The Open Science Grid from Local to Global Shared Cyberinfrastructure

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The Open Science Grid (OSG) is a five-year project jointly funded by the DOE and NSF to maintain and evolve a national distributed computing infrastructure for large-scale scientific research. The US LHC experiments, LIGO, astrophysics and biology research groups rely on the OSG to operate and sustain the shared common distributed facility.

One goal of the OSG is to enable equivalent ease of use for local campus infrastructures, and remote national and globally distributed compute and storage resources. The OSG software stack ?based on the Virtual Data Toolkit ?provides client, server, service and other packages for use in different environments. OSG services and infrastructure are designed to expect data, jobs, information to flow across grid boundaries and provide adaptors to different security and administrative domains. And OSG works to provide the glue between community, national and campus environments.

We present the ongoing work to achieve these goals.