INFORMATION SHEET

JRA3 – SECURITY

Security will be vital to the success of the Enabling Grids for E-sciencE (EGEE) project. Security is always a challenge, particularly when crossing national boundaries and covering wide geographic areas.

The purpose of the Security activity is to propose, implement and monitor the project's security architecture. The EGEE Security team defines a security framework and architecture as well as a set of high-level policies that act as guidance to the other activities. Consistency among these items provides the more visible value-added services of the Grid - transparent security and single sign-on.

The security architecture is based on the requirements of both Grid users and resource providers and the Security team defines and validates the security architecture in-line with these requirements. The Security team also addresses critical areas such as a basic security policy, incident response, certification authorities trust establishment and policy management.

The Security team leads the EU-GridPMA effort (www.eugridpma.org), which has established a common pan-European trust fabric for research Grids, shared by several EU and national Grid projects as well as international partners. The body ensures that all involved parties operate according to, or better than, an agreed and well-documented policy.

Virtual Organisations (VOs) are used to manage access control and account for multiple applications and scientific disciplines that share the same physical Grid resources. The Security team aims to enable transparent access to resources using VO-based authorisation mechanisms, whilst leaving the local administrator in control of his resources.

Rights delegation is needed so that a job running at a remote site still has the proper access privileges to other Grid resources, such as databases and storage systems.

Existing security components are converted into OGSA (Open Grid Services Architecture) compliant services during the course of the EGEE project. The Security team monitors and participates in the creation of emerging web services security standards and applies them in the context of the EGEE software architecture.

In the past, proper management and protection of the end-user credentials used for authentication on Grids has proven difficult to maintain at an acceptable level. The EGEE Security team investigates alternatives such as hardware devices, centralised services and services that tie into the trust fabric of a local organisation.

Team Contacts

Åke Edlund (KTH/PDC), Security Head, email: edlund@pdc.kth.se
Olle Mulmo (KTH/PDC), Chief Architect, email: mulmo@pdc.kth.se
David Groep (NIKHEF), email: davidg@nikhef.nl
Joni Hahkala (HIP@CERN), email: joni.hahkala@cern.ch

JRA3 website: http://egee-jra3.web.cern.ch/egee-jra3/index.html

EGEE is a project funded by the European Commission - contract number INFSO-RI-508833