



Open Science Grid News

MAY 2007

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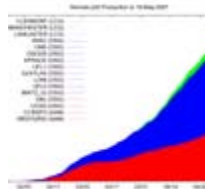
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Events reprocessed up to mid-May, 2007 on OSG. *Image Courtesy Mike Diesburg, Fermilab.*
(Click for full graph)

[Read the Research Highlight](#)

Campaign to Help Users Run Jobs

The OSG has launched a campaign that addresses difficulties some OSG users face when submitting jobs to OSG sites. The goal is to help users answer the question, "Why is my job failing on this site?" Members of the Troubleshooting team, GOC, User Support and VDT will offer quick and focused response to users with failing jobs.

Further details on this campaign, including how to report problems and troubleshooting guides, can be found on the [campaign OSG at Work Twiki page](#).

New Streamlined CE Install Guide

In response to suggestions about the length and complexity of the CE install guide on the OSG TWiki, a streamlined

From the Executive Director

Instead of the usual semi-annual all hands consortium meeting this summer we are preparing for two important workshops at the end of July. Please sign up at the registration pages linked below:

July 26-27 -- [Users and Applications Workshop](#)

July 30-31 -- [Site Administrators Workshop](#)

We have an active new community on OSG as a result of the Engagement activity's efforts. The Rosetta team working in the Kuhlman Lab at RENCi are using OSG to help design proteins. Originally created in David Baker's laboratory at the University of Washington, [Rosetta](#) is now maintained and developed by eight different groups at universities across the world. There will be a full report in the next newsletter.

Speaking of Engagement, the wallclock hours contributed by OSG sites to the Engagement VO from the weeks of April 1st through May 19th are shown below. These figures represent over 1 CPU Year per week with fifteen sites contributing cycles.

Site	CPU Hours 4/1– 5/19/07	Site	CPU Hours 4/1– 5/19/07
TTU-ANTAEUS	22,410	Vanderbilt	3,885
CIT_CMS_T2	14,848	FNAL_FERMIGRID	3,660
USCMS-FNAL-WC1-CE	11,632	FNAL_CDFOSG_1	1,933
FNAL_GPFARM	8,312	UCSDT2	1,717
Nebraska	7,093	UCRHEP	1,311
GLOW	4,692	Purdue-RCAC	413
UWMilwaukee	4,282	FNAL_CDFOSG_2	145
ASGC_OSG	3,914	Grand Total	90,247

~ Ruth Pordes

Bill Kramer, OSG Council Chair

[Bill Kramer](#) was elected chairperson of the OSG Council in February, 2006. Since that time, he has helped to chart the course of the OSG Consortium. Along with the rest of the council, he has explored how to best organize the OSG, defined the contributions and expectations of the stakeholders and penned OSG policies and agreements.

Bill believes the OSG is a practical way to bring scientists and information technologists together to solve diverse real world computational problems on the best-suited computing platforms and facilities available.

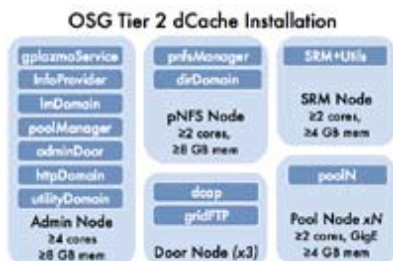


In addition to his role for OSG, Bill has several "day jobs." He is the General Manager of the National Energy Research Scientific Computing Center and head of the High Performance Computing Department at Lawrence Berkeley National Laboratory where he leads the deployment and support for large advanced technology. He also is engaged in research in large scale performance evaluation, security and parallel file systems. Bill's experience with supporting multi-user large production facilities is an asset as he approaches the goals and challenges of the OSG.

Condor Week Report

version is in progress. This includes a root install using Condor and full privilege; branching out to other options is planned. [The draft](#) is available from the [Documentation TWiki](#) and from the [website](#). Please send comments, corrections and suggestions to [osg-docs](#).

dCache available with VDT as Second Storage Element Implementation



Typical OSG Tier 2 installation of dCache.

[\(Click for larger image\)](#)

The [dCache](#) storage caching system is a new component of the Virtual Data Toolkit and is now available as RPMs from the [VDT software server](#).

dCache provides a single namespace for a pool of servers, making it look like a single, giant disk system to users. It also simplifies administration by providing mechanisms for internal cleanup and load balancing, which in turn makes efficient use of storage space and handling of users' requests.

Grid access to a dCache system is through the Storage Resource Manager (SRM) interface, just as with LBNL's Disk Resource Manager, the previously available storage element implementation in VDT.

Brookhaven and Fermilab have hundreds of PetaByte dCache disk systems with back-end tape archives accessible to OSG. Other ATLAS and CMS OSG sites have tens of TeraByte disk-only systems.

To support deployment through the VDT, OSG is working on making installation and configuration of the software easier. To help storage consumers on OSG, we are holding bi-weekly meetings to discuss problems. To find out, more please subscribe to [osg-storage](#) or see the [OSG at Work Twiki storage pages](#).

~ Gene Oleynik & Ted Hesselroth, Fermilab

Supported By

Several members of OSG participated in Condor Week at the University of Wisconsin - Madison April 30 to May 3, 2007. This annual event provides a forum for national and international collaborators and users in academia and industry to get together and discuss current and future research in high throughput and distributed computing.



Image Courtesy Miron Livny.

[\(Click for larger image\)](#)

Tutorials for users, administrators and developers were followed by several days of presentations and discussions. Hot topics this year included incorporating virtual machines and improving support for parallel applications and campus and national grid infrastructures. In addition, Red Hat announced it will be investing in the Condor project, making Condor more tightly integrated with Linux.

[Read presentations by members of the OSG.](#)

First CI Day at UC Davis -- a collaboration between OSG, TeraGrid, Educause and Internet2

The first Campus CyberInfrastructure (CI) Day was held at the University of California, Davis in April. The UC Davis faculty and researchers contributed to the success of the workshop by their deep involvement. They brought several science applications into the discussions that are candidates for activities for the Engagement activity in OSG.

Like many institutions, much of the immediate difficulty for UC Davis relates to local issues -- lack of power and cooling for existing clusters, administrative support for these systems; need for more compute cycles and bit buckets; individual faculty-owned clusters with some spare cycles. There is also the common need for data curation with well formed metadata and data interoperability. Overcoming the social, political and technical hurdles to resource sharing at the campus enables rapid integration with large scale CI.

OSG presented our principles of building, learning to operate and using a local cyberinfrastructure, and then connecting it to regional systems and a national distributed facility, such as the OSG.

We're currently following up with individual researchers whose applications are ready to take advantage of available distributed resources in the next few months. As individual groups become familiar with OSG mechanisms for sharing resources, we plan to investigate bringing in local resources using OSG technologies.

We have also begun discussions at UC Santa Barbara, who is incubating a campus CI by building on top of the grid appliance developed at UCLA. By integrating our activities and sharing technologies with these three campuses, we hope to catalyze a well integrated OSG enabled regional CI.

Feedback on the workshop was positive. The format of interaction and providing a forum for the faculty to express their needs were well-received. We will build on this first workshop for additional Campus CI Days in the summer and fall.

~ John McGee, RENC1



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