

# Meeting of the Technical Steering Committee (TSC) Board

Wednesday, December 16<sup>th</sup>, 2020 11:00am FT

# Meeting Logistics

https://zoom.us/j/556149142

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

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# Agenda/Updates

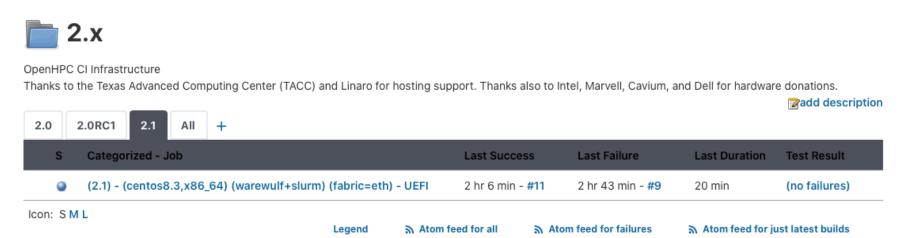
- Administrative
  - last TSC meeting of the year
  - reconvene on January 13th, 2021
- CernVM-FS report out
- infrastructure update: CentOS 8.3
- future of CentOS discussion\*

### CernVM-FS

- Follow up on CernVM-FS discussion from last time
  - spoke with one of primary maintainers
  - learned their interest in being in OpenHPC is not so much related to packaging and distribution, but in documenting a working recipe for usage
  - e.g how to setup CernVM-FS on a cluster?
    - multiple possibilities and nuances given that CernVM-FS wants to generally cache packages somewhere (e.g. head node) for distribution to computes during analysis
- Talked thru what our typical installation recipes look like and provisioning mechanisms
- Next steps:
  - gave them 2.0 recipe
  - they will try to work on what an (optional) install and configuration of CernVMFS would look like as an addition to the recipe

## CentOS 8.3 Infrastructure

- Updated our OBS setup in 2.1 build area to use CentOS8.3 which was released on Dec. 7<sup>th</sup>
- Ingested latest 8.3 image into our x86\_64 CI system
- Needed to make 1 change to test-suite to detect correct OS (there is a change in behavior for /etc/os-release with CentOS8.3, but basic cluster install works fine)



### CentOS Future

- I'm sure most folks have seen or heard about the CentOS bombshell announced Dec 8<sup>th</sup>:
  - "CentOS Linux 8, as a rebuild of RHEL 8, will end at the end of 2021"
  - CentOS will shift to CentOS Stream "which tracks just ahead of a current RHEL release."

#### https://blog.centos.org/2020/12/future-is-centos-stream/

#### CentOS Project shifts focus to CentOS Stream

The future of the CentOS Project is CentOS Stream, and over the next year we'll be shifting focus from CentOS Linux, the rebuild of Red Hat Enterprise Linux (RHEL), to CentOS Stream, which tracks just *ahead* of a current RHEL release. CentOS Linux 8, as a rebuild of RHEL 8, will end at the end of 2021. CentOS Stream continues after that date, serving as the upstream (development) branch of Red Hat Enterprise Linux.

Meanwhile, we understand many of you are deeply invested in CentOS Linux 7, and we'll continue to produce that version through the remainder of the RHEL 7 life cycle.

CentOS Stream will also be the centerpiece of a major shift in collaboration among the CentOS Special Interest Groups (SIGs). This ensures SIGs are developing and testing against what becomes the next version of RHEL. This also provides SIGs a clear single goal, rather than having to build and test for two releases. It gives the CentOS contributor community a great deal of influence in the future of RHEL. And it removes confusion around what "CentOS" means in the Linux distribution ecosystem.

When CentOS Linux 8 (the rebuild of RHEL8) ends, your best option will be to migrate to CentOS Stream 8, which is a small delta from CentOS Linux 8, and has regular updates like traditional CentOS Linux releases. If you are using CentOS Linux 8 in a production environment, and are concerned that CentOS Stream will not meet your needs, we encourage you to contact Red Hat about options.

We have an FAQ to help with your information and planning needs, as you figure out how this shift of project focus might affect you.

[See also: Red Hat's perspective on this.]

### Relevant CentOS FAQs

https://centos.org/distro-faq/

Q2: What about the other releases of CentOS Linux?

#### A:

- •Updates for the CentOS Linux 6 distribution ended November 30, 2020.
- •Updates for the CentOS Linux 7 distribution continue as before until the <u>end</u> <u>of support for RHEL7</u>.
- •Updates for the CentOS Linux 8 distribution continue until the end of 2021; users can choose to switch over directly to CentOS Stream 8
- •Updates for the CentOS Stream 8 distribution continue through the <u>full</u> <u>RHEL support phase</u>.

We will not be producing a CentOS Linux 9, as a rebuild of RHEL 9. Instead CentOS Stream 9 fulfills this role. (See Q6 below regarding the overlap between concurrent streams.)

### Relevant CentOS FAQs

https://centos.org/distro-faq/

Q13: Can I start up a SIG that will maintain CentOS Stream 8 after RHEL8 reaches the end of Full Support?

A: We will not be putting hardware, resources, or asking volunteers to work towards that effort, nor will we allow the CentOS brand to be used for such a project. Once RHEL8 reaches the end of full support, CentOS Stream 8 will be retired from build servers, community build systems, primary mirror sites (copies will remain on vault.centos.org), and other places within our ecosystem. Having SIGs build against multiple streams, and packaging/distributing multiple streams, once they are no longer active, is a distraction from what we want to be our main focus - the active stream that precedes the next RHEL release.

### Relevant CentOS FAQs

https://centos.org/distro-faq/

Q14: Can the CentOS community continue to develop/rebuild CentOS linux?

**A:** We will not be putting hardware, resources, or asking for volunteers to work towards that effort, nor will we allow the CentOS brand to be used for such a project, as we feel that it dilutes what we are trying to do with the refocus on CentOS Stream. That said, the code is open source and we wouldn't try to stop anyone from choosing to use it or build their own packages from the code.

# Impact for us and HPC community

- Discussion issues
  - potentially more interest from folks staying on 1.3 for a while with CentOS7 which does have life until 2024
  - we have support for Leap 15 which is intended to be binary compatible with SI FS15
  - seems likely to expect one or more entities rebuilding RHEL to have a CentOS8 equivalent, e.g.
    - Rocky Linux (<a href="https://rockylinux.org">https://rockylinux.org</a>)
    - also seems likely to move back to lagging more substantially behind RHEL releases
  - certainly a bit of an uproar/unknown in HPC community, but we don't yet fully know how problematic running Stream-based system would be
    - although, fundamental issue is a lack of binary compatibility as we've already seen on 2.x with users who enable Stream
    - at the moment, Stream is completely willing to change .so numbering against previous RHEL release
- Getting numerous questions on what we plan to do:
  - obviously hard to know at this point, but do we want a formal response?

# Potential Options

- extend life of 1.3 branch...
  - update compiler/mpi families to what we have in 2.x
    - some implications/pain points on infrastructure as older build system configuration is harder to work with, but we can do it
    - if we were really committed to 1.3 though, I would probably prefer to try and migrate future builds to our newer OBS build system
    - we could (potentially) do concurrent builds against CentOS 7 and 8 on new build system for 2021
- options after CentOS8 goes away...
  - 1. punt on rhel based distro altogether
  - 2. continue 2.x branch with CentOS Stream
    - to be fair, most of our end-user development packaging is self contained around standalone compiler/MPI builds
    - would expect most issues with administrative packages, potential gotchas with vendor compilers
    - seems we would need to have more aggressive build/test infrastructure to have a chance
      - builds can be done automatically when upstream OS packages are pushed in OBS
      - but, we currently test monolithic installations
      - could potentially pivot to have single package upgrade testing (on pre-installed clusters)
      - this is a big lift, even more infrastructure demands and significant **automation** work
  - 3. punt on CentOS Steam and build against future RHEL clone (e.g. Rocky) maintaining cadence that we have now
    - seems unlikely today to be able to consider both a RHEL clone and CentOS Stream
- Thoughts/discussion?