Blue Waters User Monthly Teleconference
Agenda

• Recent Events, Coming Changes to Blue Waters
• Usage, Utilization and other Items
• Upcoming Opportunities
• Request for publications!
Recent Events and Outages

- No events of note.
- System-wide uptime in the >100 days.
Recent Changes

• Newer compilers available (not default)
  • Intel 2017 Update 4
    • The Intel OpenMP monitor thread (i.e. helper thread) is not created.
    • Recommend `KMP_AFFINITY=disabled` and use `aprun` options to place threads.
    • Tests have shown slight performance gain for some benchmarks.
Recent Changes

• New email channel subscription
• Notices will have channel Opt-out model is used. To unselect a channel: sign into the portal, go to “My Blue Waters > Manage User > Your Profile”
• Unselect channels. Must subscribe to “Mandatory”
• Notices may appear on new system-blog page
  • https://bluewaters.ncsa.illinois.edu/system-blog

System News

Filtered by: Mandatory | Best Practices | Scheduled Outages | Unscheduled Outages | System Notices | Training and Opportunities | General | Policy Changes | Software Updates | New Functionality | Public Affairs |

Blue Waters User Call: October 16th at 1PM Central [edit]
Created by: gbauer 2017-10-13 14:27:12 (Channels: general)

Blue Waters Partners;

Please join us for the next Blue Waters Use...

• Unselect channels. Must subscribe to “Mandatory”
• Notices may appear on new system-blog page
  • https://bluewaters.ncsa.illinois.edu/system-blog
Usage, Utilization and other Items

- Overall Utilization last 30 days

BlueWaters Utilization (%)
Backlog

- Last 30 days.
- 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.
- Added utilization pie charts showing XE and XK utilization by node state.
Workload Details

- Data combines XE and XK jobs.
- Last 30 days.
- Large number of 3 node jobs by 9 users from 1 project!
Job scheduler iteration time

Is job bundling having desired impact on iteration time?
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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<tr>
<th>Date</th>
<th>Topic</th>
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<tr>
<td>October 18, 2017</td>
<td>Opportunities and Challenges: Diversifying your Workforce</td>
<td>Toni Collis</td>
<td>Live</td>
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<td>October 25, 2017</td>
<td>Scientific Visualization in Houdini</td>
<td>Kalina Borkiewicz, A. J. Christensen</td>
<td>Live</td>
<td>Survey</td>
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<tr>
<td>November 8, 2017</td>
<td>Scientific Software Ecosystems: Why and How</td>
<td>Lois Curfman McInnes, Michael Heroux</td>
<td>Live</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