

## Grid computing 'Mappa mundi' unveiled in Florida

## November 15 2006

Visitors to Supercomputing '06 in Tampa, Florida this week will be the first to see a new interactive map that shows nine of the world's largest computing Grids. The map, developed by researchers from GridPP in the UK and the European particle physics laboratory, CERN, in Geneva, uses Google Earth to pinpoint Grid sites on six continents, showing more than 300 sites overall. Like the medieval 'mappa mundi', which showed what was known of the world at the time, this is one of the first attempts to show the whole scientific Grid world.

Laurence Field, who works at CERN for the Enabling Grids for Escience project, has been leading work on the map. He explains, "Today there are a number of production Grids being used for science, several of which have a strong regional presence. Many of them are using different middleware, which can artificially limit scientific collaboration. The Grids shown on the map are all taking part in the Open Grid Forum's Grid Interoperation Now (GIN) group, which is trying to bridge the differences and enable seamless interoperation between the various infrastructures."

Gidon Moont from Imperial College London, developed the interface with Google Earth. It was then adapted by the GIN group, and will be shown on CERN's stand and the UK e-Science stand at Supercomputing.

Moont comments, "It's very exciting that we can, for the first time, see these major Grids together on one map. Interoperation will be a key area for the future of the Grid, and the map will show how it grows."



Grid sites are displayed on Google Earth using a KML file. When this file is opened in Google Earth the locations of the Grid sites are added to the Google Earth map. Clicking on each site gives the name and location of the site, and identifies the Grid to which it belongs. The map queries a database that includes site information from the following Grids:

- -- Enabling Grids for E-sciencE (worldwide)
- -- Open Science Grid (mainly USA)
- -- Nordic Data Grid Facility (mainly Scandinavia)
- -- NAREGI (Japan)
- -- TeraGrid (USA)
- -- PRAGMA (Pacific Rim)
- -- Distributed European Infrastructure for Supercomputing Applications (Europe)

National Grid Service (UK)

Australian Partnership for Advanced Computing (Australia)
The file to show Grid sites on Google Earth and instructions on how to install it can be downloaded from:
<a href="https://www.gridpp.ac.uk/demos/gin\_monitor.html">www.gridpp.ac.uk/demos/gin\_monitor.html</a>

Source: PPARC

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