

## GILDA - Future plans for training infrastructure

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- **Overview on present**
- **Old and new facilities**
- **gLite and other middleware**
- **GILDA in future projects**
- **Questions**

# Overview on present

- **GILDA “core” elements**
  - Testbed : a dozen of sites, mostly managed on voluntary basis, running the latest version of gLite
- **CA and VOs**
  - A dedicated Certification Authority, with relaxed procedures for digital certificate release
  - A dedicated VO
- **Training offer**
  - Tutorials on line (<https://grid.ct.infn.it/twiki/gilda>)
    - users (basic, medium, advanced)
    - system administrators (grid services/elements installation)
    - developers
  - Live tutorial : formats
    - induction/installation tutorials
    - general purpose/ application porting schools

# Old and new facilities

- **Virtualization techniques have been widely exploited for training purposes**
  - Installation tutorials
  - working images of grid services available to everyone for download
  - Test of new releases/services/configurations
  - Production services backup
- **A significant number of machines, with public IP address and host certificates is permanently available for installation tutorials**
- **Thanks to the use of specific tools like Adobe Connect® training itself can be virtualized**
  - physical participation not strictly necessary
  - lessons/tutorial available also for off-line use



The screenshot displays the GILDA Support System interface within a Mozilla Firefox browser window. The browser's address bar shows the URL <http://gilda-support.ct.infn.it/>. The page features a header with the INFN GRID logo, the GILDA logo, and the eGee logo with the tagline 'Enabling Grids for E-science'. Below the header, there is a navigation menu with options like 'Summary', 'Create Ticket', 'My Profile', and 'View All Tickets'. The main content area is divided into several sections: a 'Login' section with a form for Username (RobertoB) and Password, a 'WARNING' section, and a 'Create Ticket' form. The 'Create Ticket' form includes fields for 'Username' (RobertoB), 'Assign To' (Site INFN-CATANIA), 'Priority' (Accounting), and 'Subject' (Data Management). A dropdown menu is open for the 'Assign To' field, showing a list of sites including Site INFN-CATANIA, Site IISAS-BRATISLAVA, Site INAF-CATANIA, and Site IHEP-BEIJING. The 'Description' field is empty. The 'Add File' section is also empty. The page footer includes the text 'Powered by XOOPS 2.0 © 2001-2006' and 'Grid CT 2006'.

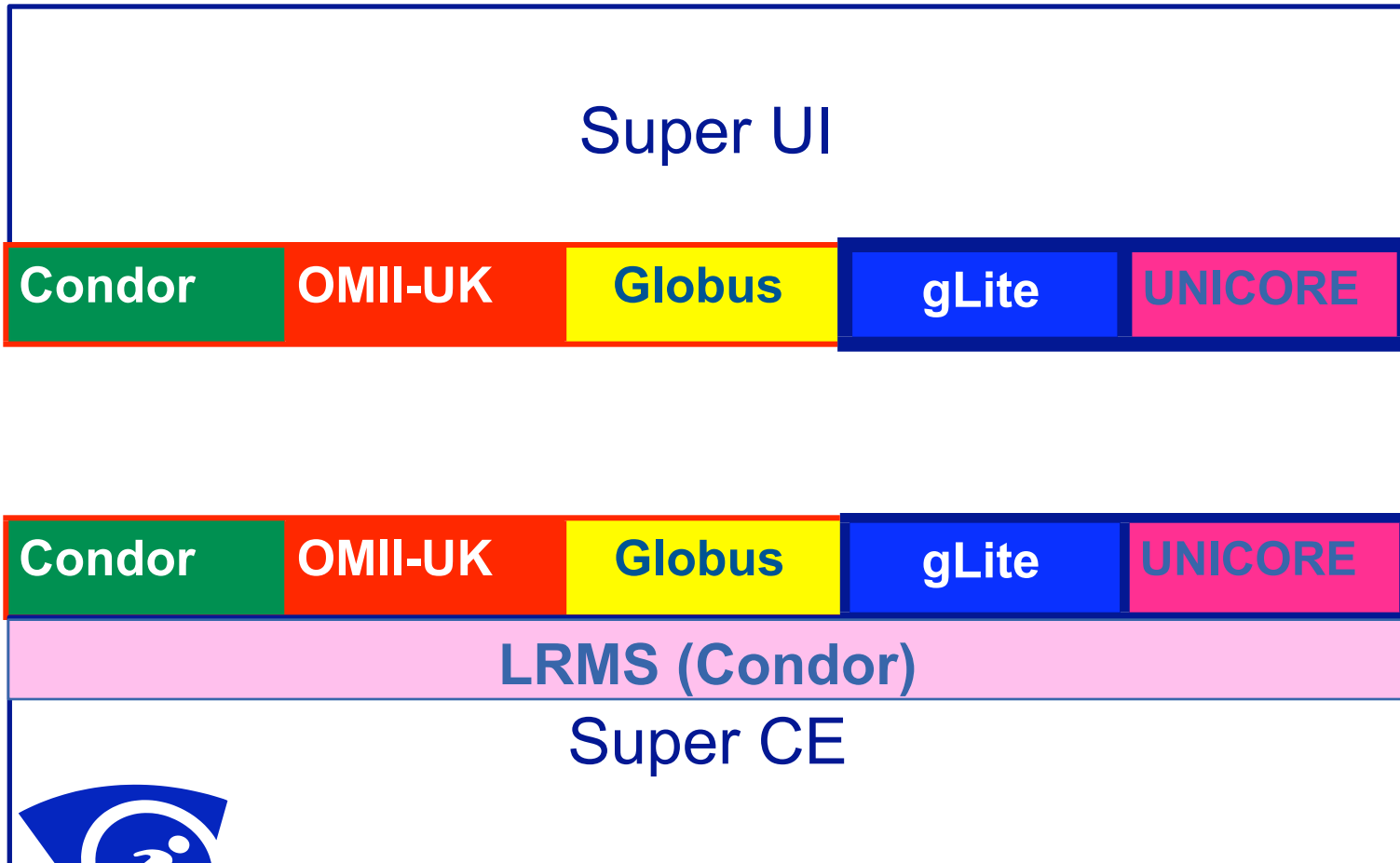


The screenshot displays the GILDA Support System interface. At the top, there are logos for INFN GRID and eGEE Enabling Grids for E-science. The main content area features a 'Create Ticket' form with fields for Username (RobertoB), Assign To (Site INFN-CATANIA), Priority, Subject (Data Management), and Description. A navigation menu on the left includes options like 'View Account', 'Edit Account', 'Notifications', 'Logout', 'Inbox', and 'Who's Online'. A large red diagonal banner is overlaid on the page with the text '>400 tickets in less than 2 years.'

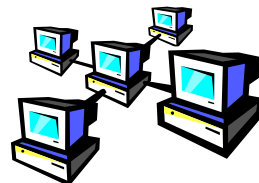
>400 tickets in less than 2 years.

# gLite and other middleware

- **To accomplish International Schools requirements GILDA supports several middleware**
  - gLite, GT4, UNICORE, OMII-UK, Condor
  - resources are shared among the different middleware
- **Several level of integrations**
  - User and hosts are authenticated using a single certificate, regardless of the middleware they are going to use
  - A single batch system (Condor, PBS) is capable to accept jobs from the different middleware
  - The Information System recipes information on the usage done from the different middleware, enabling cross-middleware resources scheduling
- **The multi-middleware setup has represented a significant experience toward middleware coexistence and interoperability of heterogenous infrastructures**



Single  
Information  
System



Super UI

Condor

OMII-UK

Globus

gLite

UNICORE

Condor

OMII-UK

Globus

gLite

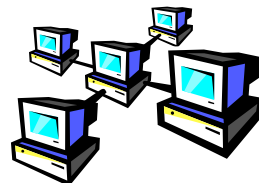
UNICORE

LRMS (Condor)

Super CE



Single Information System



Single Authorization Framework

# Future projects :



- **t-Infrastructure provision will be continued for the forthcoming European Grid Initiative (EGI)**



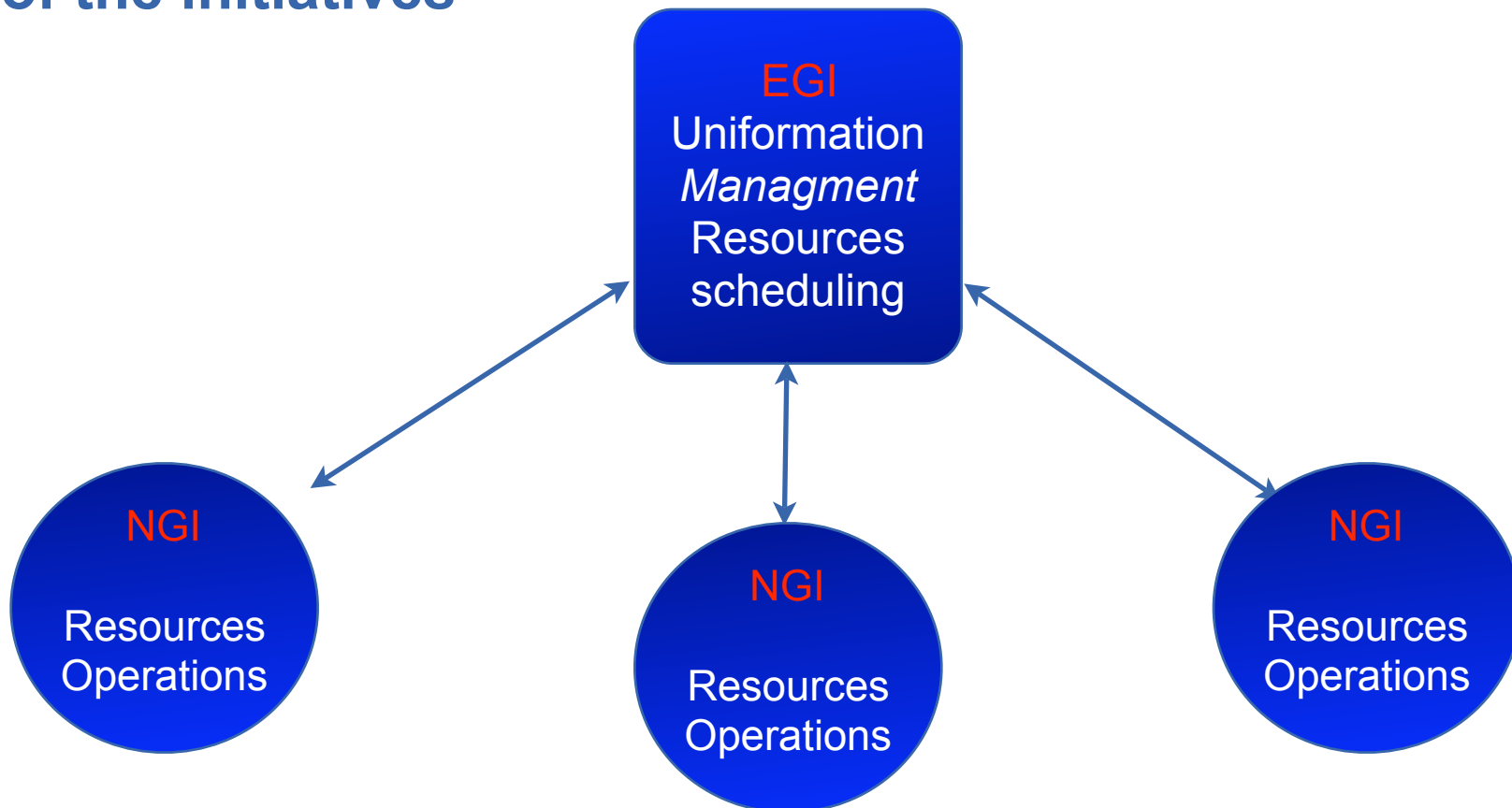
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EGI

Uniformation  
*Managment*  
Resources  
scheduling

- t-Infrastructure provision will be continued for the forthcoming European Grid Initiative (EGI)
- Deployment of the testbed will follow the federated nature of the initiatives



- **NGI - Training Infrastructure related tasks**
  - setup of local repositories for training
  - setup and maintenance of integrated t-Infrastructure
- **EGI - Training Infrastructure related tasks**
  - support of central training repositories
  - support of national t-Infrastructure inter-operations
  - management of central grid services

*(EGI Blueprint proposal, v.2.2)*

- **GILDA is acting as “model” for the South Africans grid initiative, through tutorials (3 in 2008 ) and dedicated support**
- **GILDA will serve as training platform for the Marie Curie project EPIKH (2009-12) :**
  - 6 schools per year in Asia, Latin America, Africa

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**2005**

**2006**

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**2010**

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