Workshop "GRID & e-Collaboration for the Space Community"
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**ENEA-GRID infrastructure**

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**Poster Items**

- ENEA-GRID Infrastructure and Resources
- GRID paradigm & ENEA-GRID
- Connection with other GRID projects: DATAGRID, Firb/GRID.IT/WP13 ChemGrid, EGEE
ENEA GRID

ENEA-GRID has been in development since 1998 and is now an integrated infrastructure:

• offering a production quality, service oriented system

• covering most of the computational resources belonging to ENEA INFO Scientific Computation Service, connected in a Wide Area Network.

• providing a unified user environment and an homogeneous access method for all ENEA researchers irrespective of their location

• implementing tools to facilitate the integration of departments and individual resources and support to experimental facilities
ENEA GRID Architecture

AFS Geographical multiplatform File System

User programs and commercial codes

LSF multi-cluster as integrator

Graphical User Interface

Web Portal Citrix

Monitoring service quality

Load Leveler

LSF

XTERM

User programs and commercial codes

AIX

SGI

SUN

MacOSX

Win

Linux

Linux Alpha

...
Connection with other GRID Projects

The focus of the participation of ENEA INFO in other GRID projects is **GRID interoperability**: the access to ENEA GRID from other GRIDs should be compatible with ENEA GRID architecture -> **gateway implementation**.

- **Datagrid** (ended 2004): in collaboration with ESA/ESRIN, gateway to ENEA-GRID; GOME data elaboration (IDL).

- **FIRB/Grid.it**: WP13, Computational Chemistry (CHEMGRID), Perugia Univ., ENEA Casaccia, et al. Globus 3.2 gateway into ENEA-GRID is now in operation.

- **EGEE**: Enea commitment: ~100 cpu (at 20%), second half 2005. The installation of a small testing environment with standard EGEE middleware is currently in progress at ENEA Frascati.