

Meeting of the Technical Steering Committee (TSC) Board

Wednesday, March 13th, 2019 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

- Reminder on upcoming submission deadlines: PEARC'19 (Feb 19) - submitted on Feb 27 (thank you Derek!)
 – SC'19 BoF (July 31)
- Review cycle #8
- 1.3.7 release status
- Mentorship program

Review cycle #8

Component Name	# of Reviewers	# of accepts	# of rejects	Avg. Priority
OpenXDMoD	2	0	2	
OSU MPI Benchmarks	5	5	0	8.0

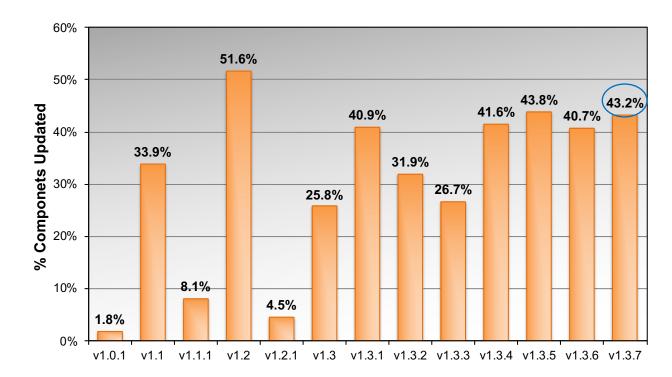
- No ambiguity with osu micro-benchmarks
 - will add this as new component for backlog
 - would propose to remove the osu mpi benchmark binaries that are currently only packaged with mv2 and build them for all MPI stacks and expose via standard modules ("osumb")
- Issues with OpenXDMoD
 - don't have all reviews yet, discussion spurred by use of non-open source license software: Highcharts
 - do see they distribute an rpm for centos on their github site
 - I looked at it and it does embed highcharts

• Getting close to finalizing 1.3.7 release (goal is to have it out before this weekend)

1.3	1.3.1 1.3.2 1.3.3 1.3.4 1.3.5	1.3.6 1.3.7 All +		CH	result	s Snapsh
s	Categorized - Job	Last Success	Last Failure	Last I	Duration	Test Result
- 📀	» [aarch64]	4 hr 7 min - #15	1 day 9 hr - #10	3 hr	13 min	N/A
	🥑 (1.3.7) - (centos7.6,aarch64) (w	arewulf+pbspro) (fabric=eth)	6 hr 48 min - #14	1 day 9 hr - #10	2 hr 40 min	0 of 1,135 failed (±0)
	 (1.3.7) - (centos7.6,aarch64) (w 	arewulf+slurm) (fabric=eth)	4 hr 7 min - #15	1 day 12 hr - #12	3 hr 13 min	0 of 1,145 failed (±0)
	 (1.3.7) - (sles12sp4,aarch64) (w 	arewulf+pbspro) (fabric=eth)	21 hr - #4	2 days 19 hr - #1	2 hr 49 min	0 of 1,133 failed (±0)
	🗯 (1.3.7) - (sles12sp4,aarch64) (w	arewulf+slurm) (fabric=eth)	9 hr 54 min - #8	3 days 14 hr - #2	3 hr 6 min	0 of 1,145 failed (±0)
 (1.3.7) - (cer 	» [x86_64] - CentOS 7	54 min - #22	9 hr 25 min - #19	49 m	in	N/A
	🔮 (1.3.7) - (centos7.6,x86_64) (wa	rewulf+pbspro) (fabric=Ib) - UEFI	1 hr 30 min - #226	16 hr - #221	1 hr 16 mir	0 of 1,567 failed (±0)
	(1.3.7) - (centos7.6,x86_64) (was	rewulf+slurm) (fabric=eth)	1 hr 15 min - #459	1 day 10 hr - #448	1 hr 7 min	0 of 1,182 failed (±0)
	(1.3.7) - (centos7.6,x86_64) (was	rewulf+slurm) (fabric=eth) + PMlx	54 min - #22	9 hr 25 min - #19	49 min	0 of 880 failed (±0)
	C (1.3.7) - (centos7.6,x86_64) (wa	rewulf+slurm) (fabric=ib) + psxe	4 hr 7 min - #112	13 hr - #109	2 hr 41 mir	0 of 2,578 failed (±0)
	(1.3.7) - (centos7.6,x86_64) (was	rewulf+slurm) (fabric=lb) - tarball REPO	2 hr 25 min - #4	2 days 12 hr - #1	1 hr 31 mir	0 of 1,581 failed (±0)
	(1.3.7) - (centos7.6,x86_64) (was	rewulf+slurm) (fabric=opa) + psxe	4 hr 43 min - #24	14 hr - #22	2 hr 43 mir	0 of 2,568 failed (±0)
	🔮 (1.3.7) - (centos7.6,x86_64) (xca	t+slurm) (fabric=lb)	19 hr - #3	1 day 22 hr - #1	1 hr 30 mir	0 of 1,505 failed (-9)
- 📀	» [x86_64] - SLES12	1 hr 37 min - #16	18 hr - #11	1 hr -	4 min	N/A
	🔮 (1.3.7) - (sles12sp4,x86_64) (wa	rewulf+pbspro) (fabric=lb) - tarball REPO	1 hr 37 min - #16	18 hr - #11	1 hr 4 min	0 of 1,561 failed (±0)
	🔮 (1.3.7) - (sles12sp4,x86_64) (wa	rewulf+pbspro) (fabric=lb) - UEFl	2 hr 37 min - #2	N/A	1 hr 3 min	0 of 1,534 failed (±0)
	C (1.3.7) - (sles12sp4,x86_64) (wa	rewulf+slurm) (fabric=eth)	3 hr 9 min - #97	21 hr - #91	54 min	0 of 1,182 failed (±0)
	🔮 (1.3.7) - (sles12sp4,x86_64) (wa	rewulf+slurm) (fabric=ib)	1 hr 38 min - #78	1 day 22 hr - #63	1 hr 12 min	0 of 1,581 failed (±0)
	🗯 (1.3.7) - (sles12sp4,x86_64) (wa	rewulf+slurm) (fabric=opa) + psxe	7 hr 0 min - #16	20 hr - #13	2 hr 16 min	0 of 2,568 failed (±0)

CI Desulta Cuesalest

- This update targets newer OS releases
 - CentOS 7.6
 - SLES 12 SP4
- Similar amount of component version updates that we've seen in last several releases



Some notable updates and comments:

- Singularity 2.x -> 3.1.0 (big change, now requires "go"). CLI syntax changes
- pbspro 18.x -> 19.x
- slurm 17.x-> 18.x
- MPICH 3.2 -> 3.3
 - this is the new version discussed at TSC meeting earlier this year
 - started initial work with enablilng newer ch4 interface
 - discovered job launch under SLURM did not work
 - singletons executed on head node also broken
 - reverted to ch3 based build (patch cherry-picked from upstream to re-enable slurm job launch)

Some notable updates and comments:

- Some issues/changes observed with newer Intel MPI (2019.x)
 - singleton execution not working out of the box (see example discussion at <u>https://software.intel.com/en-us/forums/intel-clusters-</u> and-hpc-technology/topic/799716)
 - observed in our CI environment with IB testing
 - resolved with export FI_PROVIDER=sockets
 - will highlight in release notes so admins can update env if necessary
 - job launch behavior under SLURM changed
 - mpiexec.hydra -bootstrap slurm no longer works
 - updated prun to use alternate job launch mechanism which does work: srun --mpi=pmi2
 - backtested change with previous impi versions (2017.x, 2018.x)
 - directory layout changed again for libs and headers
 - affects packages like TAU

Mentorship Program

- At recent governing board meeting, an interest was expressed in starting/supporting a mentorship program for OpenHPC
- Likely technical in nature:
 - include some level of funding support for the students
 - would require oversite and participation from members of TSC
- Potential items:
 - work on backlog of new component additions
 - help with latest ongoing release
 - create example "How do I enable or setup XXXXX" documents
 - Jupyter notebooks under resource manager
 - LDAP
 - build community app using ohpc dev tools with spack/easybuild
 - cloud recipes
 - install/execute ML tools
 - etc....?
- Was asked to get thoughts and feedback from TSC:
 - are folks favorable of such a program?
 - interest in volunteering?
 - recruiting?
 - practical aspects can we do something this year (e.g. to possibly highlight at SC)?