisms and policies that support High Throughput Computing on large collections of distributed computing resources. For more information see http://www.cs.wisc.edu/condor/

6. The Globus Toolkit is an open source software toolkit used for building Grid systems and applications. For more information see http://www.globus.org/

7. The National Research Grid Initiative (NAREGI) in Japan aims to develop operational middleware, which conforms to global standards, for large-scale, widely-distributed computing environments in advanced research and education. For more information see http://www.naregi.org

8. The Open Science Grid is a distributed computing infrastructure for scientific research in the USA. For more information see http://www.opensciencegrid.org

9. UNICORE (UNiform Interface to COmputing REsources) provides a science and engineering Grid combining resources of supercomputer centres. For more information see http://www.unicore.org

10.   The Open Grid Forum (OGF) is a community of users, developers, and vendors leading the global standardization effort for grid computing. For more information see http://www.ogf.org