

Spack

Agenda for the Technical Steering Committee Meeting
September 3, 2025

Attendance

Present	Name	Organization
X	Adam Stewart	Technical University of Munich
	Luke Peyralans	University of Oregon
X	Gregory Becker	Lawrence Livermore National Laboratory
	Harmen Stoppels	Stoppels Consulting
X	John Parent	Kitware
	Marc Paterno	Fermilab
X	Mark Krentel	Rice University
X	Massimiliano Culp	NP-complete, S.r.l.
X	Peter Scheibel	Lawrence Livermore National Laboratory
	Philip Sakievich	Sandia National Laboratories
X	Ryan Krattiger	Kitware
X	Tamara Dahlgren	Lawrence Livermore National Laboratory
X	Todd Gamblin	Lawrence Livermore National Laboratory
X	Wouter Deconinck	University of Manitoba

New Items

Lots of 1.0 updates – see below

1. Any updates from `becker33@llnl.gov` and `ajstewart426@gmail.com` on deprecation policies? (see notes from last time)
 - a. Aim to have a draft policy to vote on before Spack 1.1
2. Pip install spack

- a. Making progress in a series of meetings – configuration is close to sorted; then we can move on to absorbing certain things into lib/spack/spack
 - i. And maybe moving lib/spack/spack to top-level
 - b. Notes for these meetings are at:

https://docs.google.com/document/d/18B7Dh-SrJX3izz5GAgDddzJU_RWgetWOgJuCGGyD6dw/edit?tab=t.0
3. Progress on spack/spack GitLab CI?
 - a. ryan.krattiger@kitware.com ? Nearly completed
4. Progress on spackbot maintainers?
 - a. In review: <https://github.com/spack/spack-packages/pull/1265>
5. Todd Gamblin thinks we need a few more standing agenda items:
 - a. Outreach items don't get covered here. Spack tutorials at:
 - i. PEARC
 - ii. <https://hpcic.llnl.gov/tutorials> (virtual)
 - iii. ICPP next week
 - iv. SC25
 - v. SC25 BOF accepted!
 - vi. SCA/HPC Asia tutorial accepted
 - vii. Kitware running a training in late october/early november
 - b. Propose to add outreach updates to standing agenda
 - i. VOTE: 10 in favor, 1 did not vote
6. ryan.krattiger@kitware.com Binaries WG status? In progress

Standing Agenda Items

1. Any technical decisions that have come up since last month that require a vote?
 - a. becker33@llnl.gov wants to talk about deprecation policies
 - i. Adam's PR from last time is merged.
 - ii. Not sure we have any proposed new deprecation policy – becker33@llnl.gov ?
 - b. Contributor doc now at <https://github.com/spack/spack/pull/51154>
 - i. Please review or Todd will just merge :)
 - c. We are looking at behavior of compiler mixing in an ongoing series of meetings. See:
 - i. https://docs.google.com/document/d/1tVDU2S_Uv-6uSE-Tbz5wOWHx2OhxZT3XKWG5vhpNA4l/edit?tab=t.0#heading=h.z8z2fthpvkse
 - d. Todd and ajstewart426@gmail.com **really** want to switch to just ruff / mypy and no longer have spack style
 - i. Pretty close, just need to finish a little work on spackbot, translate format
 - ii. Ruff is very fast, replaces flake8/isort/black/many others
2. Standing:

- a. How many open issues
 - i. Spack: 2.4k → 2.2k → 1.5k → 1,517
 - ii. Packages: 53 → 60 → 81
 - b. Open PRs
 - i. Spack: 886 → 664 → 554 → 532
 - ii. Packages: 211 → 163 → 186
 - c. do we have, and is that trending the right/wrong way?
 - i. Seems ok?
3. Where are we in the release process / do we need a minor release
- a. v1.0.1 was released August 11:
<https://github.com/spack/spack/releases/tag/v1.0.1>
 - i. Let us know if there are additional high priority bugfixes, etc.
 - ii. `becker33@llnl.gov` found compiler mixing issue today:
 - Not possible to use ifort with unrelated version of icx because relationship between the two is run dependency
 - Need to resolve esp. b/c intel no longer publishing ifort versions
 - Seeing lots of workflows that can be simplified with things like configuration includes and other 1.0 features
 - iii. `lpeyralla@uoregon.edu` issue with cmake splicing:
 - <https://github.com/spack/spack/issues/50560>
 - Pinged `becker33@llnl.gov`
 - b. v1.0.2 aiming to release by next week
 - c. What about the package repo?
 - i. We've discussed doing minor releases halfway between Spack minor release – if so, we're due for a minor release of the packages repo this month
4. What are the top priorities for the Spack project, and are there developers making progress towards those?
- a. Version 1.1:
 - i. Error messages
 - ii. Performance
 - iii. Buildcache curation
 - <https://github.com/spack/spack/pull/51213>
 - iv. Isolation + pip install spack
 - Hope to finally resolve this
 - v. Treat externals as concrete specs
 - <https://github.com/spack/spack/pull/51118>
 - This allows modeling dependencies for externals
 - It also allows a 1:1 mapping from specs in packages.yaml to concrete specs that will be installed from externals, for a given fixed repository.

- Discussion ongoing how to improve this in the future, by changing how we compute the package hash

5. ML SIG

- a. Desperately looking for help adding LLVM to CI image
 - i. <https://github.com/spack/gitlab-runners/pull/67>
 - ii. This has been blocking all updates to TF/JAX since March
- b. macOS Bazel builds still very broken
 - i. Apple Clang patching required?
 - ii. Previously codesigning issues, allegedly solved but can't check
 - iii. Will likely discover new issues with TF/JAX down the line

Action Items from last time

- ☐ ryan.krattiger@kitware.com and Chris Green to look at whether Spackbot can work on forks, how to lock it down to only relevant repos

Status of this now that Spackbot is back?

Spack

Agenda for the Technical Steering Committee Meeting
August 13, 2025

Attendance

Present	Name	Organization
X	Adam Stewart	Technical University of Munich
X	Luke Peyralans	University of Oregon
X	Gregory Becker	Lawrence Livermore National Laboratory
X	Harmen Stoppels	Stoppels Consulting
X	John Parent	Kitware
X	Marc Paterno	Fermilab
X	Mark Krentel	Rice University
X	Massimiliano Culpo	NP-complete, S.r.l.
X	Peter Scheibel	Lawrence Livermore National Laboratory
X	Philip Sakievich	Sandia National Laboratories
X	Ryan Krattiger	Kitware
X	Tamara Dahlgren	Lawrence Livermore National Laboratory
X	Todd Gamblin	Lawrence Livermore National Laboratory
X	Wouter Deconinck	University of Manitoba

New Items

Lots of 1.0 updates – see below

7. Slack
 - a. Nevermind – Slack decided to keep us all pro for free
 - b. We still have matrix just in case – more updates as they come available
8. (Ryan) Release cadence for spack-packages?

- a. Can we do monthly now?
 - i. How should backports work?
 - ii. How can we do LTS releases if we release monthly?
 - iii. becker33@llnl.gov happy with quarterly for major package releases
 - 1. Need to be more on top of flagging patch releases for backports
 - 2. Want to automate backporting eventually (tag, automatically backport on merge to relevant release branches)
 - 3. becker33@llnl.gov can't work on this before 1.1 – if others could look at it
 - a. ryan.krattiger@kitware.com says [ghostflow](#) can do this
 - b. ryan.krattiger@kitware.com could do demo for others to evaluate the workflow
 - iv. Todd Gamblin - let's try quarterly and see what happens
 - 1. We already do snapshots
 - 2. Tradeoff is how much backporting do we need to do
 - 3. We are not currently doing tons of backports
 - 4. Keep backports for security-related changes
 - a. E.g. curl 8.15.0 (from 8.11)
 - 5. Updating every patch is too hard w/o becker33@llnl.gov
 - v. **Voted** on quarterly releases as above:
 - 1. **YES** – passed with 13 votes and one abstain
- 9. becker33@llnl.gov wants to talk about deprecation policies
 - a. Adam has done a lot of work on a python deprecation PR
 - b. In a PR to deprecate Python 3.8:
 - i. Package like libproxy has python variant and dependency python is upper-bounded at some old python
 - 1. Adam understandably doesn't want to figure out how to update all these
 - 2. But most recent 10 releases support python
 - 3. Need to figure out how to help with PRs like this to make these PRs nondisruptive without putting it all on Adam (or other very helpful person)
 - 4. Adam tagged all package maintainers, but only one responded
 - c. Previously approved policy said to deprecate all but latest minor version on packages
 - i. Hurts people who are relying on past minors – e.g. for externals in distros
 - ii. Makes concretization/updating too prickly
 - iii. Suggest to keep latest patch on minors back several versions
 - d. Deprecation and removal cadence, especially for core packages (compilers, MPI)
 - i. Adam and Greg discussion: Not granular enough

- ii. Need more granular deprecation information
 - iii. Version/time of deprecation, or of expected removal?
 - iv. Types of deprecation?
- 10. Pip install spack
 - a. Moved most things into lib/spack/spack
 - b. Still need a lot of changes to spack.paths
 - c. Where to put config defaults?
- 11. ML CI updates
 - a. Clang builds for TF/Keras very close
 - b. macOS Bazel builds still very broken
- 12. Progress on spack/spack GitLab CI?
- 13. Progress on spackbot maintainers?

Standing Agenda Items

- 6. Any technical decisions that have come up since last month that require a vote?
 - a. `becker33@llnl.gov` wants to talk about deprecation policies
 - i. Merge Adam's PR? :')
 - ii. Deprecation and removal cadence, especially for core packages
 - iii. Boolean-only is not sufficient, version/time? Types of deprecation?
 - b. [Contributor doc](#) still in progress – `dahlgren1@llnl.gov` has made some edits.
 - i. Voted: Passed with 9 votes to just put this in the contributor docs (RTD)
 - [dahlgren1@llnl.gov](#) will move the contents to Spack Core
- 7. Standing:
 - a. How many open issues
 - i. Spack: 2.4k → 2.2k → 1.5k
 - ii. Packages: 53 → 60
 - b. Open PRs
 - i. Spack: 886 → 664 → 554
 - ii. Packages: 211 → 163
 - c. do we have, and is that trending the right/wrong way?
- 8. Where are we in the release process / do we need a minor release
 - a. v1.0.0 was released July 20:
 - <https://github.com/spack/spack/releases/tag/v1.0.0>
 - i. `paterno@fnal.gov` has feedback:
 - Lots of procedures being tested against 1.0; 1.0 release is a big help to Fermilab
 - a. Issues with native + other installed compilers
 - b. `scheibel1@llnl.gov` is working on this:
 - i. <https://github.com/spack/spack/pull/51135>
 - ii. `becker33@llnl.gov` found compiler mixing issue today:

- Not possible to use ifort with unrelated version of icx because relationship between the two is run dependency
 - Need to resolve esp. b/c intel no longer publishing ifort versions
 - Seeing lots of workflows that can be simplified with things like configuration includes and other 1.0 features
- iii. lpeyr@uoregon.edu issue with cmake splicing:
 - <https://github.com/spack/spack/issues/50560>
- b. v1.0.1 was released August 11
- c. Planning to do a 1.0.2 release fairly soon – see v1.0.2 tag on github
- d. v1.1 planning has begun
 - i. Targeting November (SC25) as usual.
 - ii. Planning to feature freeze one month out – rush to 1.0 was stressful but worth it, but we should still be doing feature freezes to make the releases more robust.
 - iii. See:
 - <https://github.com/spack/spack/milestone/21>
 - [Spack 5-year release plan \(with roadmap items slotted\)](#)
 - iv. We should talk about items to go in
- 9. What are the top priorities for the Spack project, and are there developers making progress towards those?
 - a. Version 1.1:
 - i. Error messages
 - ii. Performance
 - iii. Buildcache curation
 - iv. Isolation + pip install spack
 - Hope to finally resolve this

Action Items from last time

- ☒ ~~becker33@llnl.gov and massimiliano.culpo@gmail.com to work on clarifying stalebot message~~
- ☒ Everyone should read ~~dahlgren1@llnl.gov's criteria for what to merge and comment:~~
 - <https://docs.google.com/document/d/1xsQmHML7fedVi5t0hpzRHxW7xV288rAaj21QUm5lVi8/edit?tab=t.0#heading=h.gxkuh3kwz4ta>
- ☒ Document Process for adding new maintainers (with merge privileges)
 - becker33@llnl.gov : make a proposal for next TSC, work with @Phil and ajstewart426@gmail.com (adam to review before TSC presentation)
- ☐ ryan.krattiger@kitware.com and Chris Green to look at whether Spackbot can work on forks, how to lock it down to only relevant repos
 - Status of this now that Spackbot is back?

Zoom Chat

12:16:45 From Ryan Krattiger (Kitware) to Everyone:

<https://github.com/spack/spack-infrastructure/issues/1123>

12:28:47 From Alec Scott (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

<https://github.com/spack/spack-packages/pull/507/files>

12:33:01 From Tammy D (LLNL/Spack) to Everyone:

My builtin check PR is <https://github.com/spack/spack-packages/pull/526>

Alec Scott (Lawrence Livermore National Laboratory (LLNL)): 👍

12:51:08 From Ryan Krattiger (Kitware) to Everyone:

Are there docs for connecting to the spack matrix?

12:51:55 From Alec Scott (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

Just click the matrix button on the Spack README

12:52:49 From Alec Scott (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

<https://matrix.to/#/#spack-space:matrix.org>

12:58:23 From Tammy D (LLNL/Spack) to Everyone:

Do you need to create a new account on matrix?

Spack

Agenda for the Technical Steering Committee Meeting
July 9, 2025

Attendance

Present	Name	Organization
	Adam Stewart	Technical University of Munich
X	Luke Peyralans	University of Oregon
X	Gregory Becker	Lawrence Livermore National Laboratory
X	Harmen Stoppels	Stoppels Consulting
X	John Parent	Kitware
X	Marc Paterno	Fermilab
X	Mark Krentel	Rice University
X	Massimiliano Culpo	NP-complete, S.r.l.
X	Peter Scheibel	Lawrence Livermore National Laboratory
	Philip Sakievich	Sandia National Laboratories
X	Ryan Krattiger	Kitware
X	Tamara Dahlgren	Lawrence Livermore National Laboratory
X	Todd Gamblin	Lawrence Livermore National Laboratory
	Wouter Deconinck	University of Manitoba

New Items

Lots of 1.0 updates – see below

14. Started making a roadmap that I intend to make more public:
 - a. [Spack 5-year Roadmap Items \(by category\)](#)
 - b. [Spack 5-year release plan \(with roadmap items slotted\)](#)
 - i. Subject to change, obviously – this is aspirational

15. Slack

- a. Premium plan is scheduled to end on August 7
 - i. Once the premium plan ends, message history will be reduced to 30 days.
- b. Currently a bridge is connecting the Spack Slack workspace and a Spack Matrix instance to maintain parity.
- c. In the future, the Matrix instance could be self-hosted

Standing Agenda Items

10. Any technical decisions that have come up since last month that require a vote?

- a. Todd Gamblin reviewed the [contributor doc](#) and started making edits (including updates for 1.0) – want to put this off one more meeting before voting on an initial version

11. How many open issues (2.4k → 2.2k + 53) and PRs (886 → 664 + 211) do we have, and is that trending the right/wrong way?

- a. Repo is split but PRs are still about the same in total
- b. Stalebot has been deployed by massimiliano.culpo@gmail.com : <https://github.com/spack/spack/pull/50974>.
 - i. First run is morning of this TSC meeting – should start marking things stale but won't close for another 30 days

12. Where are we in the release process / do we need a minor release

- a. LOTS of new 1.0 stuff
- b. Things merged since last time:
 - i. Build systems moved into the package repository
 - ii. Package repository split
 - iii. Toolchains
 - <https://github.com/spack/spack/pull/50481>
 - iv. Virtual assignment syntax
 - <https://github.com/spack/spack/pull/50858>
 - v. Spackbot resurrected for 2-repo development
 - Labels and reviewers being ported to actions:
 - a. <https://github.com/spack/spack-packages/pull/507>
- c. We had anticipated releasing 1.0 at ISC, but it was not ready
 - i. Still key bugs remaining; package API was not ready to go
 - ii. Decided to delay and make sure 1.0 is robust
 - iii. [v1.0.0 Milestone](#) currently has one major item left: formally documenting the package API
 - One bug with parallel locking
 - One question remaining around where to draw the line between PackageBase and repositories
- d. Package API work

- i. Move *everything* packages rely from core into `spack.package`.
 - Guarantee `spack.package` support for Spack 1.x
 - Some items there may be deprecated from the start but they will be in one place.
 - See <https://github.com/spack/spack/issues/50388> for the list of symbols that need moving
 - ii. Formally document API and guarantees
 - e. We are thinking we can do the final release this week or next
13. What are the top priorities for the Spack project, and are there developers making progress towards those?
- a. Version 1.0, and
 - b. See the roadmap items above under New Items

Action Items from last time

- ☐ Everyone should read `dahlgren1@llnl.gov`'s criteria for what to merge and comment – we will vote next time:
 - <https://docs.google.com/document/d/1xsQmHML7fedVi5t0hpzRHxW7xV288rAaj21QUm5lVi8/edit?tab=t.0#heading=h.gxkuh3kwz4ta>
- ☐ Document Process for adding new maintainers (with merge privileges)
 - `becker33@llnl.gov` : make a proposal for next TSC, work with @Phil and `ajstewart426@gmail.com` (adam to review before TSC presentation)
- ☐ `ryan.krattiger@kitware.com` and Chris Green to look at whether Spackbot can work on forks, how to lock it down to only relevant repos
 - Status of this now that Spackbot is back?

Zoom Chat

12:16:45 From Ryan Krattiger (Kitware) to Everyone:

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<https://matrix.to/#/#spack-space:matrix.org>

12:58:23 From Tammy D (LLNL/Spack) to Everyone:
Do you need to create a new account on matrix?

Spack

Agenda for the Technical Steering Committee Meeting
April 2, 2025

Attendance

Present	Name	Organization
	Adam Stewart	Technical University of Munich
X	Luke Peyralans	University of Oregon
X	Gregory Becker	Lawrence Livermore National Laboratory
	Harmen Stoppels	Stoppels Consulting
X	John Parent	Kitware
X	Marc Paterno	Fermilab
X	Mark Krentel	Rice University
X	Massimiliano Culpo	NP-complete, S.r.l.
X	Peter Scheibel	Lawrence Livermore National Laboratory
X	Philip Sakievich	Sandia National Laboratories
X	Ryan Krattiger	Kitware
X	Tamara Dahlgren	Lawrence Livermore National Laboratory
X	Todd Gamblin	Lawrence Livermore National Laboratory
X	Wouter Deconinck	University of Manitoba

Standing Agenda Items

14. Any technical decisions that have come up since last month that require a vote?
 - a. Putting `dahlgren1@llnl.gov` 's contributor doc off another month – will be sure to ping everyone a week before to look at it.
 - b. Much progress on compiler dependencies:
 - i. Compiler dependencies is FINALLY MERGED:
<https://github.com/spack/spack/pull/45189>

- Probably the largest Spack PR ever, certainly the biggest change
 - Seems to have gone pretty smoothly considering.
 - ii. Toolchains: <https://github.com/spack/spack/issues/49732>
 - iii. Package API and split repo work are gearing up:
 - <https://github.com/spack/spack/pull/49191>
 - <https://github.com/spack/spack/pull/48930>
 - <https://github.com/spack/spack-packages>
 - <https://github.com/spack/spack/issues/47480>
15. How many open issues (still 2.4k) and PRs (886) do we have, and is that trending the right/wrong way?
- a. Stalebot in progress by Greg.
 - b. We voted on a definition of stale that stalebot can't do.
 - i. We want to mark things stale only if the ball is in the author's court.
 - ii. Looking at using <https://github.com/actions/stale>
 - iii. PASSED: 12 out of 12 attending, 2 absent.
16. Where are we in the release process / do we need a minor release
- a. Not a lot of backports/bugfixes built up now
 - b. Change in optimization priorities bt/w virtuals that are runtime libs (injected) vs regular virtuals went in w/compiler nodes, will look at backporting for 0.23.x
 - c. Need to backport style option to swap compilers and variants
17. What are the top priorities for the Spack project, and are there developers making progress towards those?
- a. (Chris Green) Want straightforward way of updating recipes in external repos

Action Items from last time

- ☐ Everyone should read dahlgren1@llnl.gov's criteria for what to merge and comment – we will vote next time:
 - <https://docs.google.com/document/d/1xsQmHML7fedVi5t0hpzRHXW7xV288rAai21QUm5lVi8/edit?tab=t.0#heading=h.gxkuh3kwz4ta>
- ☐ Gregory Becker to configure stalebot as voted, with input from dahlgren1@llnl.gov
- ☐ Document Process for adding new maintainers (with merge privileges)
 - becker33@llnl.gov : make a proposal for next TSC, work with @Phil and ajstewart426@gmail.com (adam to review before TSC presentation)
- ☐ ryan.krattiger@kitware.com and Chris Green to look at whether Spackbot can work on forks, how to lock it down to only relevant repos

Zoom Chat

12:02:37 From Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)) to Everyone:
<https://github.com/spack/governance/tree/main/tsc-meeting-notes>

12:03:36 From Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

<https://docs.google.com/document/d/10Qetgh1WuXw9Fw4HWjCR9Wq2e9gcD4pVGwnXEDikSng/edit?tab=t.0#heading=h.u2jlg6amiko2>

12:05:18 From Marc Paterno (Fermilab) to Everyone:

Thanks.

12:07:50 From Wouter Deconinck to Everyone:

Organizational suggestion: I would suggest we ensure that the meeting notes have a summary of action items, and that those are sent around to all 1 week before the next meeting as a reminder. Actions items (like: read Tammy's document) should be able to assigned to "all" as well.

Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)), Mark Krentel: 👍

12:08:32 From Wouter Deconinck to Everyone:

Been fixing missing depends_on(c) all week yeah

12:09:16 From Chris Green to Everyone:

Working on it here at FNAL, and dealing with trying to make our more complex environments work with the new paradigm.

Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)): 👍

12:11:26 From Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

See <https://github.com/spack/spack/issues/49732#issuecomment-2771939930> and comment if you have input

12:11:37 From Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

^ toolchain specs

12:11:40 From Massimiliano Culpo to Everyone:

@Chris Green Are you updating any public issue / PRs with the problems you are encountering?

12:12:31 From Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

Package api: <https://github.com/spack/spack/pull/49191>

12:17:36 From Chris Green to Everyone:

Replying to "@Chris Green Are you updating any public issue / P...":

I was interrupted by a bereavement, unfortunately, but I hope to have something to report directly relevant to compilers-as-nodes by the end of the week.

Our most important already-open issues/PRs right now are
<https://github.com/spack/spack/issues/48203>, <https://github.com/spack/spack/pull/49267>, and
<https://github.com/spack/spack/issues/49236>.

12:18:38 From Ryan Krattiger (Kitware) to Everyone:

Replying to "@Chris Green Are you updating any public issue / P...":
these are both being investigated more with the common stack work. I have
unfortunately not found the core issue yet

Chris Green: 👍

12:19:29 From Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)) to Everyone:
<https://github.com/spack/spack/issues/49732>

12:19:29 From Gregory Becker (Lawrence Livermore National Laboratory (LLNL)) to Everyone:
<https://github.com/spack/spack/issues/49732>

12:23:21 From Gregory Becker (Lawrence Livermore National Laboratory (LLNL)) to Everyone:
<https://github.com/actions/stale>

12:39:17 From Massimiliano Culpo to Everyone:
There's a discussion with more details here:
<https://github.com/spack/spack/issues/44379>

12:40:41 From Massimiliano Culpo to Everyone:
We are also getting the walrus operator ``foo bar:=a,b,c``

12:41:06 From Wouter Deconinck to Everyone:
Why limit to ascii... ``spack spec zlib ^ gcc` ;-)`
Peter Scheibel (Lawrence Livermore National Laboratory (LLNL)): 👍
Massimiliano Culpo, Ryan Krattiger (Kitware): 😄

12:49:20 From Massimiliano Culpo to Everyone:
@Chris Green You might want to check : <https://github.com/spack/spack/pull/49256>

Spack

Agenda for the Technical Steering Committee Meeting
March 5, 2025

Attendance

Present	Name	Organization
	Adam Stewart	Technical University of Munich
X	Luke Peyralans	University of Oregon
X	Gregory Becker	Lawrence Livermore National Laboratory
X	Harmen Stoppels	Stoppels Consulting
X	John Parent	Kitware
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X	Massimiliano Culpo	NP-complete, S.r.l.
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X	Ryan Krattiger	Kitware
X	Tamara Dahlgren	Lawrence Livermore National Laboratory
X	Todd Gamblin	Lawrence Livermore National Laboratory
X	Wouter Deconinck	University of Manitoba

Standing Agenda Items

18. Any technical decisions that have come up since last month that require a vote?

a. Harmen: Version deprecation

i. https://docs.google.com/document/d/1-BZL_00o_7jofyYpupEstpctDv7Py0WJLtrlxbbDi8/edit

b. Merge criteria

- i. (deferred to next time: Adam was interested and couldn't make it this time)
 - ii. Two separate docs (one for core, one for packages):
 - <https://docs.google.com/document/d/1xsQmHML7fedVi5t0hpzRHxW7xV288rAaj21QUm5lVi8/edit?tab=t.0#heading=h.gxkuh3kwz4ta>
 - https://docs.google.com/document/d/1GfOHe1DA-XkRfSpjmAK_Af7oPvwFv7b5qE5mbEN1vsw/edit?usp=sharing
 - c. deprecate automatic resolution of `@git`. Versions
 - i. (didn't end up talking about this one)
19. How many open issues and PRs do we have, and is that trending the right/wrong way?
20. Where are we in the release process / do we need a minor release
21. What are the top priorities for the Spack project, and are there developers making progress towards those?

(NOTE: we never reached the end of 1, so didn't get to 2-4)

Action Items from last time

- ☐ Everyone should read `dahlgren1@llnl.gov`'s criteria for what to merge and comment – we will vote next time:
 - <https://docs.google.com/document/d/1xsQmHML7fedVi5t0hpzRHxW7xV288rAaj21QUm5lVi8/edit?tab=t.0#heading=h.gxkuh3kwz4ta>
- ☐ Gregory Becker to configure stalebot as voted, with input from `dahlgren1@llnl.gov`
- ☐ Document Process for adding new maintainers (with merge privileges)
 - `becker33@llnl.gov` : make a proposal for next TSC, work with `@Phil` and `ajstewart426@gmail.com` (adam to review before TSC presentation)
- ☐ Max + Harmen to make a doc and propose a PR with draft bot approval criteria here: <https://github.com/spack/governance> (Max: This one is waiting on availability from Bernhard, and pursued at low priority)
- ☐ `ryan.krattiger@kitware.com` and Chris Green to look at whether Spackbot can work on forks, how to lock it down to only relevant repos

Spack

Agenda for the Technical Steering Committee Meeting
February 5, 2025

Attendance

Present	Name	Organization
X	Adam Stewart	Technical University of Munich
X	Luke Peyralans	University of Oregon
	Gregory Becker	Lawrence Livermore National Laboratory
X	Harmen Stoppels	Stoppels Consulting
X	John Parent	Kitware
X	Marc Paterno	Fermilab
X	Mark Krentel	Rice University
X	Massimiliano Culp	NP-complete, S.r.l.
X	Peter Scheibel	Lawrence Livermore National Laboratory
X	Philip Sakievich	Sandia National Laboratories
X	Ryan Krattiger	Kitware
X	Tamara Dahlgren	Lawrence Livermore National Laboratory
X	Todd Gamblin	Lawrence Livermore National Laboratory
X	Wouter Deconinck	University of Manitoba

Agenda

Standing Agenda Items

22. Any technical decisions that have come up since last month that require a vote?
 - a. No

23. How many open issues and PRs do we have, and is that trending the right/wrong way?
 - a. PRs: Up to 874 from 873
 - b. Issues: Up to 2399 from 2388
24. Where are we in the release process / do we need a minor release
 - a. PR was created this week
25. What are the top priorities for the Spack project, and are there developers making progress towards those?
 - a.

Notes from meeting

1. Merge Criteria Document
 - a. Still being iterated on and not ready for a vote
 - b. Comments
 - i. Naming conventions
 1. Changes to “Merge-to-Develop” and “Package Maintainers”
 - ii. Criteria for Commits
 1. No anonymous committers
 2. Committers must have a record of contributions
 3. Slack account
 4. TSC vote to approve new committers
 - a. New committee for this purpose
 - iii. PR Requirements
 1. Create a PR template that includes a checklist
 - c. Tammy, Adam and Wouter will make revisions to the document

New business

1. Spack User Meeting at HPSF Con
 - a. <https://spack.io/spack-user-meeting-2025/>
 - b. Please submit materials and attend if possible.

Action items from last time

- ☐ Everyone should read dahlgren1@llnl.gov's criteria for what to merge and comment – we will vote next time:
 - o <https://docs.google.com/document/d/1xsQmHML7fedVi5t0hpbzRHXW7xV288rAaj21QUm5lVi8/edit?tab=t.0#heading=h.gxkuh3kwz4ta>
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Action Items

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- ☐ ryan.krattiger@kitware.com and Chris Green to look at whether Spackbot can work on forks, how to lock it down to only relevant repos

Zoom Chat

12:10:43 From Wouter Deconinck to Everyone:

so, only core maintainers would be able to merge packages to develop, but package maintainers wouldn't?

12:12:46 From Phil Sakievich to Everyone:

steward?

12:12:56 From Phil Sakievich to Everyone:

package-stewards?

12:13:43 From Phil Sakievich to Everyone:

package-advisor if you don't have merge privileges?

12:15:05 From Peter Scheibel (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

I think we may want to create a comment for each of these controversial vocabulary terms, but not dwell on it here

Phil Sakievich, Ryan Krattiger (Kitware), Adam Stewart, Wouter Deconinck: 👍

12:15:19 From Peter Scheibel (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

Choosing the right term is important, but can eat a lot of time

12:21:19 From Adam Stewart to Everyone:

Background checks for all contributors 🙄

12:23:45 From Wouter Deconinck to Everyone:

Replying to "Background checks for all contributors 🙄":

ChatGPT prompt: please summarize the github contributions by adamjstewart.

Adam Stewart: 👍

12:26:34 From Harmen Stoppels to Everyone:

The xz issue was basically the maintainer trusting a random contributor he never met. I think having met someone in real life is a strict but good requirement.

12:27:32 From Wouter Deconinck to Everyone:

Replying to "The xz issue was basically the maintainer trusting...":

I think I trust you, but now I'm not sure based on that criterion.

12:29:49 From Harmen Stoppels to Everyone:

Replying to "The xz issue was basically the maintainer trusting...":

∃ core member that has met the person ;) not ∀

12:32:37 From Ryan Krattiger (Kitware) to Everyone:

Would it make sense to have a PR template for different types of PRs going into Spack that mirrors/enforces this document?

12:36:21 From Adam Stewart to Everyone:

Agreed, a checklist with things like "did you check for updated deps, did you try to install the package, etc." would be useful

12:37:41 From Wouter Deconinck to Everyone:

I think we have more and more users that are primarily interested in making sure the most recent version works. That often works without even addressing updated minimum version requirements on dependencies.

12:47:36 From Adam Stewart to Everyone:

Replying to "I think we have more and more users that are prima...":

This gets complicated by the concretizer choosing older versions of packages when needed. I encourage deprecating versions that are too old to maintain or are unlikely correct.

12:49:18 From Adam Stewart to Everyone:

1 week is my policy, but it would be good to make this official

12:49:57 From Adam Stewart to Everyone:

Don't go by vacation, Germans take at least 4 weeks of vacation in a row
Phil Sakievich: 😂

12:51:20 From Adam Stewart to Everyone:

I'm fine with merging immediately if no maintainer exists

Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)), Tammy D
(LLNL/Spack): 👍

12:52:57 From Massimiliano Culpo to Everyone:

Apologies, had some unexpected delays on a previous appointment

Spack

Agenda for the Technical Steering Committee Meeting
January 9, 2025

Attendance

Present	Name	Organization
X	Adam Stewart	Technical University of Munich
X	Luke Peyralans	University of Oregon
X	Gregory Becker	Lawrence Livermore National Laboratory
X	Harmen Stoppels	Stoppels Consulting
X	John Parent	Kitware
X	Marc Paterno	Fermilab
X	Mark Krentel	Rice University
X	Massimiliano Culpo	NP-complete, S.r.l.
X	Peter Scheibel	Lawrence Livermore National Laboratory
	Philip Sakievich	Sandia National Laboratories
	Ryan Krattiger	Kitware
X	Tamara Dahlgren	Lawrence Livermore National Laboratory
X	Todd Gamblin	Lawrence Livermore National Laboratory
X	Wouter Deconinck	University of Manitoba

Agenda

Standing Agenda Items

- 26. Any technical decisions that have come up since last month that require a vote?
- 27. How many open issues and PRs do we have, and is that trending the right/wrong way?
 - a. PRs: Up to 873 from 764
 - b. Issues: Up to 2388 from 2385
- 28. Where are we in the release process / do we need a minor release
 - a. v0.23.1 does not have enough backports to require a patch release yet
 - b. v1.0.0-alpha: we will have an v1.0.0-alpha3 next week
 - i. Restores usage for cray systems
 - ii. Improves coverage for non-gcc non-clang compilers
 - iii. Will be based on its own branch off develop
 - iv. Compilers as nodes is not merged to develop yet
 - v. alpha3 will have the compiler wrappers as a separate package/node
- 29. What are the top priorities for the Spack project, and are there developers making progress towards those?
 - a. V1.0.0 priorities
 - i. Compilers as nodes (Max is leading), Separating the packages from the repo (Tammy)
 - b. Environment inclusion
 - c. Pinning git sha's

Notes from meeting

- 2. Postponing vote on the merge criteria to next time
- 3. Breaking changes for v1.0
 - a. `spec.concretize` deprecation
 - i. Should we do the same for ``spec.installed`` and other similarly stateful methods
- 4. Aiming to merge compilers as nodes to develop this month – Todd, Harmen, and Greg will review the PR

New business

Action items from last time

- ☐ Everyone should read `dahlgren1@llnl.gov`'s criteria for what to merge and comment – we will vote next time:

- <https://docs.google.com/document/d/1xsQmHML7fedVi5t0hpbzRHxW7xV288rAaj21QUm5lVi8/edit?tab=t.0#heading=h.gxkuh3kwz4ta>
- ☐ Gregory Becker to configure stalebot as voted, with input from dahlgren1@llnl.gov
- ☐ Document Process for adding new maintainers (with merge privileges)
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- ☐ Max + Harmen to make a doc and propose a PR with draft bot approval criteria here: <https://github.com/spack/governance>
- ☐ ryan.krattiger@kitware.com and Chris Green to look at whether Spackbot can work on forks, how to lock it down to only relevant repos
 - Decision was made, but changes aren't implemented yet
- ☒ ~~Discuss build cache curation, how to enable by default, what to populate it with~~
 - Is macOS supported yet? How to get bazel working? Adam Stewart
 - There are ongoing plans for changes for v1.0 to improve scalability of build caches using content addressing
 - There is a known bug with hard links on macOS – fixed by Harmen Stoppels
- ☒ ~~Discuss deprecation policies~~ Adam Stewart
 - https://spack.readthedocs.io/en/latest/packaging_guide.html#deprecating-old-versions
 - When should deprecated versions be removed?
 - Do we need to deprecate versions of indirectly affected packages?
 - Do we need more granular metadata (deprecated='v0.24', deprecated='cve', etc.)?
 - <https://github.com/spack/spack/issues/38829>
 - Decision: copy deprecation policy to a policies document, maintain current policy

Action Items

- ☐ Everyone should read dahlgren1@llnl.gov 's criteria for what to merge and comment – we will vote next time:
 - <https://docs.google.com/document/d/1xsQmHML7fedVi5t0hpbzRHxW7xV288rAaj21QUm5lVi8/edit?tab=t.0#heading=h.gxkuh3kwz4ta>
- ☐ Gregory Becker to configure stalebot as voted, with input from dahlgren1@llnl.gov
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- ☐ ryan.krattiger@kitware.com and Chris Green to look at whether Spackbot can work on forks, how to lock it down to only relevant repos

Zoom Chat

12:01:56 From Tom Slanda (The Linux Foundation) to Everyone:

Agenda:

<https://docs.google.com/document/d/10Qetgh1WuXw9Fw4HWjCR9Wq2e9gcD4pVGwnXEDikSng/edit?tab=t.0#heading=h.u2jlg6amiko2>

12:04:46 From Wouter Deconinck to Everyone:

Maybe we need a strawpoll vote just to get a sense of who has read it

12:05:33 From Peter Scheibel (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

Where are the meeting notes for this meeting?

12:05:43 From Gregory Becker (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

<https://docs.google.com/document/d/10Qetgh1WuXw9Fw4HWjCR9Wq2e9gcD4pVGwnXEDikSng/edit?tab=t.0>

12:05:47 From Peter Scheibel (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

Reacted to "https://docs.google...." with 👍

12:08:11 From Massimiliano Culpo to Everyone:

Apologies for being late, network dropped 1 min. Before the meeting. Took a while to go on 4G mobile :-)

12:12:42 From Gregory Becker (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

<https://github.com/spack/spack/pull/47971>

12:12:57 From Gregory Becker (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

<https://github.com/spack/spack/pull/47978>

12:13:13 From Gregory Becker (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

<https://github.com/spack/spack/discussions/30634>

12:14:06 From Tammy D. (LLNL/Spack) to Everyone:

FYI. For simplicity I just gave edit access to Spack Merge Criteria to anyone with a link.

12:14:24 From Massimiliano Culpo to Everyone:

<https://github.com/spack/spack/pull/48450>

12:14:25 From Adam Stewart to Everyone:

Reacted to "FYI. For simplicity ..." with 👍

12:14:33 From Massimiliano Culpo to Everyone:

Reacted to "FYI. For simplicity ..." with 👍

12:15:51 From Tammy D. (LLNL/Spack) to Everyone:

Thanks to Adam for being the first to request edit access. 😊

12:22:40 From Harmen Stoppels to Everyone:

just fyi i fixed the git/hardlink relocation issue on macos

12:22:48 From Gregory Becker (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

Reacted to "just fyi i fixed the..." with 🎉

12:22:53 From Harmen Stoppels to Everyone:

dunno about bazel

12:23:08 From Gregory Becker (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

@Harmen Stoppels can you paste the PR? I want to take a look at it

12:25:01 From Tammy D. (LLNL/Spack) to Everyone:

Reacted to "just fyi i fixed the..." with 🎉

12:33:35 From Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)) to Everyone:
Reacted to "just fyi i fixed the..." with 🎉

12:33:35 From Massimiliano Culpo to Everyone:
1 year, per repo

12:34:33 From Tom Payerle to Everyone:
I think 2 years is good for backward compatibility of packaging API

12:34:37 From Wouter Deconinck to Everyone:
... HEP with it's decade-long software support cycles is not going to be able to have its needs met with whatever policy :-D

12:34:49 From Adam Stewart to Everyone:
Reacted to "... HEP with it's de..." with 😊

12:34:51 From Massimiliano Culpo to Everyone:
Reacted to "... HEP with it's de..." with 😊

12:35:14 From Adam Stewart to Everyone:
PSF has a 5 yr cycle for Python, the NumPy ecosystem has a 3 yr cycle

12:36:52 From Adam Stewart to Everyone:
"removing a variant" this gets into my deprecation discussion

12:38:28 From Peter Scheibel (Lawrence Livermore National Laboratory (LLNL)) to Everyone:
How does variant deprecation get into compatibility between the core logic and core package repo? (I think it's an interesting problem, but don't see how it relates)

12:38:47 From Tammy D. (LLNL/Spack) to Everyone:
Also need to address/document policy wrt changes to variant defaults.

12:39:18 From Adam Stewart to Everyone:
Reacted to "Also need to address..." with 👍

12:41:01 From Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)) to Everyone:
Reacted to "Also need to address..." with 👍

12:42:21 From Tammy D. (LLNL/Spack) to Everyone:
In an ideal world, ppl should say what they wanted wrt variant values.

12:43:36 From Tom Payerle to Everyone:
Ideally, should there be a policy that new variants should default to the previous behavior.

I.e., if we add a new variant to foo, then the default behavior for that variant should be the same as was being built before the variant was added, or at least as close to that as is feasible. I.e. if we add a int64bit variant to use 64 bit integers, but the old version was (implicitly) building with 32 bit integers, the default should be to continue building w 32 bit integers

12:46:17 From Gregory Becker (Lawrence Livermore National Laboratory (LLNL)) to Everyone:
Reacted to "Ideally, should ther..." with 👍

12:46:22 From Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)) to Everyone:
Reacted to "Ideally, should ther..." with 👍

12:46:24 From Todd Gamblin (Lawrence Livermore National Laboratory (LLNL)) to Everyone:
Removed a 👍 reaction from "Ideally, should ther..."

12:46:48 From Adam Stewart to Everyone:

Reacted to "Ideally, should ther..." with 😞

12:47:15 From Wouter Deconinck to Everyone:

@Harmen Stoppels Is that traverse issue starting to hit people on v0.23.0 you think?

12:47:28 From Adam Stewart to Everyone:

Do we want to discuss version/variant deprecation policies? We really only talked about variants, not about when/how to remove versions

12:51:41 From Massimiliano Culpo to Everyone:

Here's the PR: <https://github.com/spack/spack/pull/48467>

12:57:17 From Wouter Deconinck to Everyone:

If there is a maintainer who commits to supporting the older versions,...

12:57:29 From Adam Stewart to Everyone:

^ in that case then they would remove deprecated=True

12:57:41 From Wouter Deconinck to Everyone:

Replying to "^ in that case then ..."

:1

12:57:46 From Wouter Deconinck to Everyone:

Replying to "^ in that case then ..."

:+1:

12:57:50 From Wouter Deconinck to Everyone:

Replying to "^ in that case then ..."

:shrug:

12:58:00 From Gregory Becker (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

I am in favor of the current policy, but I think we need to make clear to users that they should be making PRs to remove deprecated=True if they need it and will support it

12:58:54 From Peter Scheibel (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

@Adam Stewart the fact that you've gotten pushback would be interesting info for making this decision - what types of versions have you been deprecating (security?) and what types of packages have people been pushing back on?

12:59:23 From Wouter Deconinck to Everyone:

Part of the problem with these older versions and the reason for deprecating them is that they aren't tested. Is there a way we can test older version better? (no on every commit, but less frequently based on some strategy)

12:59:37 From Marc Paterno to Everyone:

For HEP, the stable package API seems like it will be critical for long-term support of software stacks, because it will allow deprecated package builds to be re-built using the version of spack that was current before the deprecation. HEP experiments will need to be able to do this for many more than 2 yeras.

12:59:46 From Marc Paterno to Everyone:

Of years, even.

12:59:55 From Wouter Deconinck to Everyone:

^ this! I was starting to write the same.

13:00:51 From Peter Scheibel (Lawrence Livermore National Laboratory (LLNL)) to Everyone:

@Marc Paterno I want to dig into that use case: is this experiment itself updating? Or do you want to build the old experiment?

13:01:22 From Adam Stewart to Everyone:

Replying to "@Adam Stewart the fa..."

It was mostly Python that had pushback because of the fact that Spack depends on it

13:01:32 From Adam Stewart to Everyone:

Reacted to "Part of the problem ..." with 👍

13:02:07 From Marc Paterno to Everyone:

Mature experiments eventually mostly freeze their code. But if they run across a bug in a package they use, they will want to update and rebuild their old code with the new bug-fixed package.

Spack

Agenda for the Technical Steering Committee Meeting

{{ Date }}

Attendance

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	Harmen Stoppels	Stoppels Consulting
	John Parent	Kitware
	Marc Paterno	Fermilab
	Mark Krentel	Rice University
	Massimiliano Culp	NP-complete, S.r.l.
	Peter Scheibel	Lawrence Livermore National Laboratory
	Philip Sakievich	Sandia National Laboratories
	Ryan Krattiger	Kitware
	Tamara Dahlgren	Lawrence Livermore National Laboratory
	Todd Gamblin	Lawrence Livermore National Laboratory
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Agenda

Standing Agenda Items

30. Any technical decisions that have come up since last month that require a vote?

31. How many open issues and PRs do we have, and is that trending the right/wrong way?
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33. What are the top priorities for the Spack project, and are there developers making progress towards those?

Notes from meeting

New business

Action items from last time

Action Items

