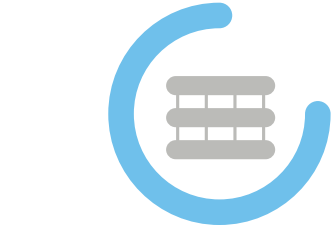

Meeting of the Technical Steering Committee (TSC) Board

Wednesday, July 29th, 2020
11:00am ET

Meeting Logistics

- https://zoom.us/j/556149142

- United States : +1 (646) 558-8656
  - Meeting ID: 556 149 142

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THE LINUX FOUNDATION

Agenda/Updates

- Announcements/deadlines:
  - SC'20 has been changed to a virtual event
    - apparently there will be virtual exhibitors as well
  - SC'20 tutorial: Stage 2 due August 7th
    - Comment from Tutorials Chair: "*At this moment, we are working on the schedule, so that tutorials can reach all time zones in the most convenient way.*"
  - SC'20 BoFs: Due ~~July 31, 2020~~ , Extended till August 14, 2020

- SC'20 Bof
- PEARC'20 tutorial post mortem
- Variety of 2.0 related items
- Mentorship program

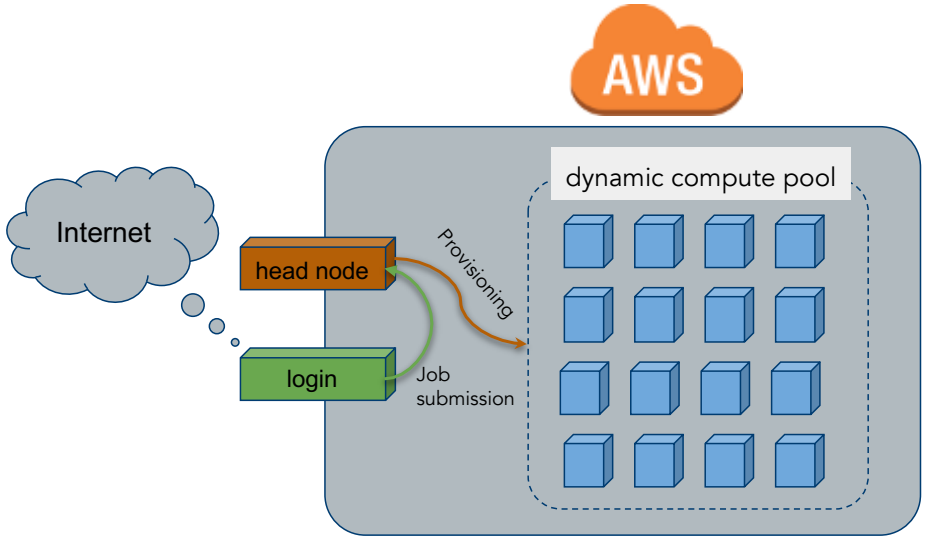
SC'20 BoF Submission

- I have submitted an initial proposal based on last year's submission
  - one minor change was to mention use of the interactive meeting tool meet.ps: https://meet.ps/openhpc-sc20bof
- We have to choose between a 1 hour or 1 ½ hour time slot
- 1-hour time slot options:
  - Tuesday 12:15-1:15pm
  - Wednesday 12:15pm – 1:15pm
  - Thursday 12:15pm – 1:15pm
- 1 ½ hour time slot options:
  - Tuesday 5:15pm – 6:45pm
  - Wednesday 5:15pm – 6:45pm
- Interested TSC co-session leaders for the submission?

https://openhpc.github.io/cloudwg/tutorials/pearc20/pearc20.html

PEARC'20 Tutorial

- We had 27 attendees sign up for a training account on the shared cluster



- Huge thanks to Chris S., Chris D., Nirmala, Derek, David and the cloud working group for all the prep work:
  - and many thanks to AWS for providing tokens to allow attendees to spin up their own cluster

- Good learning experience – can hopefully help us with the next SC'20 virtual tutorial

2.0 Related Items - xCAT

- Initial xCAT recipe has been updated for CentOS8
  - in order to resolve package dependencies correctly, need to rely on devel repo for xCAT presently

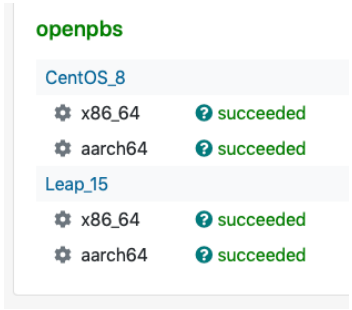
```
[sms]# yum -y install yum-utils
[sms]# wget -P /etc/yum.repos.d https://xcat.org/files/xcat/repos/yum/latest/xcat-core/xcat-core.repo
```

```
[sms]# wget -P /etc/yum.repos.d http://xcat.org/files/xcat/repos/yum/devel/xcat-dep/rh8/x86_64/xcat-dep.repo
```

  - ran into one issue with xCAT package scripts adding entries to /etc/fstab that prevent NFS server from starting up
    - filed a report with upstream
    - https://github.com/openhpc/ohpc/issues/1249
  - with small fix, provisioning process in updated recipe working ok
    - however, running into a problem with configless slurm setup
    - computes are unable to pull down their config and haven't sorted it out just yet

2.0 Related Items - openPBS

- Note that there is a name change in our PBS builds:
  - PBS Pro (v19.x) -> OpenPBS (v20.x)
  - https://github.com/openhpc/ohpc/pull/1224
  - documentation recipes updated accordingly



- With CentOS8.2 available now, the previously missing OS dependency is resolved and we have all build permutations available

- No new CI issues detected yet with updated version on x86_64
  - are seeing failures on aarch64 with one MPI Stack (mpich)

All Tests

Test name	Duration	Status
[MPI] C binary runs on two nodes under resource manager (openpbs/gnu9/mpich)	0 ms	Failed
[MPI] C binary runs on two nodes under resource manager (openpbs/gnu9/openmpi4)	1.4 sec	Passed
[MPI] C binary runs on single node under resource manager (openpbs/gnu9/mpich)	0 ms	Failed
[MPI] C binary runs on single node under resource manager (openpbs/gnu9/openmpi4)	1.3 sec	Passed
[MPI] C++ binary runs on single node under resource manager (openpbs/gnu9/mpich)	0 ms	Failed
[MPI] C++ binary runs on single node under resource manager (openpbs/gnu9/openmpi4)	0.63 sec	Passed
[MPI] C++ binary runs on two nodes under resource manager (openpbs/gnu9/mpich)	0 ms	Failed
[MPI] C++ binary runs on two nodes under resource manager (openpbs/gnu9/openmpi4)	0.72 sec	Passed
[MPI] F90 binary runs on single node under resource manager (openpbs/gnu9/mpich)	0 ms	Failed
[MPI] F90 binary runs on single node under resource manager (openpbs/gnu9/openmpi4)	0.73 sec	Passed
[MPI] F90 binary runs on two nodes under resource manager (openpbs/gnu9/mpich)	0 ms	Failed
[MPI] F90 binary runs on two nodes under resource manager (openpbs/gnu9/openmpi4)	0.72 sec	Passed

2.0 Related Items – Leap15.2

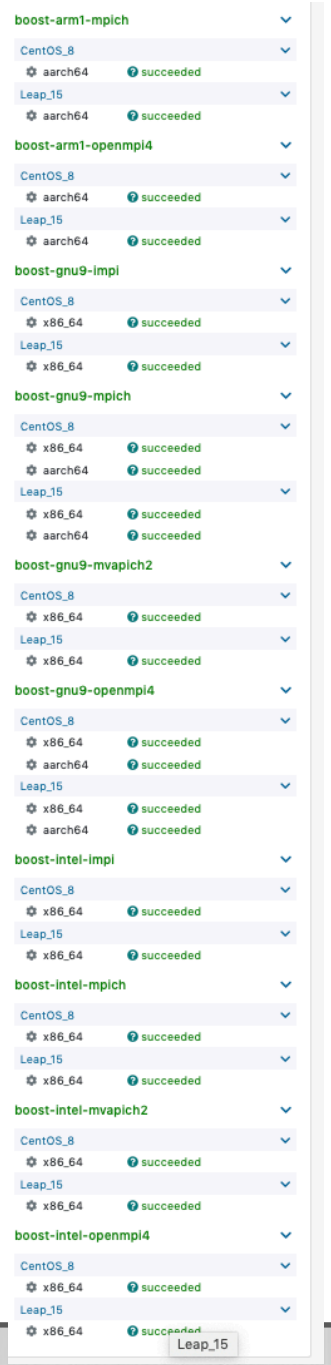
- openSUSE Leap 15.2 was released on July 02
  - https://news.opensuse.org/2020/07/02/opensuse-leap-15-2-release-brings-exciting-new-packages/
- corresponding template has been added to our Warewulf build
- Leap15.2 image has been ingested into our CI system for x86_64
- Say hello to a new kernel…

```
sms019:~ # uname -srv
Linux 5.3.18-lp152.33-default #1 SMP Wed Jul 22 06:32:33 UTC 2020 (e5a8383)
```

- Next up: ingest on aarch64 and update our CI tests to use Leap15.2 instead

2.0 Related Items – Boost

- Fixes landed to enable Boost builds with Intel toolchain on CentOS8.2
- Resolves the one primary parallel library package build for Intel that was not available in 2.0RC1
- Just a reminder on the # of permutations in 2.x presently
  - 1 .spec file -> 24 builds
- Summary: still a few issues to iron out, but seems like things are coming together



2.0 Related items – Arm compiler gotcha

- We received an updated drop of the Arm HPC compiler last week to address the modulefile incompatibility with Lmod in the previous drop
  - latest version does include modulefiles that work fine with Lmod
  - unfortunately, CI detected a new problem with package dependencies for the Arm performance library that has been reported back upstream

- Not sure if we will get a workable solution in time for final 2.0 release or not, but we will try…

- 2.0 Update summary: still a few issues to iron out, but seems like things are coming together and can go live with Leap 15.2 and CentOS 8.2
  - ideally would like to push out before end of Aug.

Call for volunteer(s)?

- If anyone is interested in working to revamp our current Spack packaging, please let me know…
  - intent is to convert from an admin-oriented package to a user-facing module
  - have some tips from experiences at Sandia
  - newer feature in spack should make it easier to leverage ohpc-provided MPI stacks
    - https://github.com/spack/spack/pull/14934

Mentorship Program

- We have talked previously about project ideas for mentees and agreed to provide them a list of potential options
- We now know that SC'20 is virtual as well so want to see what people are thinking regarding timing and requirements for our first installment of a mentorship program (targeting 2-4 students)
  - Draft Requirements:
    - undergraduate or graduate students enrolled at an accredited academic institution (can be international)
    - stipend: $4K (USD)
    - level of effort: expect availability to meet with OpenHPC mentors remotely on a weekly basis and contribute at least XX hours per week on average (this can be an issue if the program is in fall/spring and students are enrolled full time)
    - Submission elements: resume, 1-page personal statement highlighting Linux experience and interest in the community and desired project(s), copy of official University transcript, recommendation letters (none in Google summer code)ookie?
    - Evaluations: mid-term evaluation with final payment associated with passing evaluation
  - Schedule (2-3 months):
    - Normally would want to align an intern program for students in the summer.
    - We can wait for the next summer or consider something sooner (e.g. Fall 2020)
      - thoughts on the schedule?