



Shared Tier3 Outlook

Ayana Arce, Kevin Black, Doug Benjamin

Overview

- ❖ University-based Tier3's are reaching end of life and won't be refreshed through DOE/NSF research program.
 - analyzers rely on an interactive platform with generous home/scratch and batch resources
- ❖ US ATLAS is preparing by commissioning "Shared Tier3:"
 - BNL Shared Tier3 pilot - determine user needs and use patterns
 - SLAC Shared Tier3 - take advantage of WT2 hardware
 - NSF Shared Tier3 proposal - planned for sometime FY17

Requirements

(Tier3 task force and user feedback)

- ❖ Eventually: ~300 analyzers (faculty/staff count ½)
- ❖ interactive login access
 - graphical desktop capability?
- ❖ standard ATLAS and grid software interfaces
- ❖ generous batch resource
- ❖ local storage (accessible from batch and interactive)
- ❖ simple account provisioning (including non-ATLAS)
- ❖ backfill by production jobs

Lessons learned at BNL

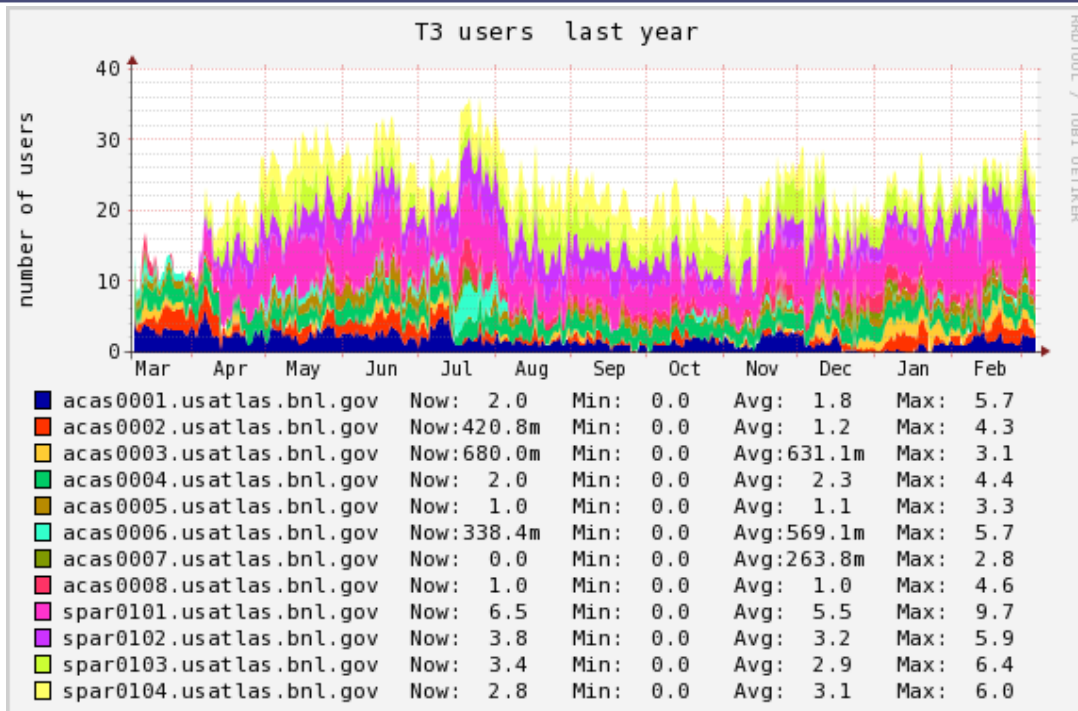
user workflows:

- ❖ mostly physics analysis, simulation, performance work
 - batch is heavily used
 - not a development platform
- ❖ interactive desktop (NX): not frequently used

user satisfaction:

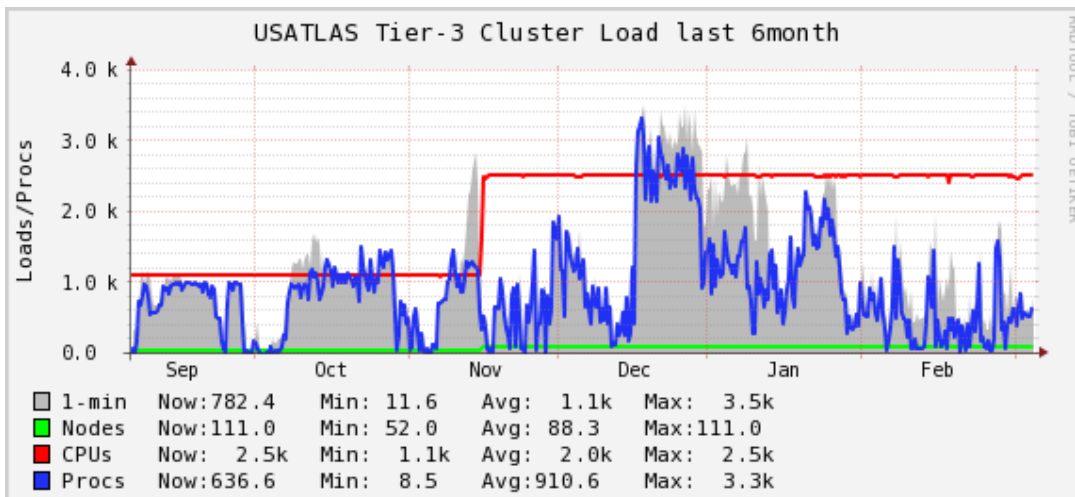
- ❖ account provisioning (steps) was satisfactory
- ❖ effective local T3 replacement
 - half would get a SLAC account too
- ❖ good documentation
- ❖ many ticket items related to dCache, data access

Lessons learned at BNL



❖ 30 users typical on weekdays

❖ Tier3-like cluster usage



Lessons learned at BNL

- ❖ Some “analysis support” takes place on mailing list!
- ❖ DCache and user error responsible for most batch failures
- ❖ Users liked (and demanded) convenient access to data placed by DDM/grid jobs
- ❖ grid tools weren't entirely transparent: local sysadmin support was needed on more than one occasion to work around BNL-specific restrictions
 - Example: users expected rucio list-file-replicas to work, needed a BNL-specific script

Outlook for NSF proposal

- ❖ Current is to call for site proposals “soon,” to be able to evaluate sites and make a decision in May
- ❖ Questions:
 - should we update the site specifications?
 - what can process at SLAC tell us?

➤ Discussion

- ❖ Data placement?
- ❖ Coordination across different ST3 sites?
- ❖ Feedback to/from facilities?