



# Technology Investigations Update

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November 4, 2015

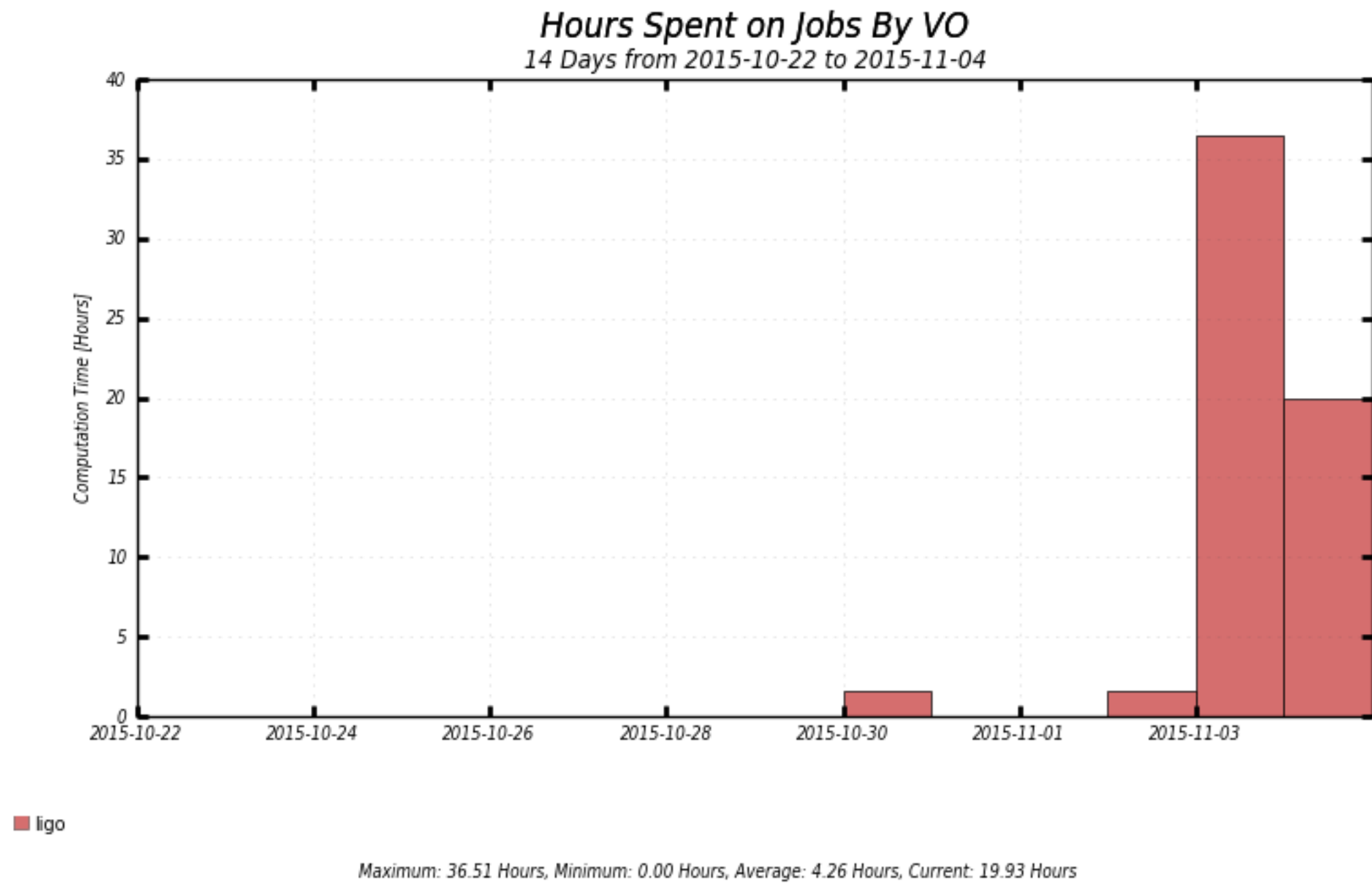
# Goals from Last Time

- 40 services in the OSG Collector. **DONE:** 53 services present.
- NoVA uses StashCache for end-2015 production run. NOT DONE: too many overlapping vacation.
  - Last (old) update was that ifdh-based tests were ongoing with FIFE.
- (Carry-over) Have a plan and prototype of the OSG-CE-BOSCO.
  - Drop? Seems to not be much demand for this...

# LIGO

- Based on a request from LIGO, we've been working on a next phase: getting an application running at Syracuse Cluster A ("Spice") running on Syracuse Cluster B ("SU-OG")
  - A bit easier than the GT work: SU-OG is already working and the application is more portable.
- The first phase is to scale up SU-OG to multiple thousands of running jobs. Currently very small scale - unwrapping layers of Pegasus hacks.
  - Second phase is to repeat the success elsewhere. Toward that end, they've already moved ~1TB to Nebraska overnight.
- Appears there is the possibility of a long healthy collaboration.

# LIGO



(Gratia reporting hours, but not 100% configured correctly)

# HTCondor-CE (and friends)

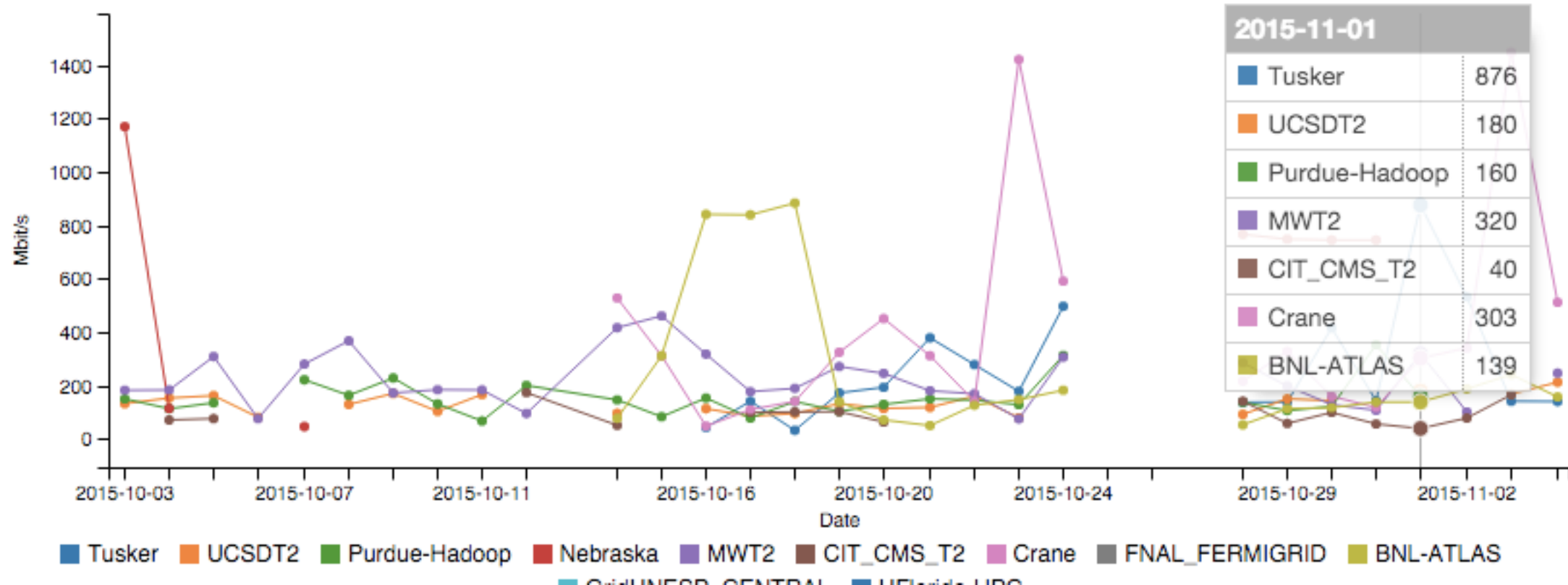
- CERN has decommissioned their ARC-CEs and declared their HTCondor-CEs production.
  - Increased the size of their HTCondor cluster by another 500 cores.
  - Based on reports from HEPiX, additional sites may be interested. We may need to ponder the support model.
- In parallel, continuing to collaborate at the WLCG level. S/N level has decreased recently.
  - Working with ATLAS directly on supporting HTCondor-CE collector within AGIS.

# StashCache

- Basic functionality is in place, but a bit of housekeeping remains post-paternity-leave.
  - Noticed RSV tests have been failing for a bit.
  - Misconfigurations exist on the redirector.
- Talking with LIGO about their needs on the 6-9 month timescale.
  - CVMFS-over-StashCache should be released around that timeframe; necessary functionality should come in the CVMFS 2.2.0 release.

# StashCache Tester

- In addition to the functionality test (does it respond?), we're trying to gather historical performance data
- Results are posted to <http://stashcache.github.io/>
- Sample graph below.



# OASIS

- Server-side changes in place to replicate any arbitrary repository.
  - Lifts last restrictions on which repositories we can replicate for OSG VOs.
  - We probably should schedule another security firedrill.
- Client side changes (cvmfs-config-osg-1.1-8) are scheduled for the November release.
  - With this, any repository replicated by OSG should “just work”.
- Contributing Stratum-1 monitoring upstream.
- With the November release, “Stakeholder request queue” is empty.
  - After Stratum-1 monitoring improvements are deployed, “internal improvements” queue is down to reworking install/configuration of service. The latter is on hold pending new GOC hires.
  - Hope is to keep this on bugfix-only until next stakeholder request appears.



# Other

- Security collaborations:
  - No progress on traceability work. Queued on security side behind work on federated IDs.
  - CRLs via CVMFS. Will be discussed at Blueprint in early December. Goal is simply to find a path that doesn't change OASIS SLA.

# Yearly Goals Checkup

- Reasonable progress on “improve Stratum-1 monitoring” and “automate CVMFS client configuration”.
- CVMFS-over-StashCache is making excellent progress. StashCache-to-production will likely be late.
- Items stalled / in trouble:
  - HTCondor-CE-BOSCO, HTCondor-CE-HPC. What’s the priority?
  - OSG User Support HTCondor Scalability (haven’t heard updates lately?)
- Items added:
  - LIGO. Where can this live “long term”?
  - HTCondor-CE / AGIS support.
  - Participate in WLCG IS task force. Goal is to help remove the BDII dependency.