
FermiGrid Project Status

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FermiGrid – Four Equal Elements

FermiGrid Common Grid Services:

- Supporting common Grid services to aid in the development and deployment of Grid computing infrastructure by the supported experiments at FNAL

FermiGrid Stakeholder Bilateral Interoperability:

- Facilitating the shared use of central and experiment controlled computing facilities by supported experiments at FNAL
 - CDF, D0, CMS, GP Farms.

FermiGrid Development of OSG Interfaces for Fermilab:

- Enabling the opportunistic use of FNAL computing resources through Open Science Grid (OSG) interfaces.

FermiGrid Exposure of the Permanent Storage System:

- Enable the opportunistic use of FNAL storage resources (STKEN) through Open Science Grid (OSG) interfaces

FermiGrid – Common Grid Services – Status

FermiGrid 1,2,3,4 are in operation hosting the following services:

- The “site wide” globus gateway on fermigrd1;
- VOMS / VOMRS on fermigrd2 (aka voms.fnal.gov);
- GUMS on fermigrd3 (aka gums.fnal.gov);
- Myproxy and (soon) SAZ on fermigrd4

FermiGrid Web Page:

- <http://fermigrd.fnal.gov/>
- Web pages contain both “informational” and “monitoring” content.
- More metrics being worked on.

FermiGrid User Guide:

- <http://fermigrd.fnal.gov/user-guide.html>
- A “work in progress”.
- More documentation being worked on.

FermiGrid - VOMS

We are hosting the following VOs:

- auger, cdf, cms, des, dzero, fermilab, nanohub, gadu, sdss, uscms
- cdf and cms VOs are replicas of the official VO.
- fermilab VO has the following groups (sub-VOs):
 - /fermilab/accelerator
 - /fermilab/astro
 - /fermilab/hypercp
 - /fermilab/ktev
 - /fermilab/miniboone
 - /fermilab/minos
 - /fermilab/numi
 - /fermilab/patriot
 - /fermilab/theory

See: <http://fermigrid.fnal.gov/voms-service.html>

FermiGrid - GUMS

Being used by the GP Farms and USCMS at Fermilab.

Preliminary metrics:

- Date & time – number of GUMS calls since
- 29 Aug 2005 22:13:33,797 - 4809
- 23 Aug 2005 10:13:40,565 - 66200
- 18 Aug 2005 02:43:53,642 - 65612
- 13 Aug 2005 09:51:47,763 - 72575
- 10 Aug 2005 09:28:00,379 - 83087
- 08 Aug 2005 13:13:23,484 - 89124
- 05 Aug 2005 13:42:33,542 - 84315
- 03 Aug 2005 01:41:02,951 - 92603
- 30 Jul 2005 16:25:49,375 - 93497
- 27 Jul 2005 17:48:46,486 - 93047
- 25 Jul 2005 11:12:31,836 - 94290

FermiGrid – Stakeholder Discussions

FermiGrid stakeholder meetings are regularly taking place on every other week in FCC1 on Mondays at 3:00pm (following the CD computer room planning meeting).

Work is progressing on stakeholder bilateral interoperability:

- <http://fermigrd.fnal.gov/stakeholder-interoperability.html>

FermiGrid – Open Science Grid

Fermilab Grid Support Center:

- Registered with OSG on July 14, 2005.
- The Fermilab Helpdesk is the primary interface.

Fermilab OSG Compute Elements:

- FNAL_GPFARM
- FNAL_FERMIGRID
- SDSS_TAM
- USCMS-FNAL-WC1-CE

FermiGrid - Permanent Storage System

Requisition in preparation to add 7TB file server to the public dcache to serve as the FermiGrid public storage element (SE).

FermiGrid – What is Next ?

The hardware (fermigrid4) to host the new SAZ service is present and operating.

Need to implement SAZ:

- A minimal SAZ implementation (always says “yes”);
- Logging SAZ implementation (always says “yes” and loads database);
- Active SAZ implementation (default is “yes”, and uses database).

FermiGrid – Milestones & Time Line

- End Feb 2005: Hardware installation.
 Begin software installation and initial configuration.
- May 2005: Common Grid Services (CGS) available in non-redundant
 mode (VOMS, GUMS, Condor, etc.).
- July 2005: “Gridified” the GP Farms to work with the FermiGrid CGS
 and open the GP Farms to the OSG through the Globus
 Gatekeeper on FermiGrid1.
- Sept 2005: SAZ
 Metrics
 Work on FY2006 FermiGrid plan.
- Ongoing: Work with other Fermilab resources to integrate them into the
 FermiGrid CGS.

FermiGrid – Fin

Any questions?