

Panel 1: Open

The Open Science Grid is a national cyberinfrastructure that brings multidisciplinary collaborations together with the latest advances in distributed computing technologies to make innovative science possible, from discoveries in particle physics to advances in earthquake engineering.

Welcoming collaborators from all scientific disciplines, software developers and resource providers, and partnerships with other national and international grids and cyberinfrastructures, the Open Science Grid provides member scientists with unprecedented access to shared computing and storage resources worldwide.

Panel 2: Science

The Open Science Grid is a national cyberinfrastructure that brings multidisciplinary collaborations together with the latest advances in distributed computing technologies to make innovative science possible, from discoveries in particle physics to advances in earthquake engineering.

Grid computing gives scientists an extraordinary range of computational and storage resources and tools to advance national and international scientific collaboration. It provides a framework to share resources and applications across regional and institutional boundaries. Physics, astrophysics, biology, computer and gravitational-wave scientists contribute manpower and resources to the Open Science Grid and benefit from the latest advances in grid technologies.

Panel 3: Grid

The Open Science Grid is a national cyberinfrastructure that brings multidisciplinary collaborations together with the latest advances in distributed computing technologies to make innovative science possible, from discoveries in particle physics to advances in earthquake engineering.

The Open Science Grid, built by research groups from U.S. universities and national laboratories, is a federation of grids with over 10,000 CPUs and many terabytes of data storage. Individual grid projects within the OSG benefit from easy access to local and remote resources; testing and production environments for middleware and applications; and a common computing infrastructure. The OSG works with its national and international partner grids to make worldwide computing resources available for cutting-edge scientific research.

Panels 4 and 5: Science

The Open Science Grid brings multidisciplinary collaborations together with the latest advances in distributed computing technologies to make innovative science possible. In this national grid infrastructure, member scientists from diverse fields contribute to the OSG and benefit from access to a range of computational and storage resources, tools to advance national and international collaboration, and a framework to share resources and applications across scientific and regional boundaries.

Panel 6: Other Grids

The Open Science Grid combines resources from many different computing infrastructures, and works jointly with its partner grids in the United States, Europe and Asia to create a worldwide interoperable system. Gateways will allow scientists to run the same application on different grids; while computer science researchers build bridges between different infrastructures to allow them to communicate freely.

Panel 7: Collaboration and Education/Training

The Open Science Grid invites science researchers, middleware developers, resource providers and grid projects to join this unique distributed computing infrastructure. Over 20 member organizations representing hundreds of researchers and over 35 sites on three continents contribute to the OSG and benefit from access to shared resources worldwide.

Summer grid workshops in the United States and Europe introduce undergraduate and graduate students--as well as established researchers--to grid computing and its applications in research. High school students in the QuarkNet Cosmic Ray Collaboration will use grid computing to analyze particle physics data from cosmic ray detectors installed at 200 high schools across the United States.