Blue Waters User Monthly Teleconference
Agenda

- New documentation on portal
- Next Blue Waters New User Webinar
- New email and blog channel selection on the portal
- Recent Events, Coming Changes to Blue Waters
- Usage, Utilization and other Items
- Upcoming Opportunities
- Request for publications!
Recent documentation on portal

• Using Python notebooks on Blue Waters
  • [https://bluewaters.ncsa.illinois.edu/pythonnotebooks](https://bluewaters.ncsa.illinois.edu/pythonnotebooks)
  • Still draft but close to being complete.
• Coming soon
  • Shifter
New User Webinar

- Updated New User Webinar coming September 21st.
- Look for announcement soon.
Email and Blog Subscription

- In the coming weeks communications will be sent to particular channels.
- “Your Blue Waters > Manage Users > Your Profile”
- Click on “Manage Email Subscriptions”
- Only Mandatory is required.
Recent Events and Outages

- 8/16/17 12:30AM
- Two cabinets emergency powered off (EPO) to avoid moisture condensation due to over cooling. Running jobs were terminated.
Recent Changes

- Changes to qsub filter to address issues with batch scripts
  - Directives at end of script
  - Extra spaces in directives
  - Malformed qsub options
Changes being considered

- Propose to change minimum node count to 2.
- Why the need for the change?
  - The scheduler iteration time varies with the number of running jobs. Iteration times of more than 5 minutes is frustrating.
- Impact on partners with single node workloads
  - Need to consider job bundling.
  - Runtime imbalance in bundled jobs can leave reserved nodes idle.
- What have we done to date
  - Worked with vendor to tune scheduler.
  - Worked with partners submitting single node workloads.
Usage, Utilization and other Items

- Utilization since last BW User Call (July 17)
Backlog

- Since BW User Call 07/17
- Vertical axis in units of nodes. Colors are different users. Red below the x-axis indicates unreserved nodes. Blue below the x-axis indicates draining.
- Data feed dropped after emergency maintenance.
- XE region shows dropping backlog but several large allocations expire end of the month.
- XK region has seen increase in backfill.
Workload Details

- Data combines XE and XK jobs.
- Since last BW User Call (7/17).
Workload Details of since 7/17

• Data combines XE and XK jobs.
• Several days with ½ and full system jobs.
Blue Waters Weekly Webinar Series

- For more information about the webinar series, including registration, abstracts, speakers, as well as links to Youtube recordings, please visit the Blue Waters webinar series webpage.

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<th>Date</th>
<th>Title</th>
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<tr>
<td>September 20, 2017</td>
<td>High-performance workflows with Swift/T</td>
<td>Justin Wozniak</td>
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<tr>
<td>September 27, 2017</td>
<td>Software Engineering Practices</td>
<td>Jeff Carver</td>
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Request for Science Successes

• We need to be current on products that result from time on Blue Waters such as:
  • Publications, Preprints (e.g. arXiv.org ☻), 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