Minutes for the Hyak Governance Board Meeting

Physics/Astronomy Tower, Rm. C610, on Friday, November 13, 1:30pm.

Present: Darwin Alonso dalonso@uw.edu, Jim Pfaendtner jpfaendt@uw.edu, Ivan Eastin@uw.edu, Tom Ackerman tpa2@uw.edu, David Veesler dveesler@uw.edu, Werner Stuezle wxs@uw.edu, Chance Reschke reschke@uw.edu, Kelli Trosvig kelli@uw.edu, Brad Greer brad@uw.edu, and Martin Savage mjs5@uw.edu.

Absent: Vicki Meadow <u>meadows@uw.edu</u>, Keith Laidig <u>laidig@uw.edu</u>, Greg Miller <u>gmiller@uw.edu</u>, Dave Beck <u>dacb@uw.edu</u>, Pedro Arduino <u>parduino@u.washington.edu</u> [not sent a request – sent to Dawn Lehman by mistake]

Visitors for first item: Doug Ray and Thom Dunning.

 [20-30 mins] Pacific Northwest Supercomputing Center – presentation by Doug Ray and Thom Dunning, followed by discussion.
Went from 1.30 to 2.15 pm

After a presentation by Doug Ray, there were extensive discussions of PNNL's vision for a PNSC. The essence of the idea is to sum the PNNL, WSU and UW dollar resources currently contributed to HPC and identify that figure as matching funds associated with a possible state contribution. The idea is to attempt to attract state funding at ~\$7M level to purchase a ``capability''-architecture machine to provide a testbed system where researchers from member institutions can develop the skills necessary to be productive on the world's fastest computers, as well as enhance the current compute resources available in the state for researchers in key areas, such as nuclear physics and molecular dynamics. While the machine could be located at PNNL (which obviously has the infrastructure to host such a machine) or UW (who also has the ability), the operation of such hardware will require each institution to provide additional FTE's to help run it and to help people at the institutions use it.

It was stressed that the formation of PNSC is in no way meant to impact local compute facilities and operations. Hyak is the UW's capacity-compute resource and the acquisition of a machine with pre-exascale architecture would not ably replace Hyak as most people would not be able to use it efficiently.

A decision (on a reasonable timeline) was requested regarding the UW's desire to enter into a PNSC with this initial target acquisition. A further meeting will be

required for the Board to make progress on this matter. Inquiries will need to be made regarding the UW's ability to support a further 2+ FTE's for this support (and for other support).

- The members attending voiced support for the addition of >= 2 FTE for the support of UW-IT's HPC efforts.

The timeline for getting such a proposal to the state is approximately 1 year, and the state would provide the funding to UW and/or WSU only.

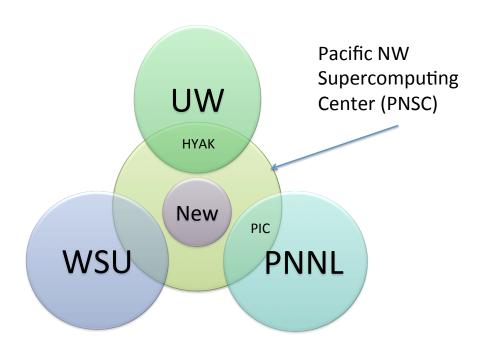


Figure 1: Cartoon of PNNL's vision for PNSC. [Image courtesy of Doug Ray.]

2) [10 mins] **Update on the STF related to HYAK**– Jim Pfaendtner. (a 5 minute presentation)

Jim P. provided a nice summary of the progress that has been made with STF funds and the development of the UW HPC club. This fraction of Hyak is on track to become the largest! Two publications are presently associated with this resource. Jim is involved in HPC outreach at Bellevue College.

3) [10 mins] **Next Generation HYAK and Timetable** – Chance Reschke.

Chance went quickly though his presentation, hitting only the high points due to the lack of time.

The attending members voiced support for delaying NextGen Hyak deployment to Q1 FY 2017 in order to include emerging technologies such as Intel's Omnipath interconnect and Knight's Landing processors – even if this results in a gap of up to four months between the end of Hyak Classic Expansion and the deployment of NextGen Hyak.

The financial advantage of time-synchronizing Hyak infrastructure upgrades and MRI proposals in order to leverage necessary Hyak infrastructure investments as required match was briefly discussed and acknowledged by the attending members.

Sponsor's ongoing financial commitment to the operation of Hyak Classic through Q2 2020 was covered briefly. An estimate of \$200k/year was given for ongoing Hyak Classic infrastructure and operations. The attending members voiced no objection.

4) [10 mins] **Next Generation MOU** - Chance Reschke did not have time to discuss.

2:45pm - close