



Open Science Grid

EDUCATION OUTREACH & TRAINING

2007-2008

The Education, Outreach and Training Activity organizes and delivers training for Open Science Grid (OSG) end users and site administrators, including supporting new communities and Virtual Organizations (VOs) in joining the OSG. EOT also engages young people in (e)Science and Computer Science, with a primary focus on undergraduate and early graduate students. Programs include:

Grid End-User Training

EOT provides in-person workshops where students get hands-on experience working with leading grid-tools, and online training for those who cannot attend one of our workshops.

Grid Site Administrator Training

The OSG EOT trains site administrators in the setup and support of their OSG sites using the OSG/VDT software stack.

Outreach to Under-served Communities

EOT engages and assists minority students and minority-serving institutions by providing resources and opportunities for engaging with the OSG through workshops, technical assistance and Grid access.

International Outreach

The OSG EOT is committed to international outreach as a part of its mission, such as recent Grid schools in Argentina and Colombia, work with NorduGrid in Scandinavia, and the International Summer School on Grid Computing (with EGEE). We are also developing projects for Pan-American and South African gridschools.

The Education Virtual Organization

The OSG Education VO includes a wiki, email lists, followup discussions and other helpful tools to support you in using the Open Science Grid in your classes and research. Our staff will work with you to find the right way to get your students engaged in the OSG.

We also post learning and other Grid-related opportunities for students.



OpenScienceGrid.org/Education

2007-2008 Gridschools & Workshops

Florida International Grid School 2008, Jan 23-25, at Florida International University, Miami, Florida

Supercomputing '07 tutorials, Nov 11 & 13, at Reno, Nevada

Great Plains Grid Workshop, Aug 8-10, at the U. of Nebraska-Lincoln

Rio Grande Grid Workshop, Jun 8-10, at the U. of Texas at Brownsville, coordinated with UT-Pan American

TeraGrid Conference tutorials, Jun 4-8, at the U. of Wisconsin-Madison

South Africa Workshop, Mar 26-30, at the IFIP School on Software, Gordon's Bay, South Africa

Midwest Grid Workshop, Mar 24-25 at the U. of Illinois at Chicago

Argentine Grid Workshop, Mar 12-14 at Santa Fe, Argentina

OSG Collaboration Meeting, Mar 5-7 at the Renaissance Computing Institute, Chapel Hill, North Carolina.

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About the Open Science Grid

The Open Science Grid (OSG) will take High Throughput Computing to the next level, to transform data-intensive science through a cross-domain, self-managed national distributed cyber-infrastructure. It will bring together campuses and communities, and facilitate the needs of Virtual Organizations at all scales. The OSG Consortium includes many universities, national laboratories, scientific collaborations and software developers working together to meet these goals.

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Gridschool & Workshop Syllabus

- Introduction to distributed computing and the Grid
- Grid security and basic Grid access
- Grid resource and job management
- Grid data management
- Building, monitoring, maintaining and using Grids
- Grid applications and frameworks
- Workflow and related issues (scheduling, provenance)

Future:

- Porting applications to the Grid
- Web services & the resource framework
- Advanced networking; data mining

Self-Paced / Online Instruction

In December 2007, EOT will release the first online, self-paced Grid tutorials based on portions of the gridschools. The tutorials include lectures and labs on grid technologies, with flexible roadmaps for navigating the material. You can access the online community for support or come to our on-line office hours.

The Grid for Secondary Science Education

I2U2, Interactions In Understanding the Universe, creates an infrastructure to develop hands-on laboratory course content and an interactive learning experience that brings tangible aspects of each experiment into a "virtual laboratory." These labs use the Grid for education in the same way that science uses the Grid.

www.i2u2.org