

Grid-site Monitoring

The Distributed Systems Group

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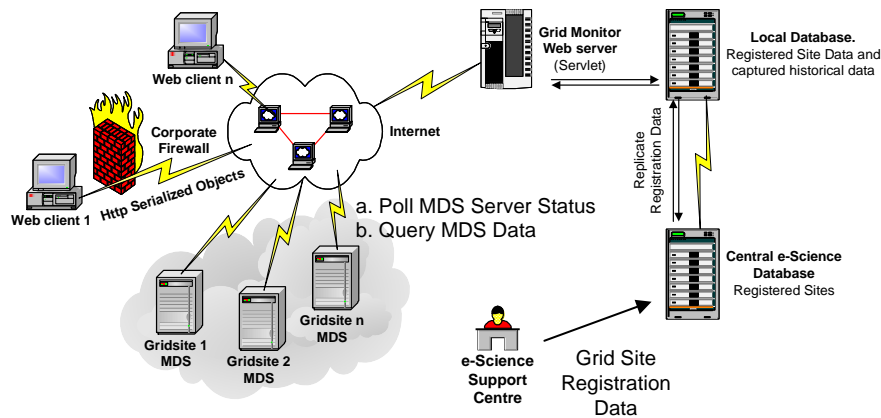
Introduction

The Grid Monitor is a 3-tier Web-based utility that allows users to easily track, query the status, and retrieve information about e-Science Grid centres and their services.

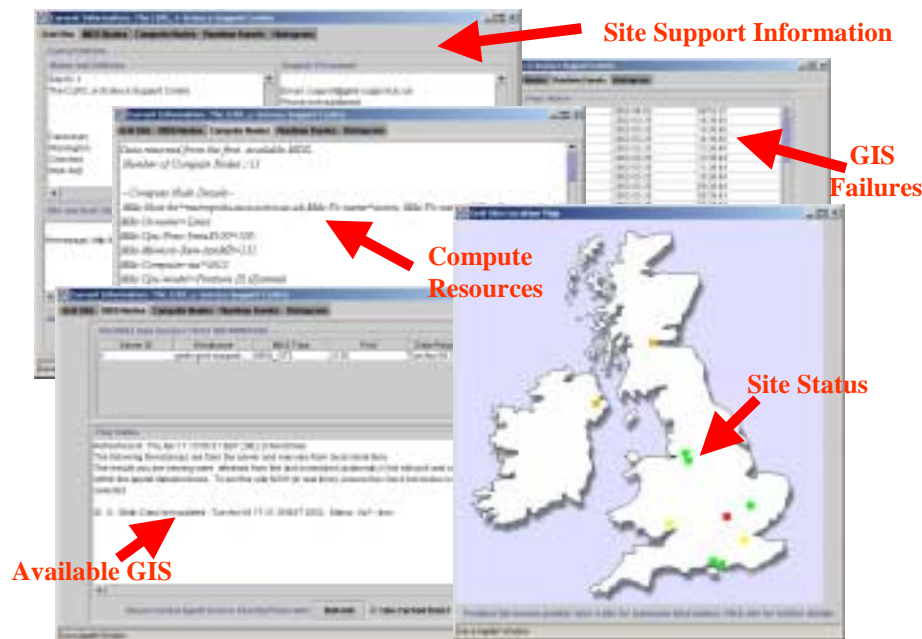
Grid Monitor Functionality

- Seamless access to Grid resource information,
- An easy to use Web-based interface,
- Collation of information from multiple sources; avoids a single point of failure,
- Combines resource data and local site information, into a single user interface,
- Permits users to efficiently observe the current and recent status of site information servers,
- Monitor can work with different Grid information sources, thus shielding the user from implementation details,
- Client-pull approach (HTTP serialised objects); communicate with monitor through firewall,
- Polled data is recorded in database for historical analysis and replay.

Our Approach



Select an e-Science Map Site for further Details



Grid Monitor User Interface

- Geographic site location and Grid Information Server (GIS) status displayed over a map of the United Kingdom.
- Display of Grid Information Server status for all e-Science sites, the site colour coding denotes the status and availability of the servers.
- User queries of site-specific information, such as site contacts, projects, resource details and status.

Future work

- Timeline and statistical plots of Information Server availability,
- Monitoring and plotting of individual resources, e.g., performance and load data,
- Network performance analysis between Grid sites,
- Improved data presentation.

Information

For further information visit:

- <http://homer.csm.port.ac.uk/projects/research/grid/grid-monitoring/>