

# Done in 6.0 seconds

A new build system for GStreamer?

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<http://mesonbuild.com>

# Why change build systems?

- performance problems
- unpleasant syntax, hard to debug
- Autotools without a native package manager is painful
- xdg-app means that embedding is the future even on Linux

# Meson in a nutshell

- Fast, easy to write, reliable
- Support all platforms: Win, OSX, Linux, iOS etc
- comply with distro packaging requirements
- system checks like with autoconf

<http://mesonbuild.com>

# Wrap dependency system

- Like Cerbero/jhbuild but inside the build system
- embed Meson subprojects in a sandbox
- “internal pkg-config” for dependencies
- transparent switching between internal and external dependencies
- online wrapdb for dependencies

<http://mesonbuild.com>

# GST build experiment

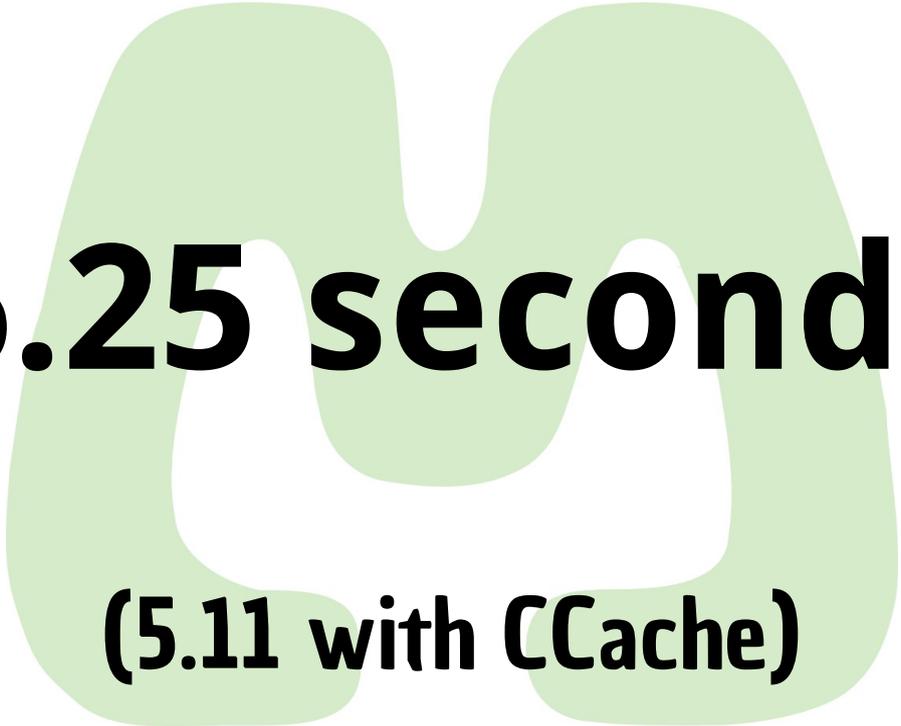
- port GST base to Meson
- cooperation with core devs
- compiles on Linux, OSX, MinGW
- 1116 lines of code vs 3395 for Autotools

<http://mesonbuild.com>

# GST build time on ARM board

- Autotools
  - conf: 3m 4s
  - build: 5m 21s
  - no change: 7s
  - one change: 1m 19s
- Meson
  - conf: 12s
  - build: 5m 14s
  - no change: 0.15s
  - one change: 27s

# Build time on Tim's machine



**6.25 seconds**

**(5.11 with CCache)**

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