

Project Operations & Open Science Grid

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ALICE-USA Computing Resource Meeting

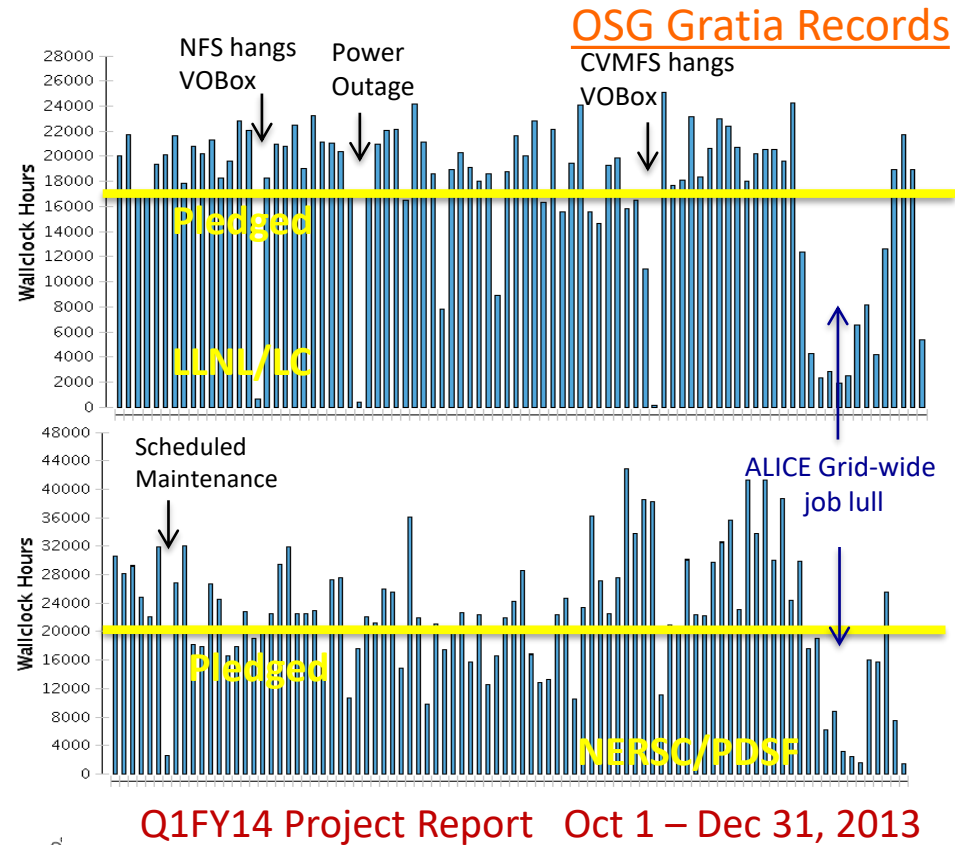
March 15, 2016

ALICE-USA & The Open Science Grid



- **ALICE-USA computing project leverages OSG capabilities**

- OSG Registration Authority
 - ALICE-USA user certificates
 - Deprecated in favor of CERN CA
 - Host & service certificates
- Reports to WLCG
 - Accounting Reports
 - Gratia site service to OSG rep.
 - Central OSG service to WLCG
 - **Not currently operational**
 - ~~Availability and Reliability~~
 - ~~critical services scans~~
 - **Discontinued as of 01/2014**



- **Discuss re-engagement at this meeting**

OSG – a one stop shop



MyOSG One-Stop location for various OSG information

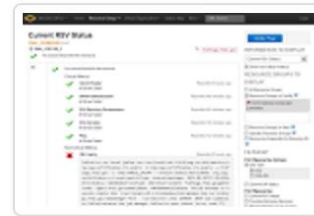
Resource Group Summary



RSV Status History



Current RSV Status



BDII Information Browser



Status Map



Gratia Accounting



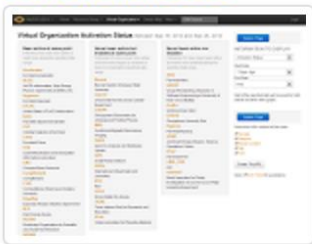
GIP Validation Results



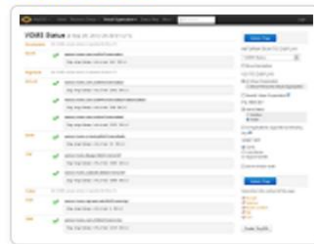
Availability History



VO Activation Status



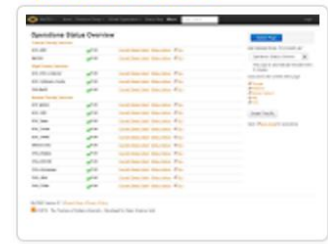
VOMS Status



Resource Service Counts



Operations Status



- **OSG Origins as WLCG Peer**
 - Original stakeholders:
 - US-ATLAS & US-CMS
 - Others added
 - LIGO, STAR
- **R&D: distributed infrastructure for science communities**
 - NERSC was founding facility
 - XSEDE partner for HTC

WLCG Interoperability Information (If Applicable)

This is a WLCG resource

Enable Interop BDII

Forward this resource's BDII data to WLCG BDII server (lcg-bdii.cern.ch)

Enable Interop Monitoring

Forward this resource's RSV data to WLCG Monitoring system ([SAM/GridView](#))

Enable Interop Accounting - Forward Gratia Accounting Data to WLCG Accounting

Include this resource in **Capacity and Benchmarking Report** sent to [\[osg-wlcg-reports@OPENSOURCEGRID.ORG\]](mailto:[osg-wlcg-reports@OPENSOURCEGRID.ORG]), only if your site is MOU agreed Tier 1/2 sites.

WLCG Accounting Name

US-LBNL-ALICE

* Required

KSI2K Minimum

3225.0

* Required

KSI2K Maximum

3225.0

* Required

HEPSPEC Value

12900.0

* Required

APEL Normalization Factor

16.614

* Required

Storage Capacity Minimum (in TeraBytes)

740.0

* Required

- **DOE (& NSF) fund OSG**
 - Initially ASCR (Computing Science)
 - HEP and small amount of NP (Nuclear Physics Office)
- **STAR leverages OSG for production on PDSF**
 - Will map use onto Cori for production
- **OSG Funding Plan may include NP component**
 - PDSF/NERSC is clear recipient

OSG CE Infrastructure

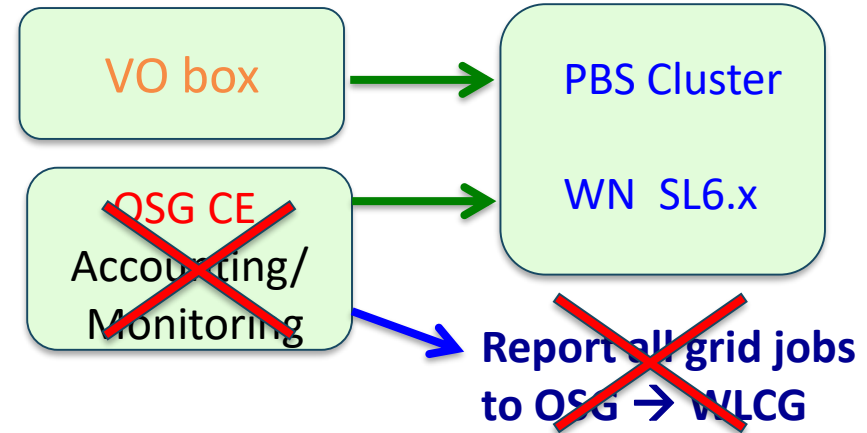
- **Originally Globus Based**
 - Currently GT6.x
 - LRMS support: Condor, PBS, UGE, SLURM, LSF
 - Not officially deprecated, but even Globus is not interested
- **HTCondor-CE**
 - Initial released in 2014
 - BLAH adaptor (used by CREAM?) for PBS, UGE, ...
- **Installation**
 - Requires host certificates
 - rpm yum-based installation
 - Configure resource info locally (not LDAP like AliEn)

➤ <https://twiki.grid.iu.edu/bin/view/Documentation/Release3/InstallHTCondorCE>

US Site Configurations

ORNL CADES

- Vobox submits to PBS
- No OSG-CE interface
- No OSG Accounting



LBNL NERSC PDSF

- Vobox submits to CondorG
- CondorG submits to OSG-CE
- OSG-CE submits to UGE
- OSG Accounting
 - Monitors batch logs

