OSG Production Support

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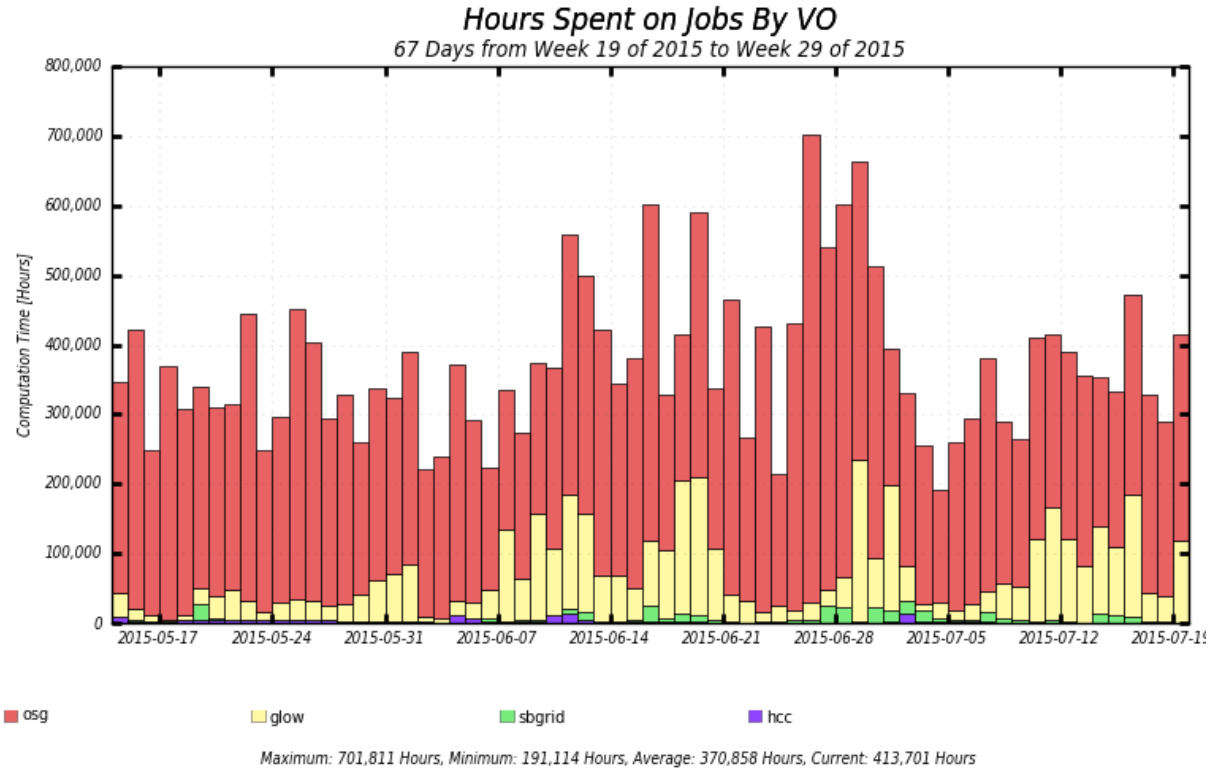
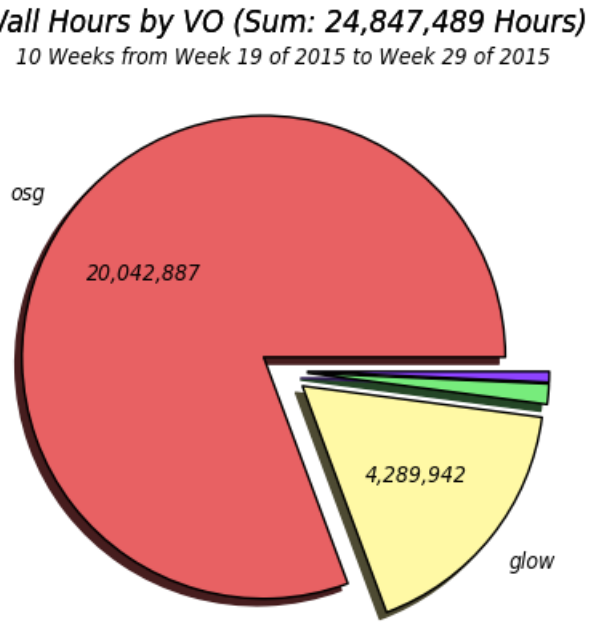
OSG Area Coordinators Call
July 22, 2015

Opportunistic VOs





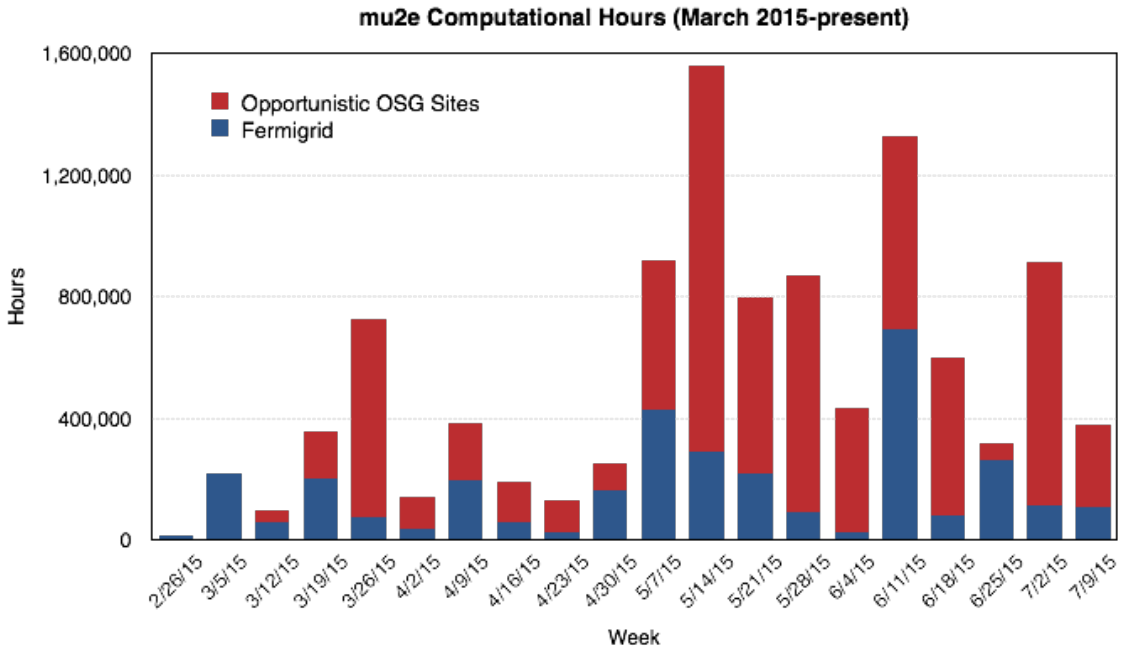
- Past two months (since last AC presentation)
- 24.8M wall hours— **13%** of all OSG hours
  - Including mu2e 33M wall hours or 18% of all OSG hours

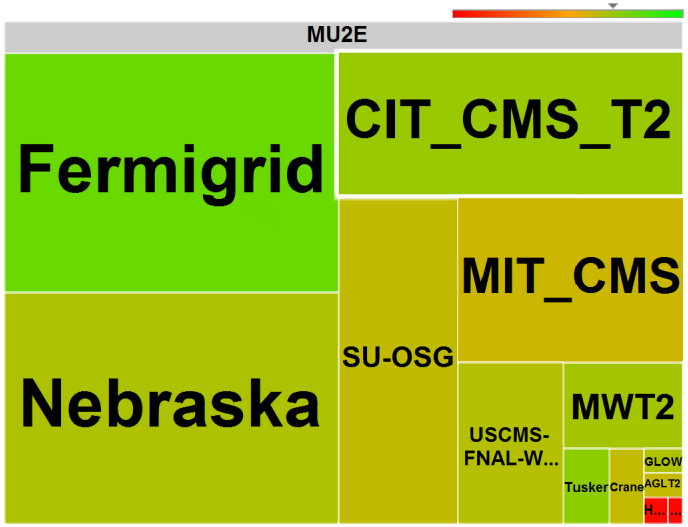
10 Largest Sites in June

Site	Total	Percent Opp.	Opportunistic VOs glow	hcc	osg	sbgrid	*Total Opp*	mu2e	*Total incl. mu2e*
Total	*80,769,382*	*15%*	*2,287,622*	*78,945*	*9,808,831*	*172,364*	*12,347,762*	*4,309,418*	***16,657,180****
CIT_CMS_T2	3,875,494	46%	620,972	25,600	1,080,516	47,464	1,774,552	585,589	***2,360,141***
SU-OG	2,198,529	75%	381,833	5,243	1,246,831	12,997	1,646,904	550,118	***2,197,022***
UCSDT2	3,125,474	50%	90,949	6,585	1,460,815	8,852	1,567,201	190	***1,567,391***
MIT_CMS	2,955,412	40%		12,199	1,104,941	54,498	1,171,638	688,190	***1,859,828***
Nebraska	2,808,841	27%	408,595	4,143	339,532		752,270	714,942	***1,467,212***
Purdue-Hadoop	1,629,140	45%	227,879	1,544	492,177	8,457	730,057		***730,057***
Tusker	1,338,737	46%		1,255	612,649		613,904	433,817	***1,047,721***
UFlorida-HPC	3,227,439	17%			556,068		556,068		***556,068***
USCMS-FNAL-WC1	7,602,890	7%	36,174	2,959	495,797	4,239	539,169	197,880	***737,049***
SMU_HPC	412,593	99%			407,114		407,114		***407,114***

** Includes 1M hours on Fermigrid*

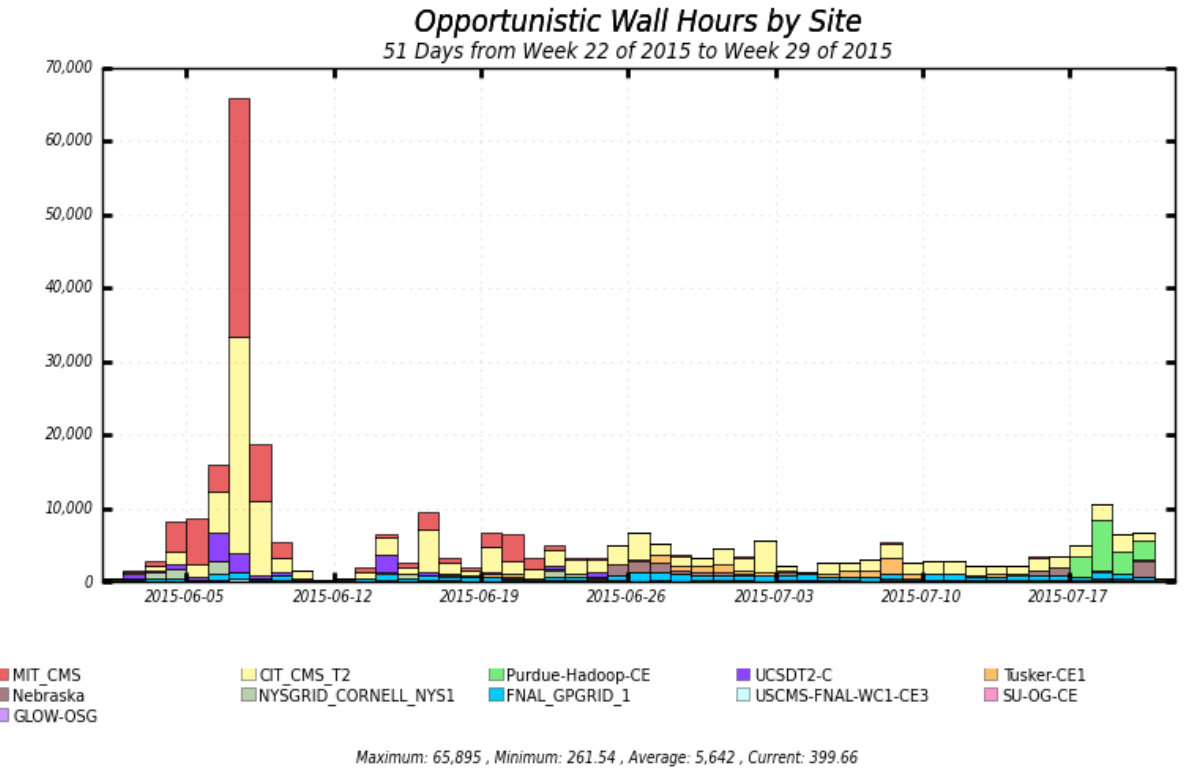
mu2e

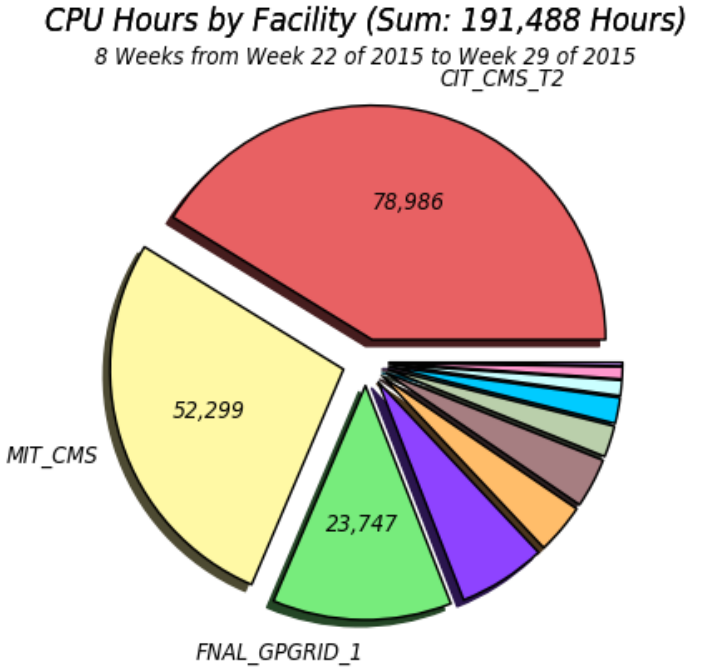




- Completed initial campaign
  - *"We exceeded our baseline goals, met the stretch goals and will continue to maintain schedule."* R. Culbertson (FNAL/mu2e)
- 14.5M wall hours since March, 11.2M hours opportunistic
- See writeup by H. Chang on OSG blog/Fermilab Today (7/15)

ATLAS opportunistic





- J. Caballero (BNL) working with A. Zaytsev getting ATLAS jobs running at non-ATLAS sites
- Now up to 11 sites
  - Many cases “just works” once CVMFS repo mounted

Ongoing operations

- Site integration/upgrades
  - **FIU** awaiting firewall update (expected by August) to resume setting up
  - **Harvard** migrating from GRAM->HTCondorCE
    - Currently limited to a small number of cores until then
  - **SMU** setting up new CE primarily for NOvA
    - Part of the “Maneframe" HPC installation at SMU
    - Testing underway
  - **Georgia Tech** (LIGO) succesful setup of CE and frontend
    - Awaiting LIGO-specific actions (data delivery) for full testing
- In several cases (FIU, Harvard) firewall rules require knowing what restricted set of addresses need access
  - Can we maintain a central list of these?

Ongoing Initiatives

- OSG-HPC-CE
  - Plan to implement this in front of SDSC Comet with minimal development (plugin to track allocation)
  - Should be able to begin this development in August
- Multicore/GPU
  - Attempt to quantify available opportunistic multicore slots (and track running?)
  - Further GPU testing for SBGrid with new frontend
- CMS Opportunistic
  - Setup for running opportunistically on non-CMS sites
  - Allow for CMS heavy ion jobs to run “opportunistically” on CMS particle physics sites (Tier1/all Tier2s except Vanderbilt)
- Gratiaweb: see Juan’s talk next

Open Science Grid

NOvA Plans

- NOvA experiment recently completed a production run
  - ~15M hours over the past 6 months
  - Most computing was done at FNAL (GPGrid)
  - Dedicated resources also available at FZU, SMU, and OSC

- Next campaign will be up to 2-3x as large
  - Data movement severe limiting factor for FZU
    - Installation and setup of a SE underway
  - Upgraded CE at Harvard will allow resumption of NOvA jobs there
  - Understand what needs to be done to enable wider use of opportunistic OSG resources (as with mu2e)

Backup