

Calendar/Meetings

September

18-21, [UK e-Science All-Hands Meeting 2006](#), Nottingham, UK

19-21, [European Grid Technology Days](#), Brussels, Belgium

21-23, [Second Austrian Grid Symposium](#), Innsbruck, Austria

25-29, [EGEE'06 Conference](#), Geneva, Switzerland

25-28, [Cluster 2006](#), Barcelona, Spain

[Full Calendar](#)

Feature Story

Solving the Football Pool Problem

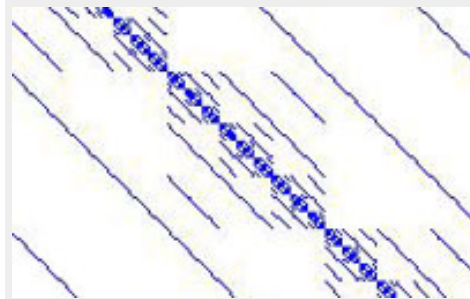


Illustration of the football pool problem. Researchers look for the smallest set of columns of the matrix such that every row is covered by the set of chosen columns.

Image Courtesy Jeff Linderoth

Grids are being used to help solve one of the most famous problems in mathematical coding theory.

The football pool problem gets its name from a lottery-type game in which participants predict the outcome of soccer matches. The current challenge is to find the minimum number of lottery tickets a person would have to buy to guarantee that for six matches, no more than one prediction (out of 729 possible outcomes) is wrong. In the language of mathematical coding theory, that translates to determining the smallest covering code of ternary words of length six.

Jeff Linderoth of Lehigh University, Francois Margot from Carnegie Mellon University and Greg Thain from the University of Wisconsin-Madison have developed a mathematical application to search for a solution to the football pool problem. The application was initially adapted to run on the Grid Laboratory of Wisconsin, the University of Wisconsin-Madison's campus grid. In the spring of 2006, Dan Bradley of DISUN, the Data Intensive Science University Network, developed services to route GLOW jobs to Open Science Grid sites.

DIANE Creates Efficient Scheduling on the Grid



EGEE sites involved in collaboration with the International Telecommunications Union. DIANE was used in the data processing tasks.
Image Courtesy EGEE

A tool for parallel scientific applications, the Distributed Analysis Environment (DIANE), has been successfully used in several processing challenges on the Grid. In April, DIANE was used during the in silico drug-discovery application to analyse possible drug components to fight the avian flu virus on the Enabling Grids for E-science (EGEE) infrastructure. In the following months, the DIANE scheduling layer was also used for a series of large-scale data-processing tasks for the International Telecommunications Union using several grid sites around Europe. Originally targeted at investigating distributed analysis for particle physics, DIANE has become an application-independent user-scheduling tool on the Grid and has been interfaced with a number of applications in various fields.

[Read the full article in this month's CERN Courier](#)

Grids in the News

Image of the Week



Nordic grid sites. (Click on image for full version.)

Image Credit CERN Courier

This map shows sites participating in Nordic grid projects or using middleware developed by the NorduGrid project. Since the beginning of the European Data Grid project, Nordic countries have participated in international grid projects and have worked to form their own projects and develop their own middleware. Read more about

grid projects in the Nordic countries in the [September CERN Courier](#).

Statistic of the Week

99

The European Commission has granted \$99 million for grid computing research. The funding, provided through the EU's sixth Research Framework Programme, will be distributed among 23 new research projects.

Source: [European Commission Press Release](#)

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After decades of study, researchers had only been able to reduce the minimum number of tickets to between 65 and 73. In five months using GLOW and OSG resources in combination with computing resources from DISUN and the TeraGrid, over 90 CPU years have been spent to establish that the answer must be between 70 and 73.

[Full article](#)

This article originally appeared as a research highlight on the [Open Science Grid Web site](#).

Globus Turns 10: Time for Celebration and Reflection
GRIDtoday, September 18, 2006
By Ian Foster

The GlobusWORLD conference being held (jointly with GridWorld and the Open Grid Forum) this week in Washington, D.C., is a significant milestone for those involved in the development and use of the Globus open source Grid software.

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Building Community Grids
GRIDtoday, September 18, 2006
By Wolfgang Gentzsch

Many of the early regional, national and community Grid initiatives were built around the Globus Toolkit.

[Read More...](#)

Merged grid computing group launched
Computerworld, September 18, 2006
By China Martens

The Open Grid Forum (OGF) standards body has officially opened for business, delivering on its commitment made in June to detail its aims and organisational set-up to coincide with the start of the GridWorld conference, held in Washington DC last week.

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