BLUE WATERS SUSTAINED PETASCALE COMPUTING



Blue Waters User Monthly Teleconference















Agenda

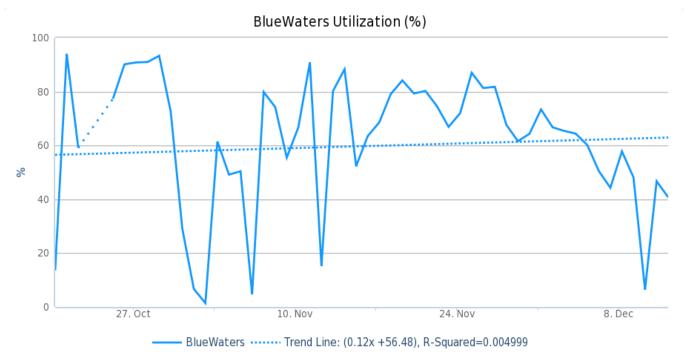
- Utilization and recent events
- Recent and upcoming changes
- Blue Waters Data Sharing
- 2015 Blue Waters Symposium
- NSF Ebola CFP
- Reduced charging opportunities
- 1:15 PM Topology Aware Scheduling webinar
- 1:45 PM <u>CADENS</u> with Donna Cox





System Utilization

• Utilization since last BW User Call (October 20)



2014-10-20 to 2014-12-12 Src: HPcDB. Powered by XDMoD/Highcharts





Recent Issues

NVIDIA cuBLAS DGEMM – Resolved and Closed





Upcoming Changes

- Enable Topology Aware Scheduling at first opportunity in January.
- System upgrades
 - CLE 5.2 January
 - Move to newer Lustre software.
 - CUDA 6.5 January
- Enabling darshan IO library in user environment at CLE 5.2 upgrade in January.
- Modules
 - Cleaning out unused modules, old modules.





Blue Waters Data Sharing Service

- Prototype service for data sharing.
- <u>https://bluewaters.ncsa.illinois.edu/data-sharing</u>
- Sharing of data sets from on-line or Nearline / projects/sciteam/xyz/share using Globus Online or web services (http).
- Metadata includes contact information, description, website, size and count, DOI*.





2015 Blue Waters Symposium

- May 10-14, 2015
- PI meeting for NSF PRAC teams.
- <u>Sunriver Resort</u> in Sunriver, OR



 Recreational opportunities: hiking, biking, fly fishing, rafting, canoeing, rock climbing, ...





Discount Charge Period

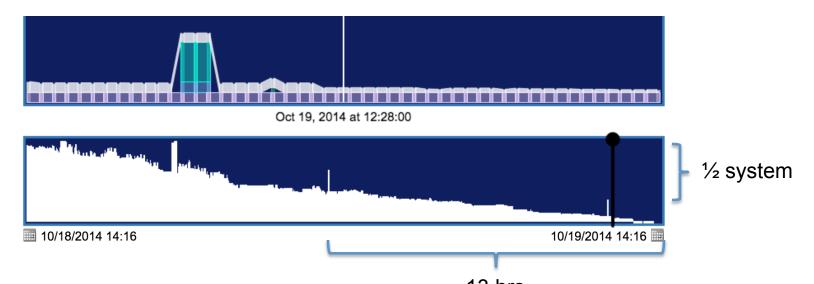
- The Blue Waters project office is pleased to announce a reduced charging period in time for the holidays as a Thank You for your help in a successful NSF Review that took place December 3rd-4th.
- Starting Wednesday, December 17th and continuing to January 5th 2015.
- Discount on charging will be a 50% reduction across all XE jobs and an additional 25% off jobs greater than 4,096 XE nodes.







Reminder to backfill ...



- Watch for maintenance notices or draining for large jobs.
- Implementing a charge factor for backfilling.
- Realtime chart of backfill opportunities
 <u>https://bluewaters.ncsa.illinois.edu/why-isn-t-my-job-running#backfill</u>





- We need to be current on products that result from time on Blue Waters such as:
 - Publications, Preprints (e.g. <u>arXiv.org</u>), Presentations.
 - Very interested in data product sharing.
- Appreciate updates sooner than annual reports.
 - Send to gbauer@illinois.edu
- NSF PRAC teams send information to PoCs.
- See the Share Results section of the portal as well.
- Be sure to include proper acknowledgment
 - Blue Waters National Science Foundation (ACI 1238993)
 - NSF PRAC OCI award number





Special Topics

- Topology Aware Scheduling Robert Brunner.
- CADEN Donna Cox.





Future Topics?

 Please send us your suggestions on topics for future teleconferences / webinars