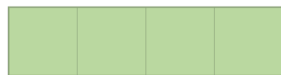


EASYBUILD



EasyBuild Maintainers Summit 2023

Mon 27 Feb 2023 + Wed 1 Mar 2023

Practical info

- Central topics:
 - Where are we now, where are we going
 - What works well, what should change
- Two sessions
 - Mon 27 Feb 2023 – 12:00-14:30 UTC
 - Wed 1 Mar 2023 – 12:00-14:30 UTC
 - Hopefully (significantly) shorter than 2.5h per session...
- Not a one-man show – please join the discussion!
- Live notes @ https://hackmd.io/_5hRC8IHSoWQE8mt-kLfgw (help is welcome!)
 - Will be copied to EasyBuild wiki after each session
 - If you don't want something mentioned in the notes, tell us!

Things to discuss (not necessarily in order)

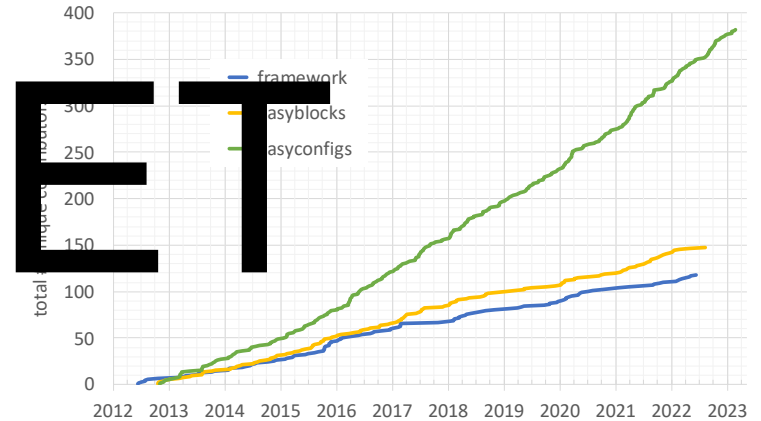
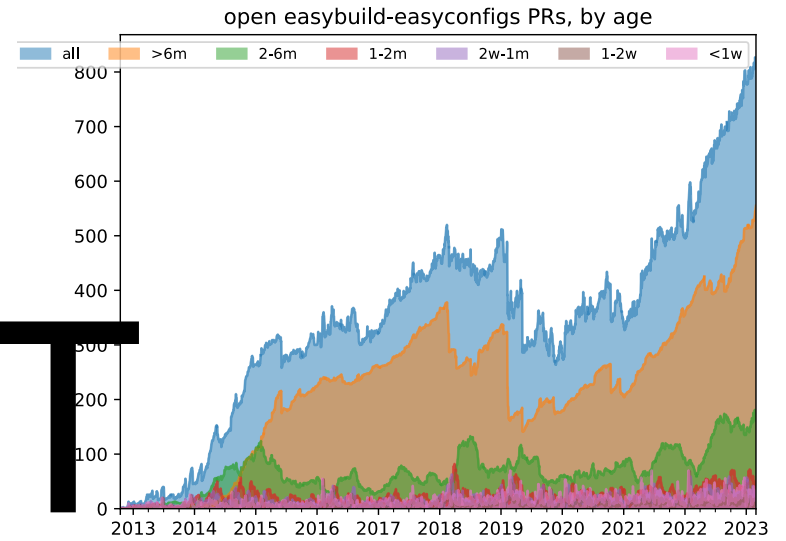
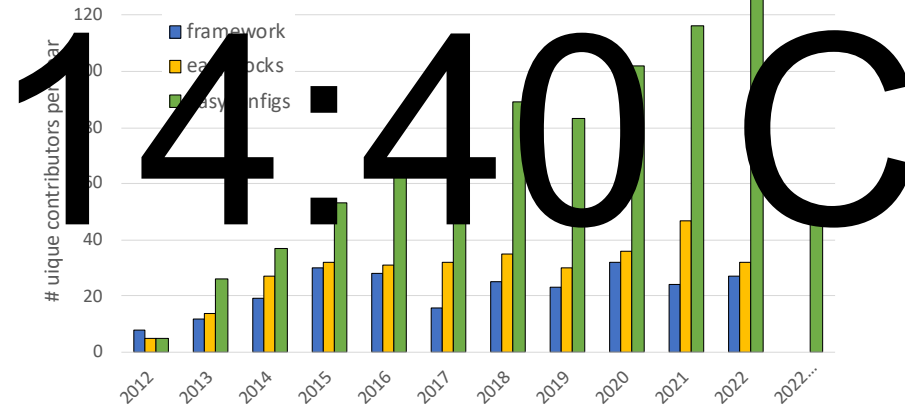
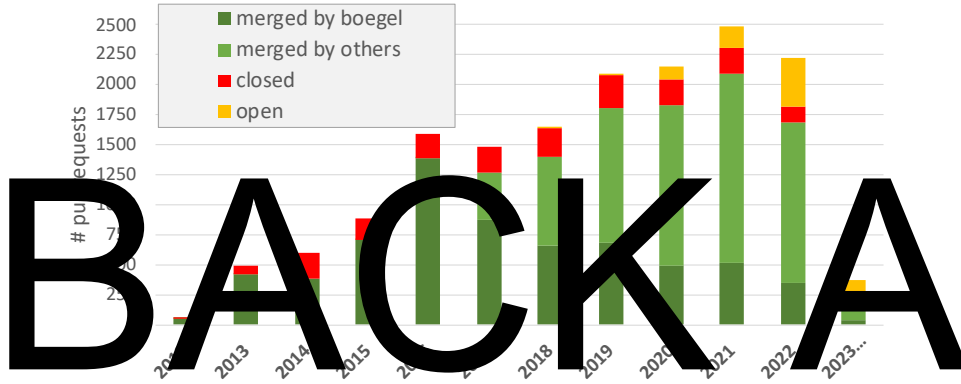
- Easyconfig PRs
- EasyBuild v5.0
- EasyBuild docs
- 6th EasyBuild User Survey
- EasyBuild Tech Talks in 2023
- EasyBuild User Meeting 2023
- **Additional topics still welcome!**

Review of previous Maintainers Summit

<https://github.com/easybuilders/easybuild/wiki/Notes-from-EasyBuild-maintainer-summit-2021>

- “Missing” contributions from large sites => very little change?
- Using FlexiBLAS in common toolchain => done!
- Keeping up with incoming contributions => very little change?
- Revamp of EasyBuild docs => done!
- EasyBuild v5.0 => limited progress (deprecating Python 2)
- generoso test cluster => actively used for testing easyconfig PRs!
- Proper EasyBuild code-of-conduct => still WIP

Easyconfig PRs – backlog (plots)



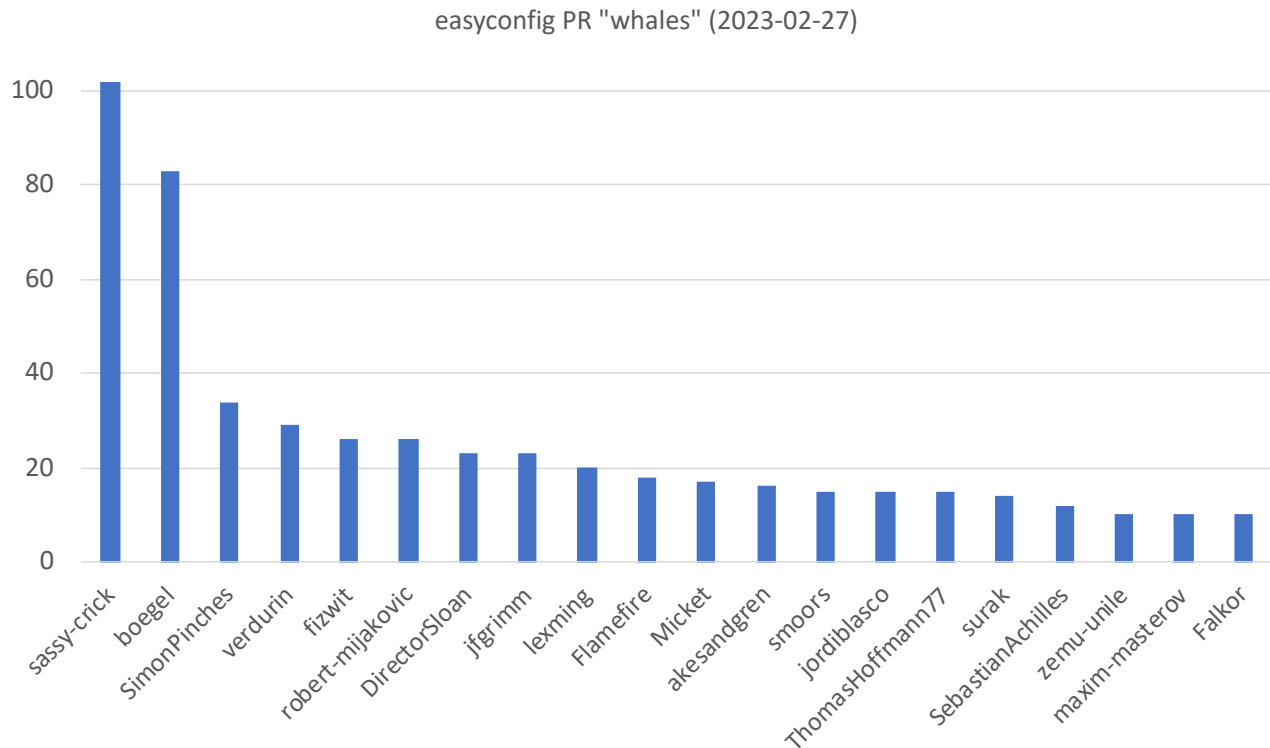
Easyconfig PRs – backlog (stats)

- PRs per year:
 - 2019: 2,094 – 2020: 2,156 – 2021: 2,483 – 2022: 2,230
 - => ~10 PRs per work day, ~50 PRs per week
- Open PRs to date:
 - 2019: 11 - 2020: 107 – 2021: 181 – 2022: 416 – 2023: 93
 - ~18% of PRs opened in 2022 is still open ☹️
- Over 125 unique easyconfig contributors per year (and growing?)
 - New contributors are still popping up (good)
 - May not be aware of contribution policy

Easyconfig PRs – backlog

- What can we do to push back on backlog + keep up with incoming PRs?
- Does Maintainer-of-the-Week (MotW) still work (well)?
 - How often do you manage to reach the “1h/day, on average” MotW target?
 - Do others feel like they shouldn’t be looking into PRs when they’re not MotW?
 - **Would another MotW role to look into oldest open easyconfig PRs make sense?**
- Maintainer “buddy” for easyconfig PR whales?
 - Close collaboration (temporary, voluntary) with contributors that have lots of open PRs
 - Could include 1-on-1 call(s) to discuss blocked PRs
- Potential candidates for additional maintainers?
 - @sassy-crick (269 merged PRs) - @SimonPinches (121) - @DirectorSloan (17)
- Separate session to exchange “best practices” for reviewing/testing/merging PRs?

Easyconfig PRs – whales



Currently ~19 contributors with ≥ 10 open easyconfig PRs

Easyconfig PRs – testing

- Trend towards more attention for tests & sanity checks (good!)
- Tension between testing and keeping PRs open longer
 - More testing reveals more problems, which we want to fix
 - Results in PRs being kept open for longer (see scipy, TensorFlow, PyTorch, ...)
- We should do more structured testing...
 - Clearly define minimal requirements w.r.t. test builds for PRs + Tier-1 vs Tier-2 test envs
 - Using containers to test for different OSs + also test on aarch64
 - More automation – bot being developed for EESSI could be a big help!
 - Also test in special environments like EESSI (RPATH + alternate sysroot + filter-deps + ...)
 - We should also leverage sponsored AWS/Azure credits from EESSI project!

EasyBuild 5.0

- Drop support for Python 2 (code cleanup)
- Archive easyconfigs using deprecated toolchain
- Get rid of `distutils` dependency (required for Python 3.12 compatibility)
- Implement + adopt new `run` function with cleaner API
- Improved error reporting
- + various smaller changes...
- Not ETA yet, but hoping to have EasyBuild 5.0 released in 2023...
- **Working group to actively work towards EasyBuild 5.0 in coming months?**

EasyBuild docs

- Port to Markdown + MkDocs finally done! \o/ *(thanks Simon + James)*
- Let's use this as a starting point for making EasyBuild docs better...
- Start reviewing and updating/improving/extended existing docs
 - Review one page/week => Full documentation reviewed in ~1 year
 - Update it (open PR) or identify shortcomings (open issue)
 - Fill in the gaps (module naming schemes, recently implemented features, ...)
- Integrate EasyBuild tutorial into EasyBuild docs?
- Separate group of maintainers for docs?

6th EasyBuild User Survey

- Currently preparing next EasyBuild User Survey
- Hope to have it open March 2023
- Present results during *State of the Union* talk at EUM'23
- Need to update existing questions + add a couple on ported docs
- **Need a volunteer to help review survey once it's ready...**

EasyBuild Tech Talks in 2023

- Suggestions for topics?
- Jacamar CI (<https://gitlab.com/ecp-ci/jacamar-ci>) ?
- OpenMPI 5.0?
- Intel oneAPI?

EasyBuild User Meeting 2023

- Who will be joining us in London, Mon-Wed 24-26 April 2023?
- Ideas for EasyBuild talks/tutorials – any volunteers?
 - *EasyBuild 5.0: coming soon!*
 - *Best Practices for EasyBuild Contributors*
 - *So you want to implement a bug fix of feature in EasyBuild framework...*
- Ideas for additional topics/speakers/tutorials?