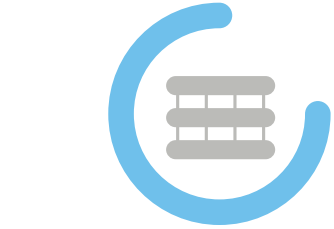

Meeting of the Technical Steering Committee (TSC) Board

Wednesday, Aug 9th, 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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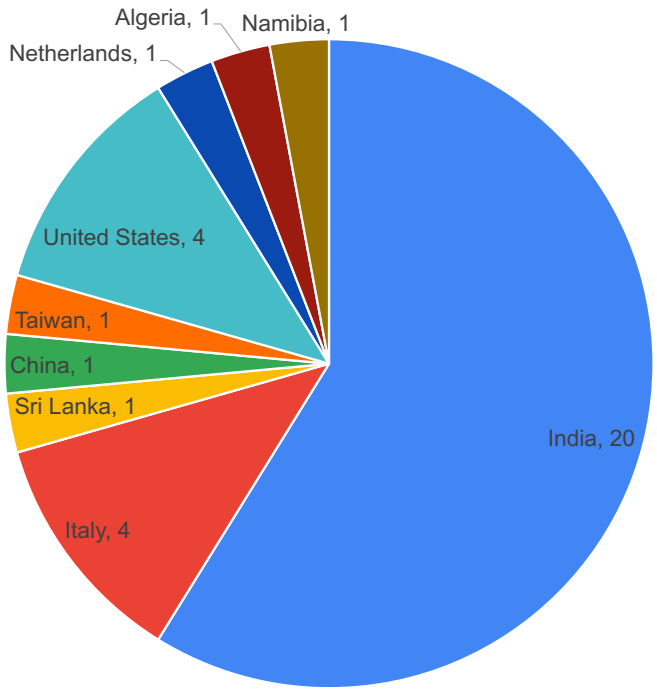
Agenda/Updates

- Announcements/deadlines:
  - Zoom link changes for TSC meeting:
    - Zoom policy change deadline is near to require meeting passwords
    - Our current link needs to be updated
    - Expect to see updated calendar invite with new meeting details (we will use updated URL next time….)

- Cloud working group
- Mentorship program updates
- 2.0 stuff

Mentorship Program

- Neal closed the application window yesterday (9/8)
- Pretty significant number of questions coming in…
  - may have noticed that some initially got posted to mailing lists
  - Neal kindly setup alternative location for questions (lesson learned for next time)
    - mentorship@openhpc.community
- Quick overview:
  - 61 applications initiated on CommunityBridge
  - 34 complete applications submitted
  - 9 countries represented
  - mix of undergrad/grad (but initial review shows mostly undergrad)
  - mostly CS majors
- Will be following up with those who expressed interest in participating as mentor to review candidates after initial triage



2.0 Related Items - IPoIB

- Tweaks to recipes were made for Lustre/IPoIB (centos only)
  - with the update in recipes to use iproute tools (e.g. ip) instead of older net-tools suite, IPoIB configs needed updating
    - example template files for SMS and
  - does mean we had to add NetworkManager as pre-requisite for ohpc-base and ohpc-base-compute (and use in recipes)
  - this allows latest Lustre client build to mount existing file system ok

```
[root@sms001 ~]# nmcli
eth0: connected to eth0
        "Intel I350"
        ethernet (igb), A4:BF:01:01:AB:73, hw, mtu 1500
        inet4 192.168.1.1/16
        route4 0.0.0.0/0
        route4 192.168.0.0/16
        inet6 fe80::a6bf:1ff:fe01:ab73/64
        route6 fe80::/64
        route6 ff00::/8


ib0: connected to System ib0
        "Mellanox MT27500"
        infiniband (mlx4_core), 80:00:02:08:FE:80:00:00:00:00:00:00:00:1E:67:03>
        inet4 172.17.1.1/16
        route4 172.17.0.0/16
        inet6 fe80::21e:6703:f2:54d3/64
        route6 ff00::/8
        route6 fe80::/64
```

2.0 Related Items – Leap 15.2 on aarch64

- Resolved the Leap15.2 provisioning issue mentioned last time…
  - problem related to fact that iPXE can't boot gunzipped ELF kernels
  - because initrd images file formats differ on Leap/CentOS, we have different Warewulf builds to assemble bootstrap kernel images appropriately
- No issue when assembling images on similar OS environments, but potential gotcha in mixed OS/mixed aarch environment
  - this is our case for aarch64 CI testing environment
  - using Fujitsu cross-sms-arch64.sh utility to build aarch64 images that are served by x86_64 box
    - https://github.com/NaohiroTamura/cross-sms-aarch64.sh
  - likely affects nobody here, but if you are interested in doing this, have to edit wwbootstrap file or create a companion version:

```
# diff -u /bin/wwbootstrap /bin/wwbootstrap.leap
--- /bin/wwbootstrap 2020-03-19 16:07:57.000000000 +0000
+++ /bin/wwbootstrap.leap 2020-08-26 18:20:24.664776733 +0100
@@ -153,7 +153,7 @@

 mkpath("$tmpdir/initramfs");

-if (! -f "$opt_chroot/boot/vmlinuz-$opt_kversion" && ! -f "$opt_chroot/boot/vmlinux-$opt_kversion.gz") {
+if (! -f "$opt_chroot/boot/vmlinuz-$opt_kversion" && ! -f "$opt_chroot/boot/Image-$opt_kversion") {
     &eprint("Can't locate the boot kernel\n");
     exit 1;
 }
@@ -323,8 +323,8 @@
 # Note, if the kernel isn't a gzip, IO::Uncompress::Gunzip makes a direct copy of the file.
 if (-e "$opt_chroot/boot/vmlinuz-$opt_kversion") {
     gunzip "$opt_chroot/boot/vmlinuz-$opt_kversion" => "$tmpdir/kernel" or die "gunzip of kernel failed: $GunzipError\n";
-} elsif (-e "$opt_chroot/boot/vmlinux-$opt_kversion.gz") {
-    gunzip "$opt_chroot/boot/vmlinux-$opt_kversion.gz" => "$tmpdir/kernel" or die "gunzip of kernel failed: $GunzipError\n";
+} elsif (-e "$opt_chroot/boot/Image-$opt_kversion") {
+    gunzip "$opt_chroot/boot/Image-$opt_kversion" => "$tmpdir/kernel" or die "gunzip of kernel failed: $GunzipError\n";
 }

 &nprint("Building and compressing bootstrap\n");
```

2.0 Latest CI Results

2.x

OpenHPC CI Infrastructure

Thanks to the Texas Advanced Computing Center (TACC) and Linaro for hosting support. Thanks also to Intel, Marvell, Cavium, and Dell for hardware donations.

add description

2.0 | 2.0RC1 | All | +

S	Categorized - Job	Last Success	Last Failure	Last Duration	Test Result
	.. » [aarch64]	13 days - #1	13 days - #2	8 min 33 sec	N/A
	(2.0) - (centos8.2,aarch64) (warewulf+openpbs) (fabric=eth)	14 days - #13	21 days - #11	1 hr 42 min	0 of 1,076 failed (-2)
	(2.0) - (centos8.2,aarch64) (warewulf+slurm) (fabric=eth)	1 mo 12 days - #8	1 mo 12 days - #7	1 hr 33 min	0 of 1,102 failed (-4)
	(2.0) - (centos8.2,aarch64) (warewulf+slurm) (fabric=eth) + arm hpc compiler	1 mo 10 days - #9	1 mo 10 days - #8	31 min	0 of 284 failed (±0)
	(2.0) - (leap15.2,aarch64) (warewulf+slurm) (fabric=eth)	13 days - #1	13 days - #2	8 min 33 sec	2 of 1,088 failed (+2)
	.. » [x86_64] - CentOS 8	1 hr 11 min - #394	4 hr 24 min - #90	1 hr 5 min	N/A
	(2.0) - (centos8.2,x86_64) (warewulf+openpbs) (fabric=ib) - UEFI	1 hr 11 min - #394	3 days 6 hr - #376	1 hr 5 min	0 of 1,456 failed (±0)
	(2.0) - (centos8.2,x86_64) (warewulf+slurm) (fabric=eth) - UEFI	2 days 10 hr - #396	5 days 4 hr - #374	1 hr 7 min	0 of 1,139 failed (±0)
	(2.0) - (centos8.2,x86_64) (warewulf+slurm) (fabric=ib) + psxe	4 hr 32 min - #237	7 hr 43 min - #236	2 hr 52 min	0 of 2,852 failed (-1)
	(2.0) - (centos8.2,x86_64) (warewulf+slurm) (fabric=opa) + psxe	1 hr 14 min - #91	4 hr 24 min - #90	41 min	0 of 347 failed (±0)
	(2.0) - (centos8.2,x86_64) (xCAT+slurm) (fabric=ib)	22 hr - #106	2 days 7 hr - #100	1 hr 30 min	0 of 1,459 failed (±0)
	.. » [x86_64] - Leap15	1 hr 5 min - #266	7 hr 5 min - #264	55 min	N/A
	(2.0) - (leap15.2,x86_64) (warewulf+openpbs) (fabric=eth)	1 hr 5 min - #266	7 hr 5 min - #264	55 min	0 of 1,117 failed (±0)
	(2.0) - (leap15.2,x86_64) (warewulf+slurm) (fabric=eth)	1 mo 5 days - #132	1 mo 6 days - #125	1 hr 6 min	0 of 1,159 failed (±0)
	(2.0) - (leap15.2,x86_64) (warewulf+slurm) (fabric=ib) + psxe	5 hr 35 min - #76	9 hr 35 min - #75	2 hr 49 min	0 of 2,852 failed (-1)

Icon: S M L

Legend | Atom feed for all | Atom feed for failures | Atom feed for just latest builds

← Leap 15.2 now provisioning

← Lustre client check re-enabled

← imb/intel failures resolved

2.0 Related Items – Trilinos/Intel Updates

- Recall from last time we are seeing failures with latest Trilinos builds on intel compiler only
- Explored a couple of additional compiler/package version options
  - older Trilinos (version we had in v1.3.9)
  - intermediate Trilinos (v12.12.4)
  - newer PSXE
  - mixed bag of results: can build older versions of Trilinos with PSXE, but those versions fail to build with newer gcc (gnu9)
  - note: major new version of Trilinos just came out last month (v13.0.0)
    - kicked off a build earlier this morning just to check
    - both gnu9/intel fail, but for different reasons
  - thoughts on potential release with mixed versions?
    - we are not really setup for this in OBS
    - could treat as separate packages if needed

Trilinos v12.12.1

- gnu9 build - build fails
- psxe 2020u0 - build succeeds

Trilinos v12.12.4

- gnu9 build - build fails
- psxe 2020u0 - build succeeds

Trilinos v12.12.18 ← Target for ohpc v2.0

- gnu9 build - build succeeds
- psxe 2020u0 - build fails
- psxe 2020u3 - build fails

2.0 Remaining Items Summary

- decide on Trilinos/Intel
- BeeGFS client testing…
  - re-initiating in recipes now…