



# Releases

## Release

Releases are a way to mark or point to a particular milestone in software development. This is useful for users and collaborators, e.g. I found a bug running version x. For publications that refer to software, referring to a specific release enhances the reproducibility.

[Apache foundation](#) describes their [release policy](#).

Release cycles will depend on the project specifics, but in general we encourage quick agile development: *release early and often*

## Semantic versioning

Releases are identified by a version number. [Semantic Versioning \(semver\)](#) is the most accepted and used way to add numbers to software versions. It is a way of communicating impact of changes in the software on users.

A version number consists of three numbers: major, minor, and patch, separated by a dot: *2.0.0*. After some changes to the code, you would do a new release, and increment the version number. Increment the: \* MAJOR version when you make incompatible API changes, \* MINOR version when you add functionality in a backwards-compatible manner, and \* PATCH version when you make backwards-compatible bug fixes.

Very often package managers depend on `semver` and will not work as expected otherwise.

## Releasing code on github

Github makes it easy to do a release straight from your repositories website. See [github releases](#) for more information.

## CHANGELOG.md

A change log is a way to communicate notable changes in a release to the users and contributors. It is typically a text file at the root of your repository called *CHANGELOG.md*. Every release should have relevant entry in change log.

See [Keep a CHANGELOG](#) for some best practices.