

Continuous integration with GitHub Actions, Gitlab pipelines and ci.inria.fr

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Tentative for a map of continuous integration platforms

GitHub Actions

([launched on 16 October 2018](#))

- A platform for GitHub projects, providing [GitHub-hosted runners](#) for Linux, MacOS and Windows.
- File-based workflow specification:
`.github/workflows/*.yaml`.
A command-line tool, `act` is available for running workflows locally (or from other continuous integration platforms):

<https://github.com/nektos/act>

Gitlab Pipelines

(introduced in [Gitlab 8.8.0, on 2016-05-22](#))

- Continuous integration system integrated in Gitlab. gitlab.inria.fr provides shared docker runners, ci.inria.fr can host user-maintained VMs, and self-hosted gitlab runners can be registered.
- File-based workflow specification: `.gitlab.yml`. A command-line tool, `gitlab-ci-local` is available for running

ci.inria.fr

- A cloud of virtual machines dedicated for continuous integration:
VMs are created and maintained by the users.
Linux, Windows and
MacOS VMs are supported, but MacOS VMs are quite fragile for the moment (but we are working on it!).
- Provides yet another continuous integration system, Jenkins, and a part of it can be configured by a file-based workflow specification: