

Campuses, Cyberinfrastructure, and the OSG

Abstract content

We describe the OSG Campus Grids accomplishments, activities and plans for the next year.

The Open Science Grid Consortium continues to support both physics and non-physics virtual research communities by providing access to a distributed set of processing and storage resources at more than 70 sites across the United States. OSG currently supports ~400,000 jobs a day, more than 700,000 CPU hours of processing, and movement of 200 TB of data.

OSG's vision includes enabling campuses and regions to build, sustain and use their own distributed infrastructures so that their research communities can increase the usage and benefits of distributed computing. One way that OSG helps campuses is by facilitating access to other resources both on and off campus, within OSG and outside of OSG, including commercial and scientific computing, TeraGrid, and other HPC facilities. Additionally, the joint activity with the US LHC Tier-3s in the US anticipates expansions "virally" from the physics faculty to the rest of the campus as desired and/or needed. To date there are 8 campus/regional infrastructures partnering as part of the OSG and there will soon be more than 40 US LHC Tier-3s.

The work on the Campus includes extending the boundaries of OSG to: provide expertise, software and best practices for building and operating effective and robust processing and storage sites; help adapt and use applications running across the campus infrastructure and bridging to remote resources; teach the local staff how to provide central services at the Campus level that mimic the functionality of those of the national infrastructure; and provide support and expertise in areas of such as operational security, system architecture and design. OSG provides an exemplar distributed infrastructure and a staff of existing evolving expertise and experiences from which campus can learn and benefit. All OSG services and software components are designed and implemented to allow "cloning" "replication" and self management.

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