

GHC Dev-Ops Status

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Status

Two years since the GitLab transition. Much has changed:

- ▶ Slight up-tick in contributor counts?
- ▶ Far better CI: still not perfect but great improvement from Phabricator

Platform support

Darwin:

- ▶ On-going to improve packaging (#17854)

Windows:

- ▶ Further work on stabilizing toolchain issues.
- ▶ Still need a Windows installer (#18104). Volunteers wanted!

New platforms: FreeBSD, Alpine Linux

Release engineering

Date	Release
8.6.1	Sep 21, 2018
8.6.2	Nov 2, 2018
8.6.3	Dec 7, 2018
8.6.4	Mar 5, 2019
8.6.5	Apr 23, 2019
8.8.1	Aug 25, 2019
8.8.2	Jan 16, 2020
8.8.3	Feb 24, 2020
8.10.1	Mar 24, 2020
8.8.4	Jul 15, 2020
8.10.2	Aug 8, 2020

So what is the status of 9.0?

It's coming.

A few false-starts but progress is being made:

- ▶ New Windows toolchain
- ▶ Darwin packaging
- ▶ CI continues to evolve

Alpha 1 shortly after this workshop. Release candidate 1 in mid-September Final release in late-September/early-October.

What about Hadrian?

In progress since 2016!

Lots of dark corners to find, most have been found.

If you want to help, see tickets set to the `Make removal` milestone.

We hope to use Hadrian for bindists in 9.2.

head.hackage

Goal: Facilitating testing of pre-releases.

Now exposes a proper Hackage repository.

Blog post describing usage will be published with 9.0.1-alpha1

```
$ cat >>cabal.project.local << EOF
```

```
repository head.hackage.ghc.haskell.org
  url: https://ghc.gitlab.haskell.org/head.hackage/
  secure: True
  key-threshold: 3
  ...
```

Performance testing

Introducing more metrics to evaluate compiler/runtime performance:

- ▶ New `nofib` build system facilitates running/recording metrics in CI
- ▶ Dedicated builder for performance tests
 - ▶ Ad-hoc testing: `build Cabal`
- ▶ `head.hackage`:
 - ▶ Dumps `-ddump-timings` output