



US CMS Grid & Services: Interaction with Open Science Grid & FermiGrid

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US CMS Grid Services Work Plan Defined by USCMS Activity based Budget and WBS



Latest Grid Services WBS at:

http://cmsrv07.fnal.gov:8080/XProject-ruth/XProject?wbs=1.3&proj=uscms&serv_key=current

Work separated into Development, Integration, Operations. All have tasks and deliverables.

Co-dependence between Grid Services and Integration and other Areas of WBS

- ➔ OSG is underlying Infrastructure for Distributed Computing Tools
- ➔ Grid relies on Tier-1 and Tier-2s for Storage Services, Site Administration, Support Services etc.

...CD Joint Projects covered by GDM

- ➔ VO Management, VO Privilege, Upper Storage, FermiGrid etc

... external Grid projects and collaborations

- ➔ OSG, LCG etc,

Grid Operations evolving - not yet well understood.



VO Services

➔ VO Management

- Phase II to support LCG nearing deployment. Proposal for inclusion in SC3 may add work.
- Phase III for FermiGrid & other VOs not US CMS work.

➔ Privilege

- Phase I deployment/support details occupying lots of time
- Phase II with focus on policy expected to ramp up in couple of months - will FermiGrid be interested in collaborating on this?

Accounting

- ➔ Importance is here. work and “presentation” ramping up.

Information and Monitoring

- ➔ Monalisa, GridCAT, Clarens discovery, MDS, ganglia... all being deployed in parallel.

Security

- ➔ Contributing to CSWG; much work from Tier-I facilities.

Job Scheduling Scalability -

- ➔ still need to address headnode bottleneck



US CMS dependencies



Distributed Computing Tools will first rely on grid services present in OSG deployment.

Managed multi-VO use of storage resources needs actual use cases from non-CMS VOs to understand how they can actually provide benefit on/to OSG.

Interoperability with LCG across the Tier-2s (Tier-1 was done last year) resulting in deployment of LCG information providers and and work on how to configure VNs.



Deploying OSG



Evolve current Grid3 - many new capabilities needed to support production and analysis.

Integrate and Support new and enhanced Services developed over past year(s):

- ➔ Enable use of Grid accessible managed storage to store data for later archiving or use. US CMS Tier-I SE accessible to OSG.
- ➔ User -Organization Management - most services now included in VDT. This process results in configuration and deployment changes to improve the integration, maintenance and consistency with rest of VDT, the EGEE and LCG.
 - VOMS, GUMS, PRIMA, Registration through VOMRS being proposed for OSG support.
- ➔ New versions of GridFTP, monitoring and information services.

Only a small step in the capabilities - many more needed...

Lots of detailed work for integration and documentation - ramp up of FermiGrid involvement a big help.

Operations and more distributed support model than Grid3 being prototyped as we go.

- ➔ Registrations, Agreements, Policies etc.



US CMS accepted the ITB release 0.1.5 for OSG Provisioning and Deployment.

- ➔ In May ,Tier-2s will move from Grid3 to OSG.
- ➔ In June,Tier-I will move to OSG.

Can FermiGrid support the US CMS Production VOMS service in time for Tier-2 migration ?

Read all about it at <http://osg.ivdgl.org/twiki/bin/view/Provisioning/WebHome>



First OSG Council face to face meeting next Tuesday

US LHC OSG Baseline Services meeting next week;

- ~24 people attending including Condor and Globus.
- Work to continue and plan for common roadmap with US ATLAS.
- 2 LCG deployment people
- 1 or 2 CMS Baseline Services people will attend.

“joint” Operations workshop with EGEE and LCG in Bologna in May.

Applications meeting SLAC June 1,2

OSG Consortium workshop - July Milwaukee



FermiGrid Intra-Grid work



D0 SAMGrid jobs running on US CMS Tier-I Grid site. Remaining Condor problem being looked at at Wisconsin.

Work started to enable use by CDF jobs and understand interface issues.

FermiGrid will provide support for Production GUMS/VOMS services for US CMS.