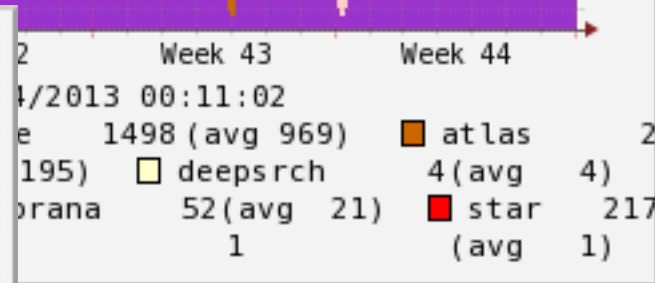
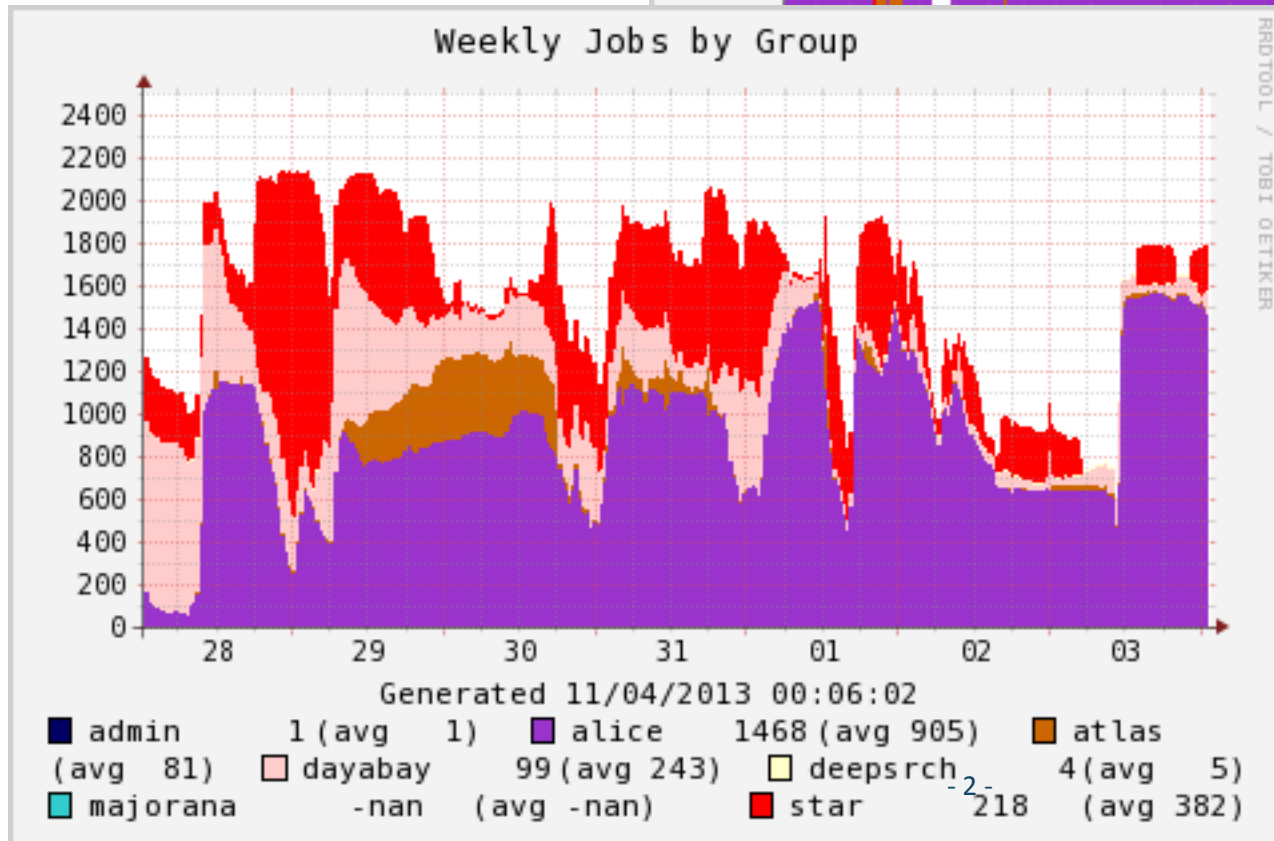
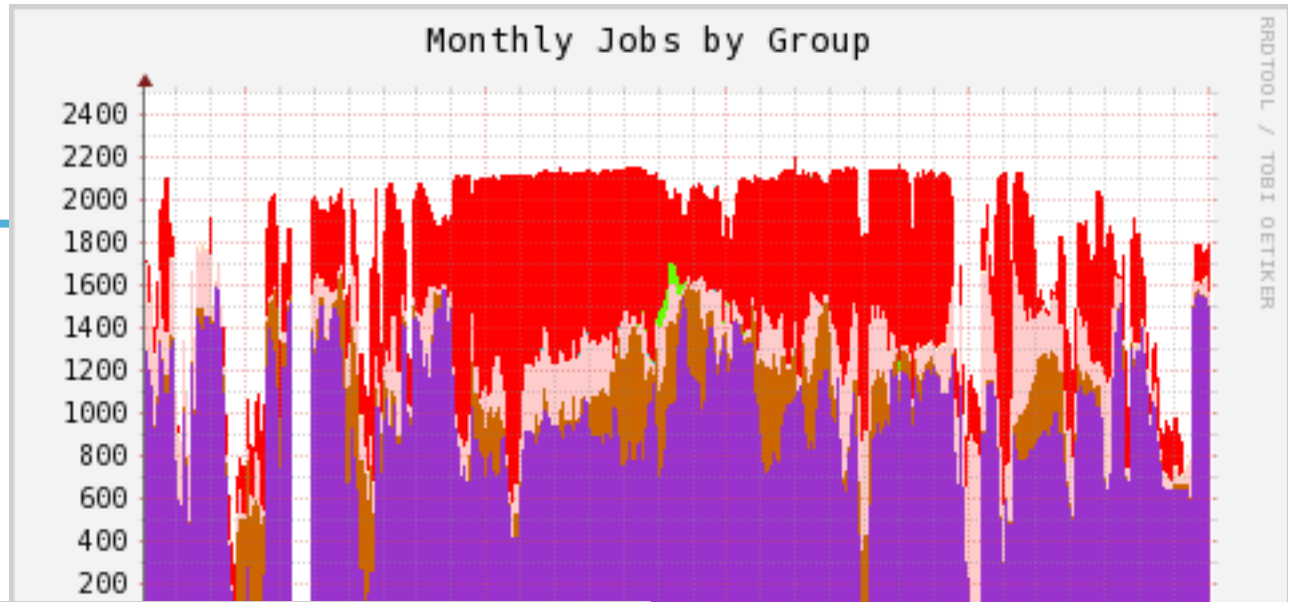


PDSF User Meeting

November 5, 2013

Lisa Gerhardt

Utilization



Past Outages



- **Past**

- October 8th (8:00 am – 9:00 pm): Project unavailable for inode expansion
- October 12th (1 hour): Switch failure, effected NERSC DTNs and science gateways
- October 15th (1 hour): Network, effected NERSC DTNs and science gateways

Planned Outages



- **Planned**

- November 6th (8:00 am – 10:00 am): Rolling upgrade of kernel and GPFS on interactive nodes. Nodes will be upgraded one at a time. PDSF will stay up
- November ???: Rolling upgrade of Daya Bay nodes
- November 12th 7:00 am (1 week): Mendel nodes will be offline for recabling. Scheduled return November 19th 7:00 pm.
 - Mendel nodes will drain at 6:00 pm 11-11-13.
 - PDSF will stay up, but 48 / 205 nodes will be offline

Other Topics from PDSF Staff



- **New Hardware**

- New Mendel nodes have been delivered!!
- Larry can update
- Tentative plan is to swap the interactives in January with new Mendel nodes
 - Leave the system stable for the big holiday break
 - Once new interactives are up, mount global scratch on all of PDSF
 - Going from four interactive nodes to three, but same number of cores

- **Rolling Upgrade**

- Since 10/29 computes and interactives are being upgraded to a new kernel and GPFS
- Part security, part to address ATLAS kernel issue

Benchmarking

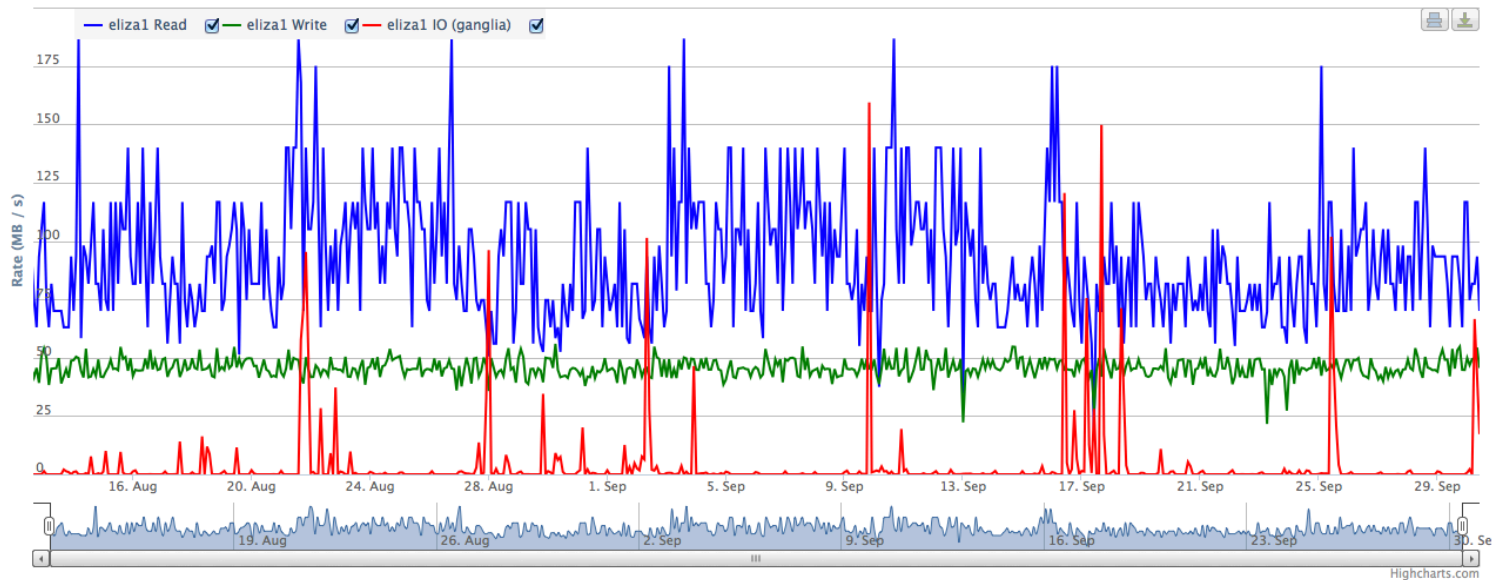
Covers all elizas and project.
Shows read and write rates along
with ganglia I/O rates.
On NERSC page:
PDSF -> Cluster Statistics -> PDSF I/O
Monitoring

Command:

eliza1

Zoom:

1 Month 3 Month 6 Month 1 year All



The screenshot shows the NERSC website interface. At the top, the NERSC logo is displayed with the tagline 'Powering Scientific Discovery Since 1974'. A search bar is visible in the top right corner. The main navigation menu includes 'HOME', 'ABOUT', 'SCIENCE AT NERSC', 'SYSTEMS', 'FOR USERS', 'NEWS & PUBLICATIONS', 'R & D', 'EVENTS', and 'LIVE STATUS'. The 'FOR USERS' section is expanded, showing a list of links: 'Live Status', 'My NERSC', 'Getting Started', 'Computational Systems', 'Edison', 'Hopper', 'Carver', 'Dirac', 'PDSF', 'About', 'PDSF Login Node Status', 'Getting Started', 'Hardware Configuration', 'Using the PDSF Batch System', 'Performance and Optimization', 'Software and Tools', 'Announcements and Meetings', 'Cluster Statistics', 'Ganglia', 'PDSF I/O Monitoring', and 'PDSF Completed Jobs'. The 'Cluster Statistics' link is highlighted in green. Below the navigation menu, the 'CLUSTER STATISTICS' section is visible, with 'PDSF I/O Monitoring' circled in red. Other links in this section include 'Ganglia', 'PDSF Completed Jobs', 'Usage Summaries', and 'Utilization Graphs'.



Other Topics from PDSF Staff



- **cvmfs on carver**
 - Uses parrot: User level virtual file system
 - Can only handle one cvmfs repository at a time
 - `module load cctools/parrot-cvmfs`
 - `parrot_run <your script>`
- **NERSC AFS is going away**
 - PDSF either needs to retire it or find a new cell to join

Topics from the Users

