

Calendar/Meetings

August 2005

30-31, [Bridging the Gap: End-to-End Networking for Landmark Applications](#), Ann Arbor, Michigan

September 2005

2-3, [VLDB Workshop on Data Management in Grids](#), Trondheim, Norway

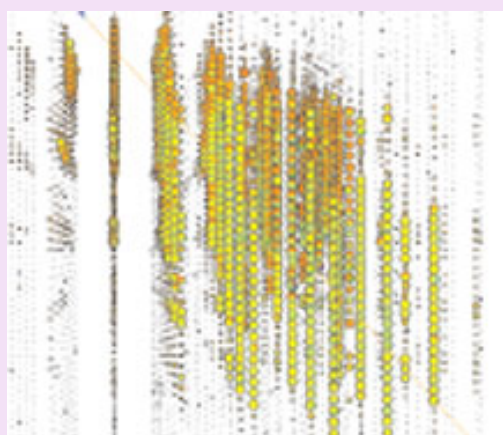
4-17, [CERN School of Computing 2005](#), Saint Malo, France

6-7, [14th GridPP Collaboration Meeting](#), Birmingham, UK

6-15, [Second National Virtual Observatory Summer School](#), Aspen, Colorado

[Full Calendar](#)

Image of the Week



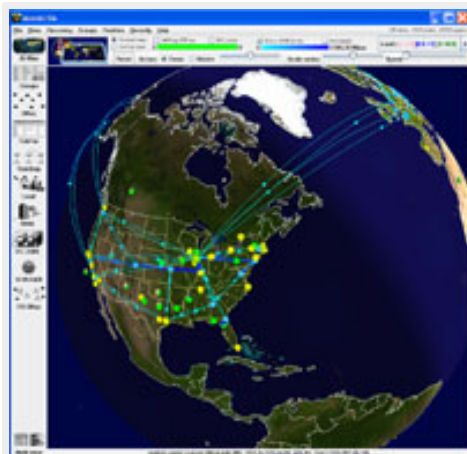
Muon neutrino simulation in the future IceCube detector. (Click on image for full version.)

Image courtesy Stephan Hundertmark, Stockholm University

One billion events of this type, the simulated response to the same ultra-

Feature Story

The Art of Monitoring with MonALISA



MonALISA monitoring.
Image Courtesy Iosif Legrand

Operating a successful grid, network or computing facility requires vast amounts of monitoring information. Projects and organizations worldwide that need to track resource usage, network traffic, job distribution and many other quantities rely on Caltech's MonALISA system to collect the information and present it in a way that allows them to make effective decisions. The system also automatically troubleshoots and optimizes very large grid and network systems.

"While developing computing models for experiments at the Large Hadron Collider, we realized that vital monitoring information was missing," explained Caltech's Iosif Legrand, MonALISA's chief architect. "We didn't want to reinvent the wheel, so we built a framework that collects and synthesizes data from many existing monitoring tools and built new tools only where needed."

MonALISA, which stands for Monitoring Agents Using a Large Integrated Services Architecture, has been developed by Caltech and its partners over the last five years. The framework monitors everything from single computers to large facilities and

EGEE Battles Malaria With Grid Wisdom

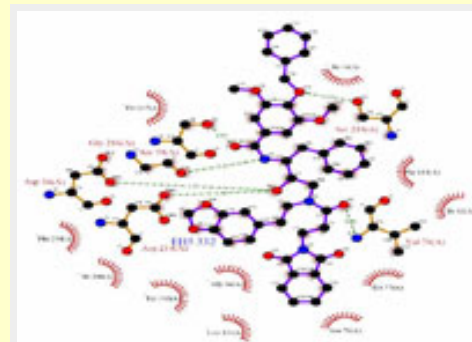


Image Courtesy EGEE

The first biomedical data challenge for drug discovery ran successfully this summer on the EGEE grid production service. Entitled WISDOM (Wide *In Silico* Docking on Malaria), the challenge used 1,000 computers in 15 countries simultaneously, resulting in over 46 million docked ligands. This type of scientific challenge would not be possible without the EGEE grid infrastructure, as *in silico* docking usually produces only around 100,000 docked ligands when carried out on classical computer clusters.

In silico docking enables researchers to compute the probability that potential drugs will dock with a target protein. This very promising approach may speed up and reduce the cost to develop new drugs to treat diseases such as malaria. The data challenge is a step towards realizing a full *in silico* drug discovery platform that would use a docking approach to propose new inhibitors for the target proteins implicated in malaria.

[Read more...](#)

Grids in the News

high-energy muon neutrino event in the [AMANDA-B10](#) detector and the future [IceCube](#) array, were produced at [Swegrid](#), the Swedish Grid facility.

[Learn more...](#)

Link of the Week

NSF Middleware Initiative

The National Science Foundation Middleware Initiative funds the design, development, testing, and deployment of middleware, a key enabling technology upon which customized applications are built. NMI supports large and small teams to develop software, standards and experimental applications which are used by thousands of researchers and educators worldwide.

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Office of Science/
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global networks. At CERN in Geneva, Switzerland, MonALISA services monitor 2,500 computers and transcontinental and intercontinental network links. The Open Science Grid uses the framework for resource and network monitoring, and the GLORIAD network monitors traffic and all major routers using MonALISA.

[Read more...](#)

Awards boost super-grid research

The Age, August 30, 2005

By Beverley Head

Grid computing technologies that allow faster analysis of complex data and underpin international collaboration received a lift from the most recent round of Australian Research Council grant allocations.

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NSF proposes next-generation Internet

Network World, August 29, 2005

By Grant Gross

The National Science Foundation has proposed a next-generation Internet with built-in security and functionality that connects all kinds of devices, with researchers challenging the government agency to look at the Internet as a "clean slate."

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Got Data?

SLAC Interaction Point, August 19, 2005

By Monica Bobra

Over 10,000 CPUs scattered across the globe hum in unison for one of the world's major distributed computing systems, known as the Open Science Grid (OSG).

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