



Enabling Grids for E-sciencE

Experience and plans using gLite (New applications)

Giuseppe Andronico

www.eu-egee.org









- GILDA and GENIUS role
- Test on gLite
- gLite and the GA requirements
- Summary



GILDA and GENIUS

30 tutorial+demo from April 2004 Tested applications:

- Earth observation
- Hydrology
- Geosciences
- Computational Chemistry
- Astroparticle Physics
- 20+ demonstrative applications



GILDA and GENIUS

They are

- Key enablers of of the EGEE "virtuous cycle"
- Important instruments for dissemination

To continue to use these instruments we need

- Access to testbed (prototype and/or pre-production)
- Keep in touch with development
- Interaction to have GENIUS working properly on gLite



Test on gLite

- During last ARDA Workshop I tried to download, install and configure gLite client successfully
- Fedora Core 2 machines
 - the data management related commands worked
 - the job submission commands did not (libstdc++ problem)
- Production testbed UI
 - Data management and job submission worked

But.... Last Saturday data management did not work any more



Test on gLite

Documentation

- Not updated
- Unclear the configuration part
- Unclear where the configuration files go in case of centralized installation



GA requirements

51 requirements

- 12 should be already fulfilled and we will test them in the next days
 - Job submission
 - Data management
 - Information service
- 22 imply middleware modifications
 - High priority job submission
 - Metadata and their access rights
 - MPI
- 17 imply further testing or middleware enhancements
 - DAG jobs
 - Anonymous access
 - Retrieve part of a replica

ecee

Other selected requirements

Enabling Grids for E-sciencE

- Light client and scripting capabilities (GENIUS)
- Program streams accessible at runtime
- Interactive and MPI interactive
- Posix like interface to replicas
- Permanent index for Information Service and Resource Broker
- Metric about jobs
- QoS
- Handling of licensed software
- Data encryption
- Outbound connectivity to external services
- Guaranteed network bandwidth



Summary

- It is important support to GILDA/GENIUS group
- We will begin an extensive testing soon
 - Basic functionalities
 - Requirements
- We are ready to discuss other requirements