



TOTAL

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**Total: External Grid Computing Project
....Application Development Experiences**

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External Grid Computing Project

Aims of External Grid Computing Project Initiative:

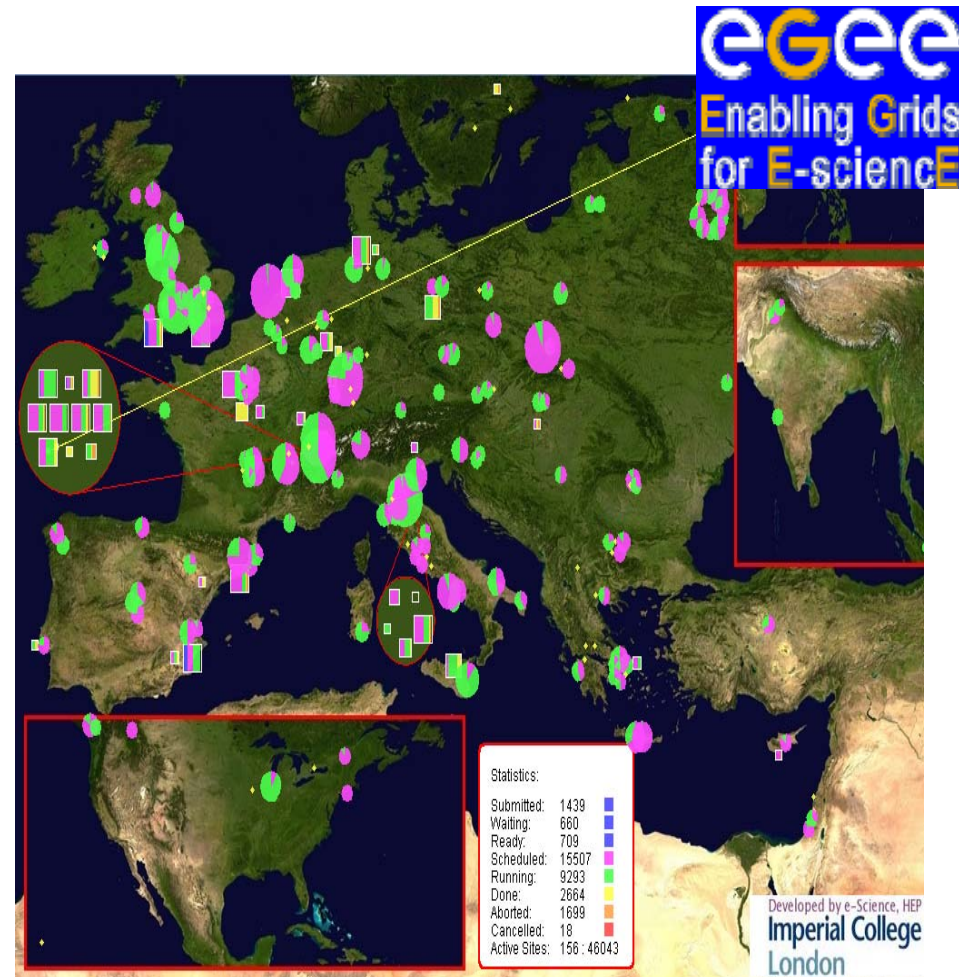
A research based project to assess the usefulness to Total of an 'External' GRID. By adapting one of our own applications (Twist++) for the EGEE external GRID.



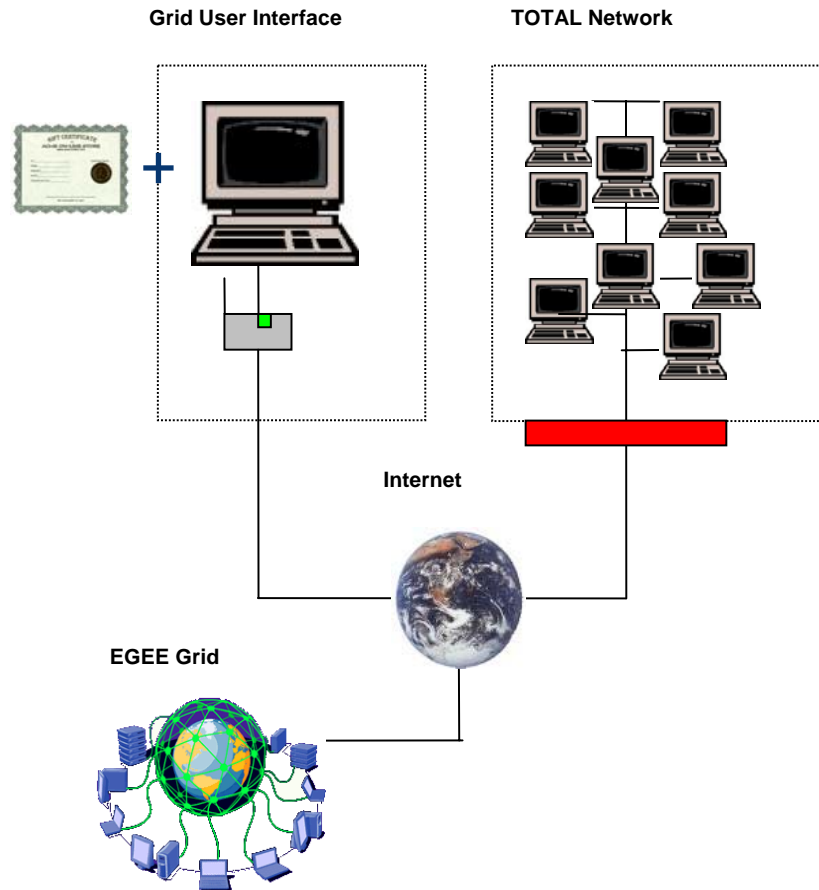
- One of a number of projects involved in securing HPC resources for future
- Research project – step by step approach

Why EGEE?

- International Grid with strong links to the UK. Important as a UK based research centre.
- The EGEE Grid is one of the worlds largest external Grids. Also has large influence over future of Grid developments
- gLite Middleware had all the features we were interested in testing- Resource Broker, SE, ...
- The EGEE grid has a wide user community physics, medicine, chemistry....and also geoscience community.



Current Set-up

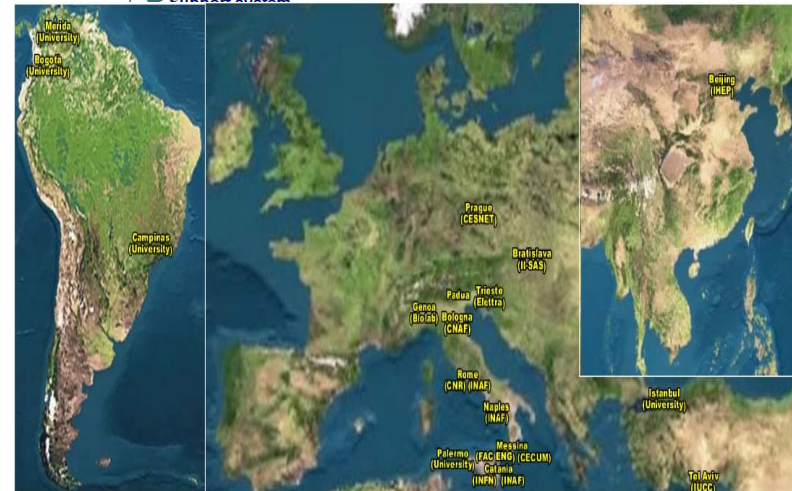
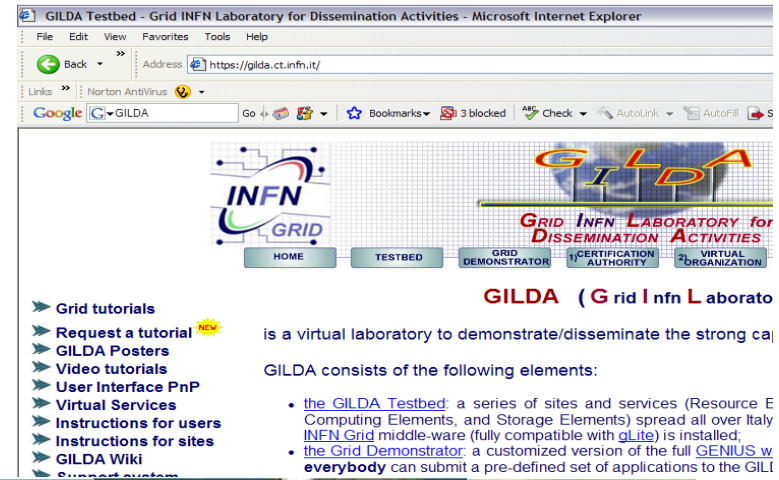


Current Set-up:

- Dedicated User Interface machine to the EGEE GILDA Grid on separate internet connection using plug and play user interface
- Grid Certificate and membership to the gilda Virtual Organisation
- No resources contributed at this time to the EGEE Grid
- Use of the GILDA Grid for development and small scale tests
- Using gLite C++ APIs to link with our application (WMS, LFC...)

GILDA

- GILDA test grid was useful starting point, allowing Total to test the Grid with little or no risk.
- PnPUIComb (gLite 3)
- Support available through GILDA.
- Recent Improvements in GILDA documentation/ website.
- WIKI GILDA site **central point** for tutorials information on APIs.
- Ticket System resource for problems



TOTAL

gLite Documentation & Training

- Documentation not all in one place (websites NA1, SA2, reports, deliverables, presentations).
- Difficult to know which features are current
- Difficult to find out about *know* bugs
- Training courses are a good way of getting started.
- Understand this is a research project- so don't expect everything to be perfect

Wish List

- More *technical* updates/ information on gLite to Industry working with gLite (newsletter?).
- Dedicated resources for Application Developers. Forum for issues on best practice/ problems from knowledge gained by application developers in all VOs.
- Lots of work has been completed by other VOs (e.g. security by Bio-medical community) . This type of knowledge is of interest to industry.