Open Science Grid

Production Support Report

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Opportunistic jobs: past 90 days

Hours Spent on Jobs By VO

Maximum: 7,749,068.93, Minimum: 1,156,802.03, Average: 5,356,389.05, Current: 4,759,824.20
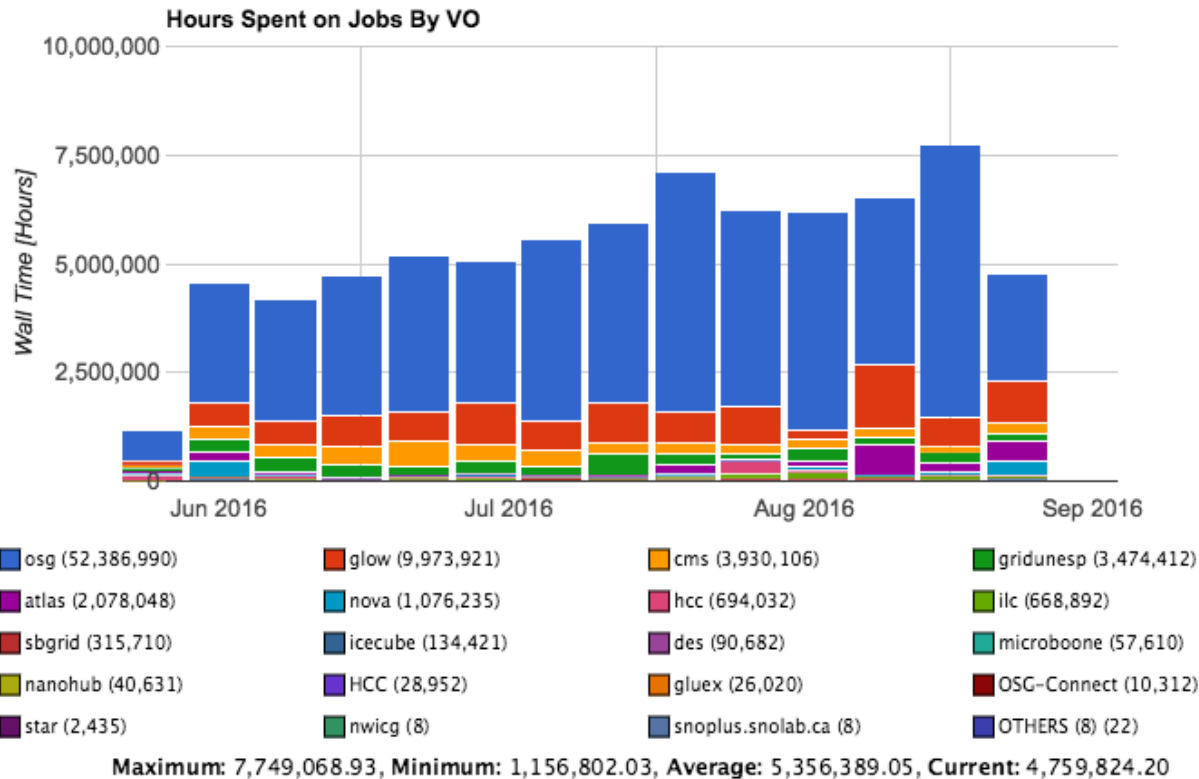
- Nearly 75M past 90 days (58M hours from 4/26 – 7/26)
- Total does not include all Fermilab VO jobs (accounting issue). Fermilab experiments totaled about 3.1M hours in this period outside of FNAL GPGrid (nearly all from NOvA or Mu2e)
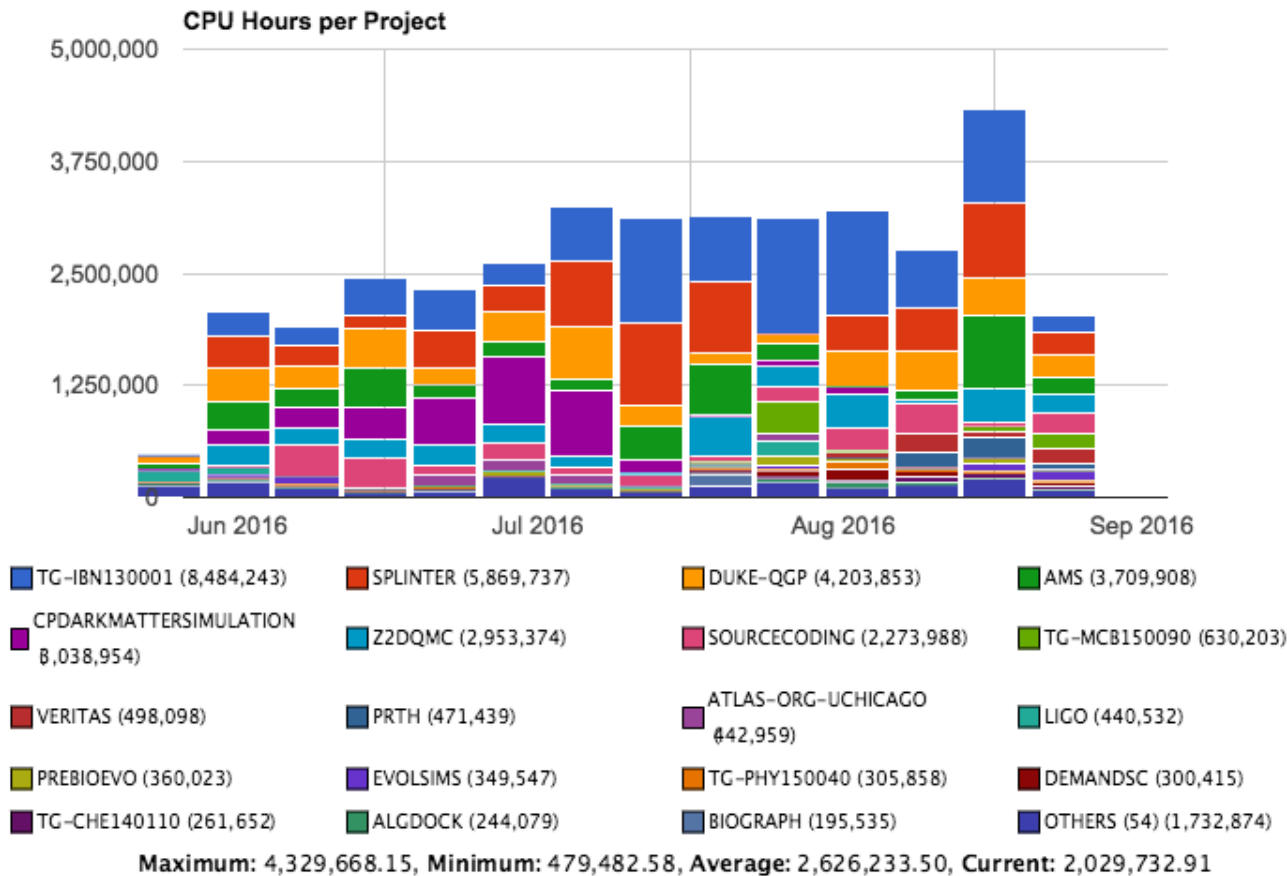
Similar, but from GRACC...
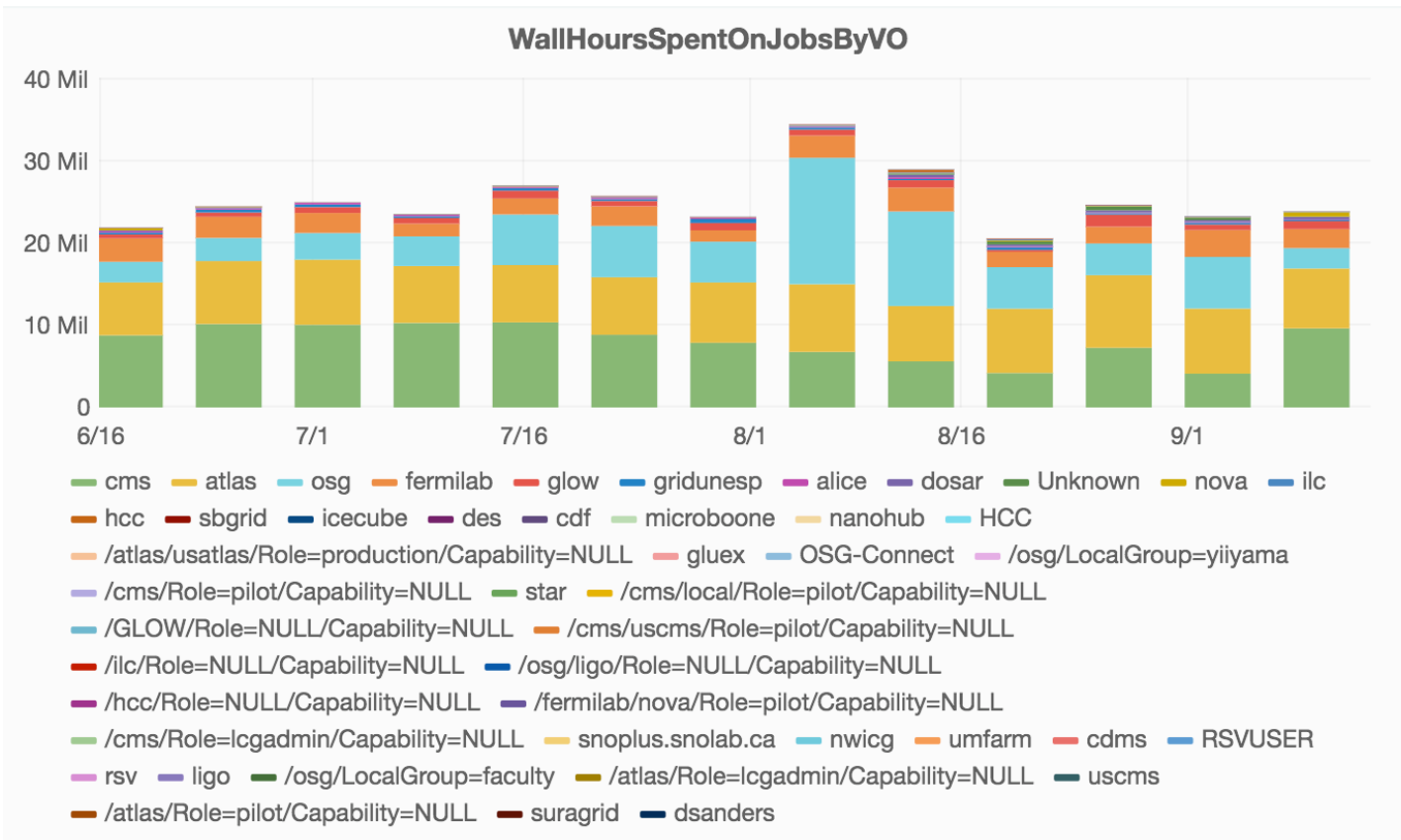
This is not opportunistic only though

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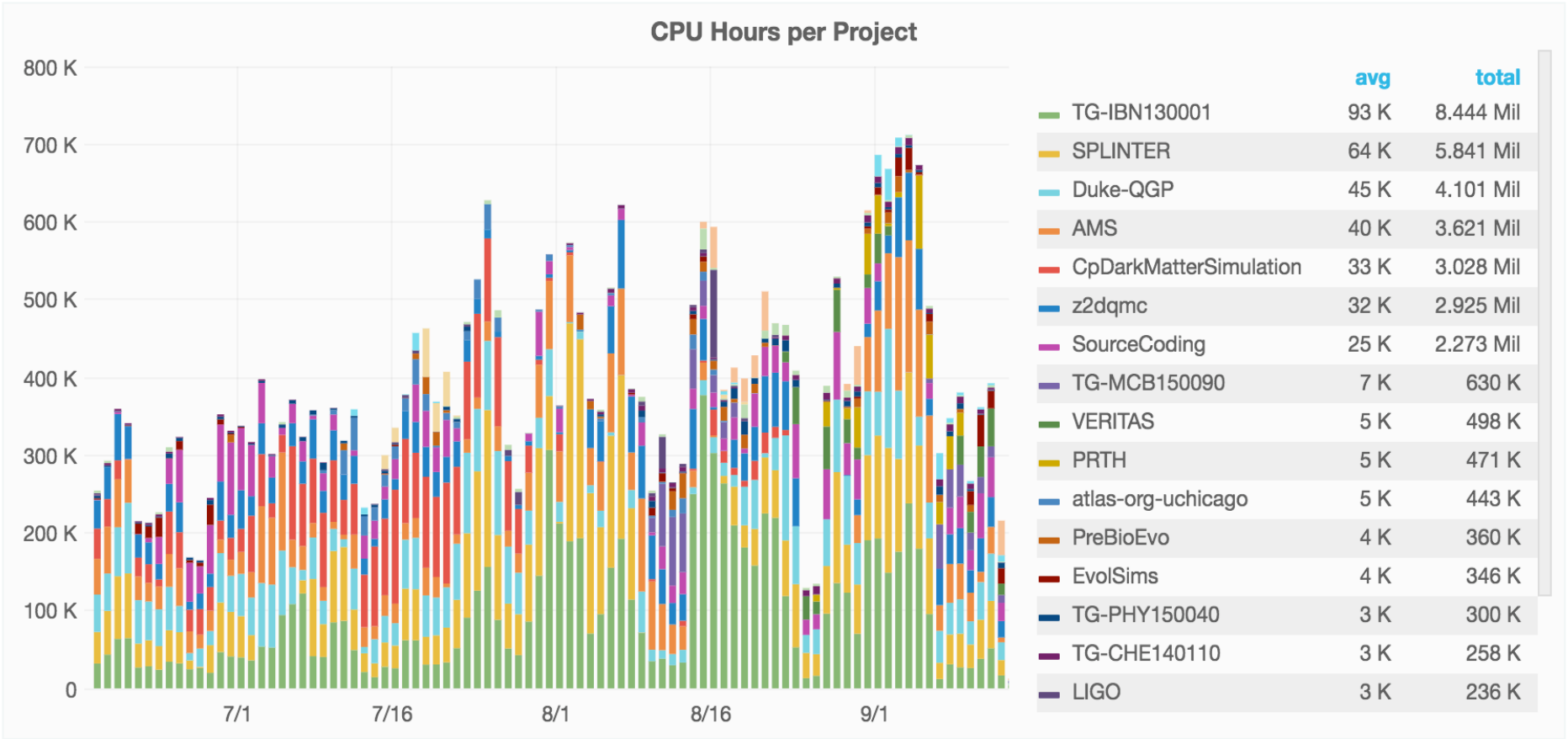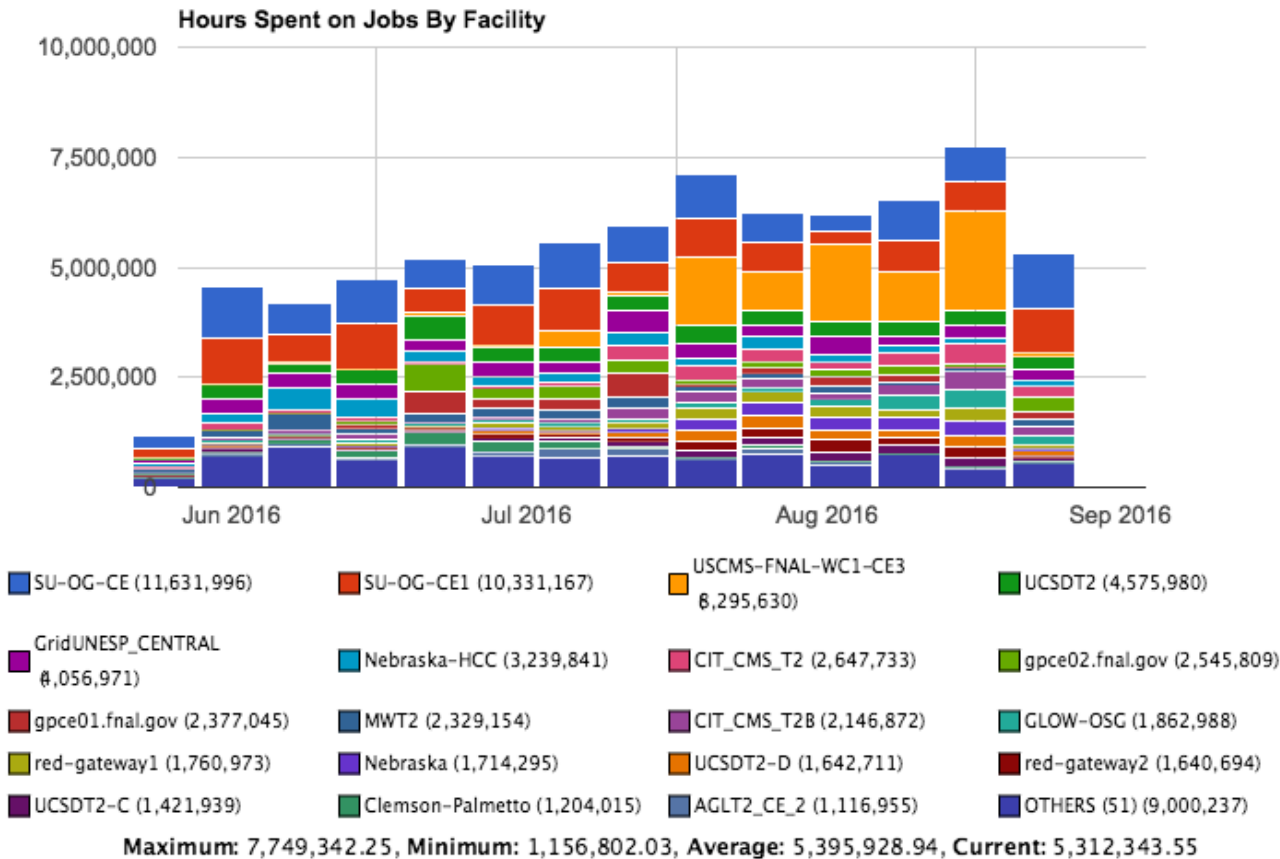
OSG VO at the project level

OSG VO at the project level

CPU Hours per Project

	avg	total
TG-IBN130001	93 K	8.444 Mil
SPLINTER	64 K	5.841 Mil
Duke-QGP	45 K	4.101 Mil
AMS	40 K	3.621 Mil
CpDarkMatterSimulation	33 K	3.028 Mil
z2dqmc	32 K	2.925 Mil
SourceCoding	25 K	2.273 Mil
TG-MCB150090	7 K	630 K
VERITAS	5 K	498 K
PRTH	5 K	471 K
atlas-org-uchicago	5 K	443 K
PreBioEvo	4 K	360 K
EvolSims	4 K	346 K
TG-PHY150040	3 K	300 K
TG-CHE140110	3 K	258 K
LIGO	3 K	236 K

Top opportunistic sites

Hours Spent on Jobs By Facility

Legend:
- SU-OG-CE (11,631,996)
- SU-OG-CE1 (10,331,167)
- USCMS-FNAL-WC1-CE3 (8,295,630)
- UCSDT2 (4,575,980)
- GridUNESP_CENTRAL (4,056,971)
- Nebraska-HCC (3,239,841)
- CIT_CMS_T2 (2,647,733)
- gpce02.fnal.gov (2,545,809)
- gpce01.fnal.gov (2,377,045)
- MWT2 (2,329,154)
- CIT_CMS_T2B (2,146,872)
- GLOW-OSG (1,862,988)
- red-gateway1 (1,760,973)
- Nebraska (1,714,295)
- UCSDT2-D (1,642,711)
- red-gateway2 (1,640,694)
- UCSDT2-C (1,421,939)
- Clemson-Palmetto (1,204,015)
- AGLT2_CE_2 (1,116,955)
- OTHERS (51) (9,000,237)

Maximum: 7,749,342.25, Minimum: 1,156,802.03, Average: 5,395,928.94, Current: 5,312,343.55

- Larger contribution from FNAL GPGrid in Jul/Aug (low pressure from FIFE)

- Syracuse still very strong

Recent progress with new sites

- Stanford
  - Pilots working, jobs going through (some plot of hours)
  - Working to get multicore pilots set up now
- CENF (Neutrino Platform at CERN)
  - Basic HTCondor installation set up
  - Intended for (proto)DUNE
  - Now installing HTCondor-CE
- JINR
  - Two existing CREAM CEs; using them for WLCG jobs
  - Now setting up third (HTCondor) CE per OSG instructions
    - Will initially be limited to NOvA and STAR

HPC

- MINOS and CMS still attempting to run at Stampede
  - MINOS still seeing authentication issues (project # or misconfigured allocation?)
  - Authentication issue for CMS seems to be fixed, on to new (rare) globus error
- Opportunistic running on Comet continues
  - still not yet with allocations
- Hopeful to get Stanford GPU cluster up and running in the semi-near future (get rest of site working first)

GPUs

- Tusker (HCC) has nodes with GPUs on OSG
  - accessible via dedicated factory entry
- Currently in use by IceCube (GLOW) and OSG VOs
- Would like to make this an option for all VOs that want to use GPUs opportunistically
  - Using OSG VO configuration as template
  - Enabled Fermilab VO in factory
    - Still need a frontend change at FNAL; will assist personally this week
- We should also express openness to sites that are willing to share GPUs
  - e.g., new BNL institutional cluster (non-ATLAS) with ~200 GPUs, Stanford

FIFE Updates

- NOvA's now running again at OSC:
  https://ticket.opensciencegrid.org/30192

- NOvA testing StashCache over CVMFS (requires CVMFS 2.2)

  – Focusing on FZU (Prague) in the short term

  – Several sites have upgraded their installations since last time. Should be able to run a more meaningful test soon.

- (not technically FIFE but uses a lot of the tools) DES StashCache instance now deployed
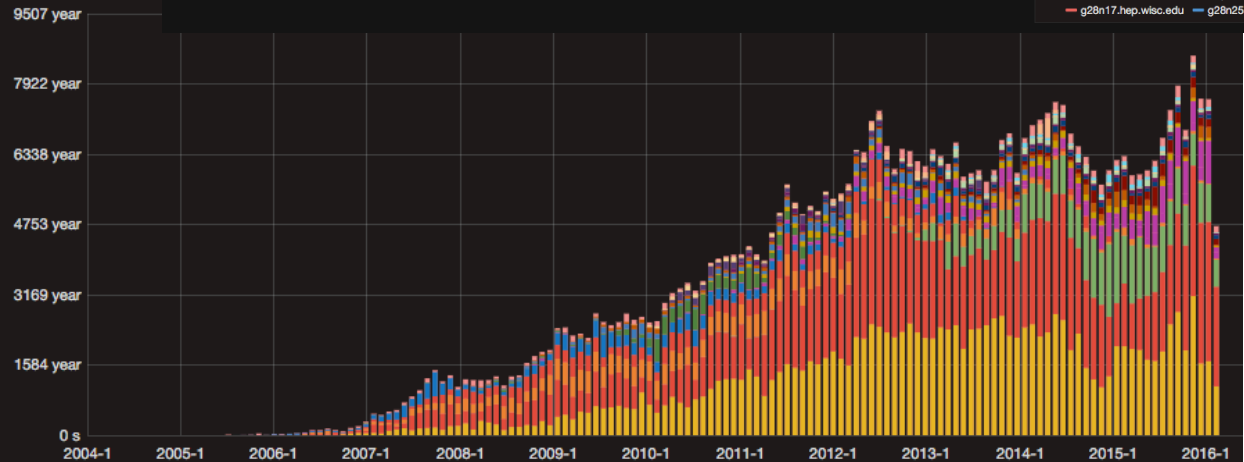
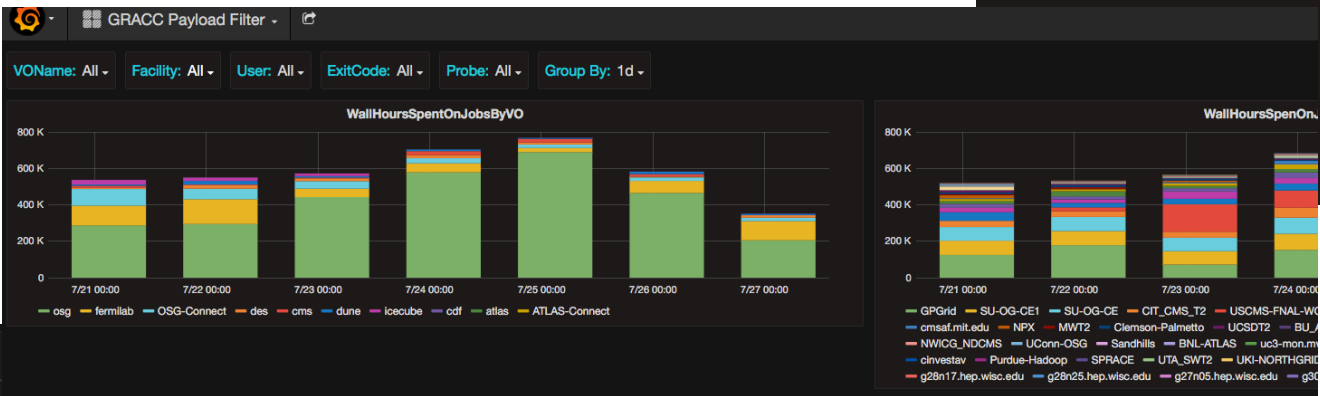 – Probably won't be widely adopted until FNAL is on CVMFS 2.2 (working on that!)

Monitoring/GRACC

- Good progress on GRACC
- Check out gracc.opensciencegrid.org
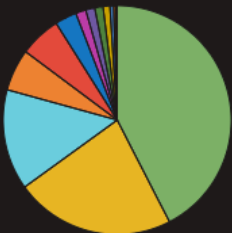
Plans

- Continue efforts on new sites (LSJU, JINR, CENF, already mentioned)

- Need to also follow up on Utah (BOSCO proxy issue) and Colorado; Rutgers may also come into play later

- Continue to push HPC (e.g. Stampede) and GPU (Nebraska can be a good template)

- Fix that Fermilab Opportunistic accounting issue...