Open Science Grid

OSG Production Support

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OSG Area Coordinators Call
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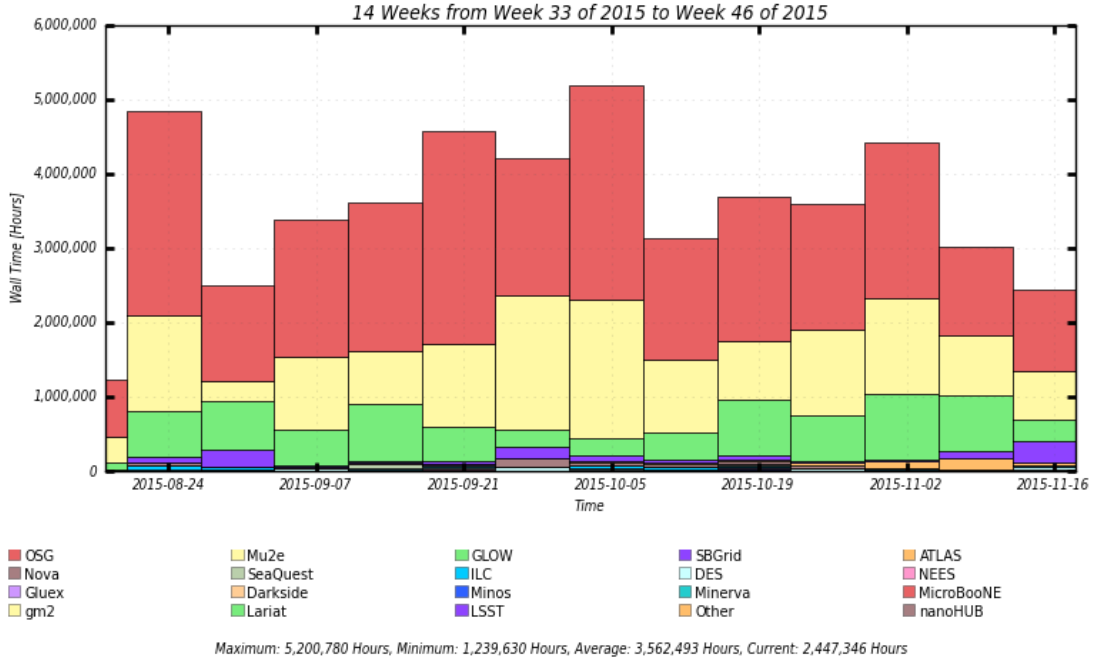
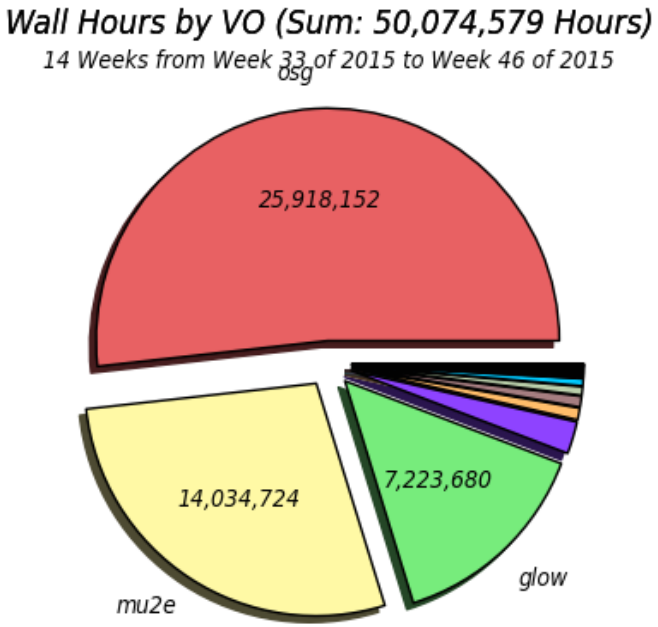
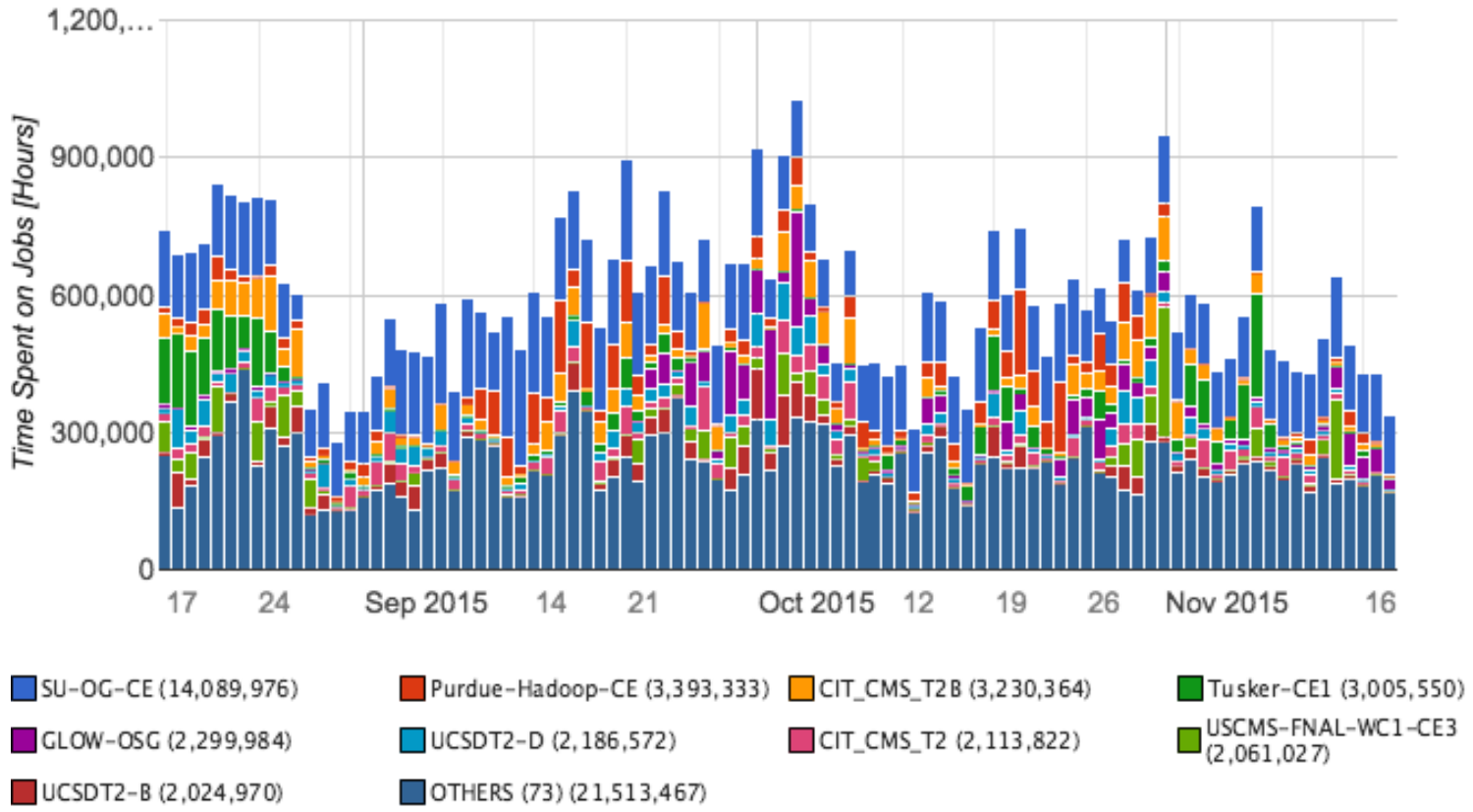
Opportunistic resources (revisited)

- Is the OSG opportunistic pool demand-limited?
  - ~~Not in the past ~3 months~~ yes, in the past month
- Still, ~51M hours in the past 3 months
- Scaling test will have to wait until more real resources are available
- OSG VO now has two flocks (LIGO is the second)
  - What can we learn?





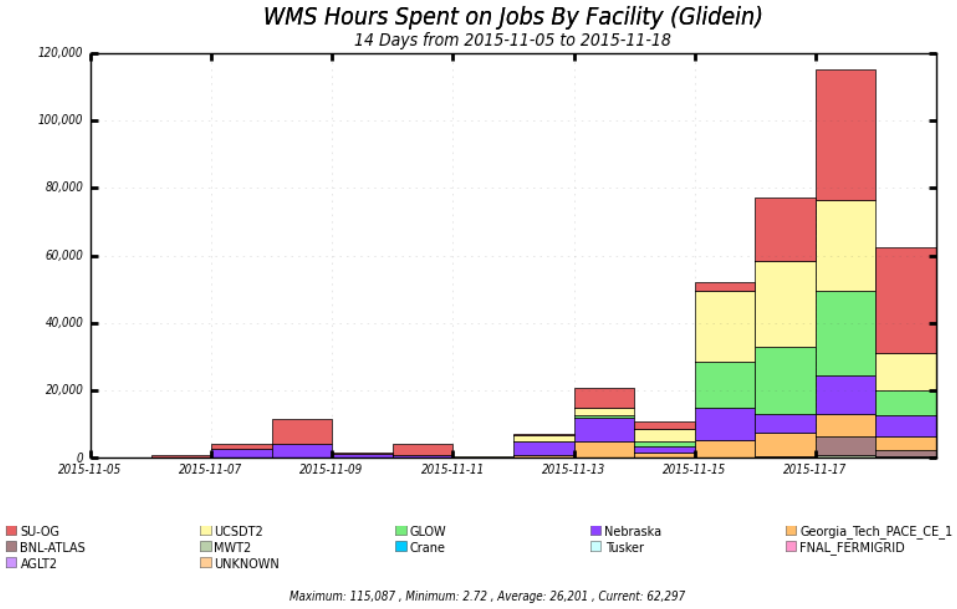
Opportunistic Sites

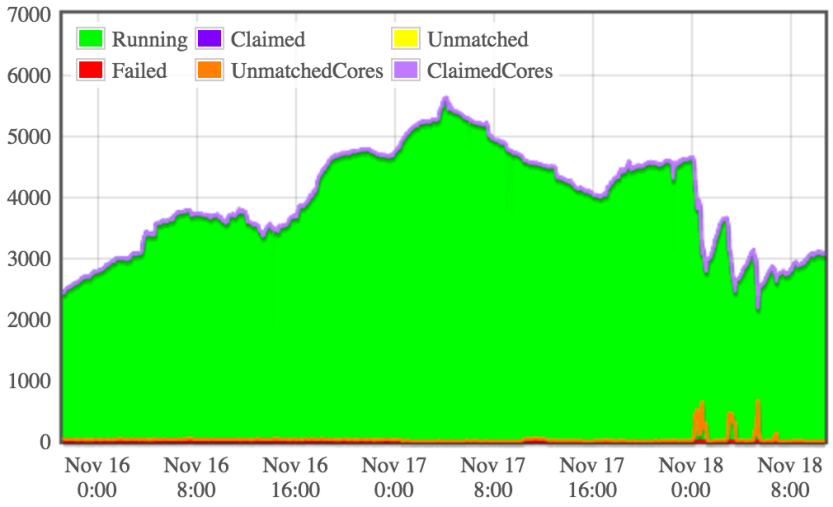


- Showing top 10 averaged over last 3 months— Syracuse continues to dominate

LIGO

- Efforts from technology and software have brought LIGO computing to OSG
- Flocking handled via frontend at UCSD
- Dedicated resources at Georgia Tech and at Syracuse
- List of opportunistic sites growing
  - Usage already at over 5000 slots simultaneously





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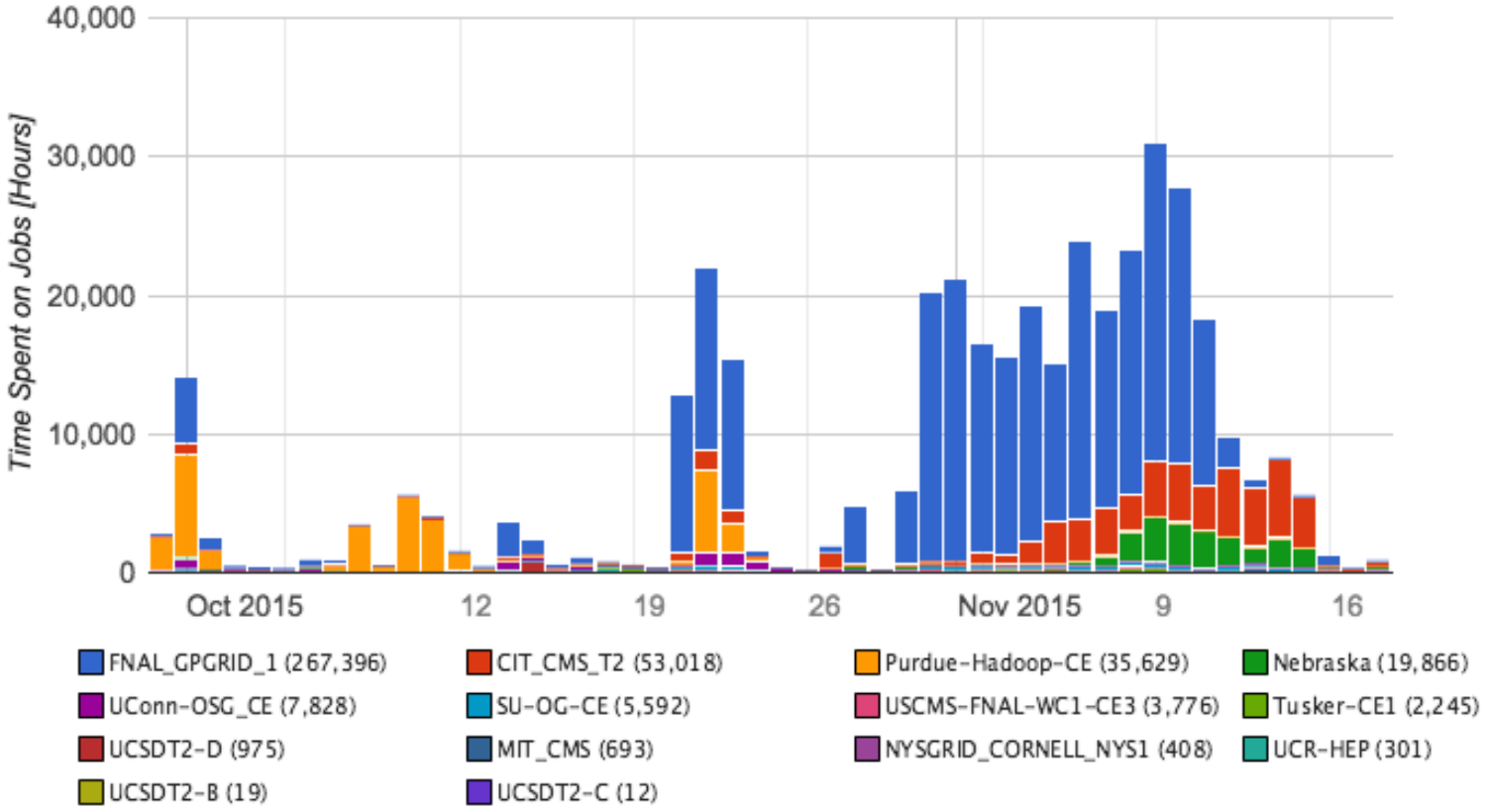
SDSC Comet

- Comet is the newest HPC installation at SDSC
  - Intel Haswell, 47.7k cores, all-SSD storage
- UCSD team has interfaced Comet to UCSDT2 for opportunistic OSG computing
  - Accomplished via a dedicated Condor job router off of UCSDT2 CEs that launches VMs on Comet as needed
  - Currently only OSG VO (including LIGO) and only on one rack (~1k cores)
- Future plans still include OSG interface for users with an XSEDE allocation on Comet
  - Easier with a dedicated CE?
- Accounting questions
  - Currently hours are counted towards UCSD
  - Preference is to be able to account for these hours separately

ATLAS Opportunistic



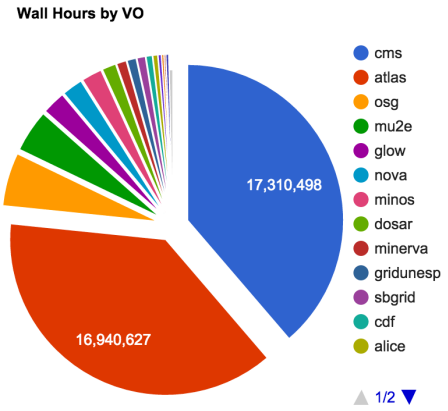
- Testing for CMS on 5 non-CMS sites done and being implemented on frontend/factory now

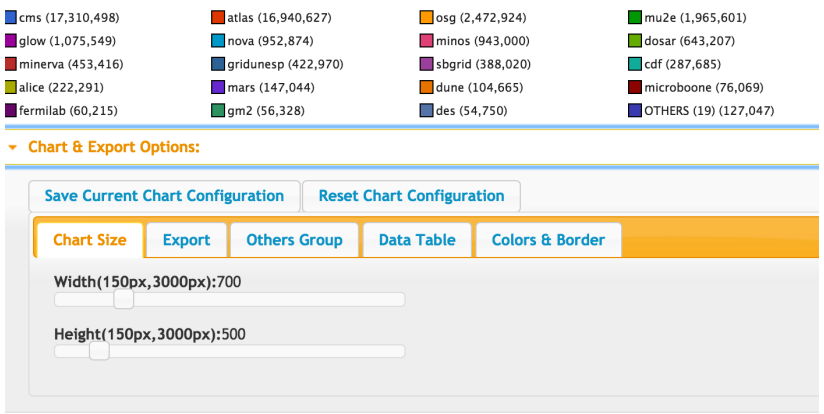
Site integration

- FIU currently in production with only one node (36 cores) due to security exemptions
  - Meeting scheduled for 12/2 with FIU network admins to discuss how to open up
- JINR setup for NOvA use but faces proxy expiration issue (specific to Cream CE?)
  - Will extend lifetime of FNAL proxies to get around this
- University of Bern will offer resources to MicroBooNE
  - Existing site for ATLAS, running ARC CE
  - Setting up site as an OSG site for use by microboone
  - Added into OIM and should be ready for testing in ~1 week
- Harvard setup/upgrade resumed after break due to personnel

Gratiaweb updates

- A version of gratiaweb with google charts was circulated a couple weeks back via the ITB instance
  - Feedback is still welcome
  - In particular: should these be pushed to production and, if so, should old versions of these plots be retained?
- Due to urgent security patch, ITB version no longer has this update
  - There is a version at http://fermicloud035.fnal.gov:8100/gratia/xml
  - Currently only accessible at FNAL but should be open soon





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Multicore

- OSG VO multicore jobs now going to a variety of sites
  - ~1k slots on MWT2 is the largest such site
- With some tweaking Fermilab jobs are also being tested at these sites
  - Should allow for experiments such as DES to access more memory in their jobs
- Currently working with Mats Rynge to understand how to quantify the available multicore resources
  - Not easy since partitionable slots lead to a very mutable landscape

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Support Centers

- The notion of support centers has come up multiple times recently
- LIGO: What should their support center be?
  - There is an existing support center for LIGO that is defunct
  - My proposal is to define a new support center for the current incarnation of LIGO (“Advanced LIGO”?)
- Non-US sites: what should their support centers be?
  - Currently defining new “support centers” that consist of the site admin
- General definition of support center: does this need to be clarified?
  - There are 78 support centers currently listed in OIM

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Other items

- Next NOvA campaign pushed back to early 2016
  - Concern about efficiency when using OSG sites
  - Some data-movement limitations should be addressed with StashCache
- A number of other Fermilab experiments (e.g. microboone) have workflows looking for >2GB/core
  - Partionable slots should help but are we wasting CPU that way?
- ATLAS and CMS running opportunistic computing at scale?
  - There is still a *very* limited set of workflows they can run this way