

GLib: What's new and what's next?

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- Covering releases 2.55.0 to 2.57.x
- **2017-11-05** to today

Meson migration: feature parity

Move to GitLab brings easier contributions (since May 2018)

GitLab CI means much better cross-platform support (since 2.56.0)

CI code coverage means incrementally better testing (since 2.57.1)

75 documentation fixes

Oldest bug fixed: Bug 111848 — function to canonicalize file names (JFDled by Georges Basile Stavracas Neto!)

Current code review delay: about 2 hours

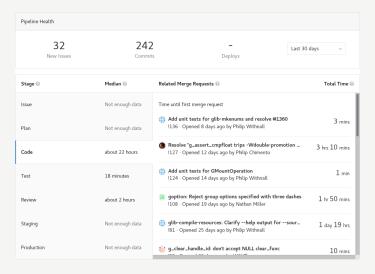


Figure: GitLab cycle analytics (via GitLab, as of 2018-07-03)

We dropped Perl! (Thanks Emmanuele and Christoph!)

Various new APIs

```
g clear handle id() (Cosimo Cecchi)
g file load bytes() (Christian Hergert)
g date time new from iso8601() (Robert Ancell)
g file new build filename() (Cosimo Cecchi)
g file peek path() (Colin Walters)
👸 g time zone get identifier(), g date time get timezone() (Philip Withnall)
g hash table steal extended() (Philip Withnall)
g ptr array steal index*() (Philip Withnall)
G APPROX VALUE, g assert cmpfloat with epsilon() (Emmanuele Bassi)
g ref count *(), g atomic ref count *() (Emmanuele Bassi)
```

Bigger changes

- Numerous OS X content type fixes (Ryan Schmidt, Friedrich Beckmann, Patrick Griffis
- Static linking support for GIO modules (Xavier Claessens)
- Various typeof() fixes (Christian Hergert)
- Windows network monitor (Jan-Michael Brummer)
- GBytes performance improvements when slicing (Christian Hergert)
- Nominative case month names (Rafal Luzynski)
- Splice performance improvements (Andrés Souto)
- 🛚 kqueue file monitor fixes (Martin Pieuchot, Ting-Wei Lan)

Bigger changes

- get_type() performance improvements (Christian Hergert)
- Drop Visual Studio projects we use Meson for building on Windows now (Chun-wei Fan)
- Add interface generation mode to gdbus-codegen (Philip Withnall)
- Bash completion for gio tool (Ondrej Holy)
- posix_spawn() support (Daniel Drake)
- Per-desktop overrides for GSettings schemas (Alberts Muktupāvels, Allison Lortie)
- Android API level 28 support (Xavier Claessens)

Who's contributed?

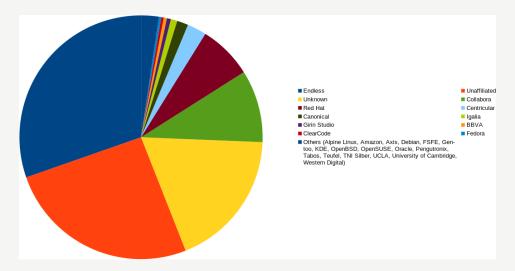


Figure: GLib contribution affiliation since 2.55.0 (29 affiliands, 936 commits, via git shortlog, as of 2018-07-03)

Development activity

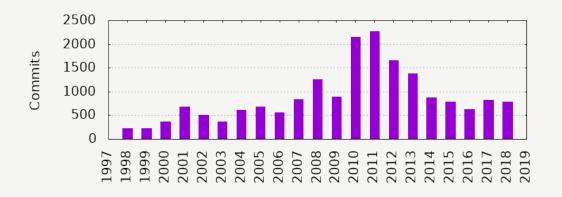


Figure: Commit count per year since 1998 (via gitstats, as of 2018-07-03)

Development activity

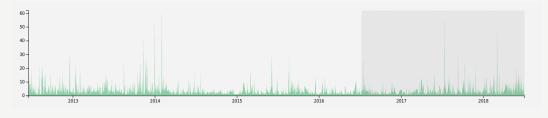


Figure: Commit count since 2013 (via GitLab, as of 2018-07-05)

Bug count before GitLab



Figure: Open bug count on Bugzilla, as of 2018-07-05

CI charts

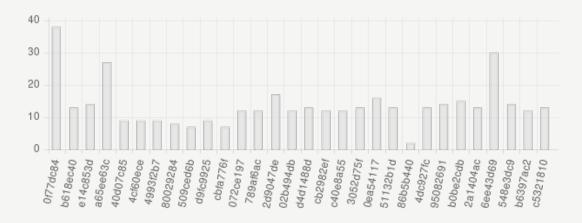


Figure: CI testing duration for the most recent 30 commits (via GitLab, as of 2018-07-05)

CI charts



Figure: Successful (green) vs total CI pipelines in the last year (via GitLab, as of 2018-07-05)

What's next?

- Planning will happen properly in the BoF, all day tomorrow, room 2
- **ℰ** GError improvements? (Issue #14)
- Improved I/O streams API? (Issue #1431)
- Improved platform support; *BSD CI? (various issues)
- Complete port to Meson ('Meson' label)
- Dropping our Unicode tables? (Issue #1333)
- Work out what to do with GSlice? (Issue #1079)
- libglib-testing: Separate library with utilities for testing code which uses GLib

Meson timeline

- 2.57.2 release will be made with ninja dist
- Distributions should still build with autotools (unless you want to dogfood early)
- 2.57.3+: we will recommend to build with Meson by default
 - (i.e. autotools and Meson will be available in parallel for all 2.57.x and 2.58.x releases)
- 2.59.0+: autotools will be dropped upstream
- Some platforms default to Meson already (Windows)

How do I get involved?

- #gtk+ on irc.gnome.org
- Pick up an issue on GitLab and play around with it post comments with your progress or questions
- Suggest new convenience API to us, after prototyping it in your project

Miscellany

Our home on GitLab <3 https://gitlab.gnome.org/GNOME/glib/ Come to the BoF Tomorrow (9th), all day in room 2 libglib-testing https://gitlab.gnome.org/pwithnall/libglib-testing



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Beamer theme: https://gitlab.gnome.org/GNOME/presentation-templates/tree/master/GUADEC/2018