

Comparing commits

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You can compare the state of your repository across branches, tags, commits, forks, and dates.

To compare different versions of your repository, append `/compare` to your repository's path.

We'll demonstrate the power of Compare by looking at the compare page for [a fork of the Linguist repo](#), which is at <https://github.com/octocat/linguist/compare/master...octocat:master>.

Every repository's Compare view contains two drop down menus: `base` and `compare`.

`base` should be considered the starting point of your comparison, and `compare` is the endpoint. During a comparison, you can always change your `base` and `compare` points by clicking on **Edit**.

Comparing branches

The most common use of Compare is to compare branches, such as when you're starting a new pull request. You'll always be taken to the branch comparison view when starting [a new pull request](#).

To compare branches, you can select a branch name from the `compare` drop down menu at the top of the page.

Here's an example of a [comparison between two branches](#).

Comparing tags

Comparing release tags will show you changes to your repository since the last release. For more information, see "[Comparing releases](#)."

To compare tags, you can select a tag name from the `compare` drop-down menu at the top of the page.

Here's an example of a [comparison between two tags](#).

Note: If a branch and a tag have the same name, the branch will be used when comparing commits. You can compare the tag specifically by adding `tags/` to the tag name.

Comparing commits

You can also compare two arbitrary commits in your repository or its forks on GitHub in a two-dot diff comparison.

To quickly compare two commits or Git Object IDs (OIDs) directly with each other in a two-dot diff comparison on GitHub, edit the URL of your repository's "Comparing changes" page.

For example, this URL uses the shortened seven-character SHA codes to compare commits `f75c570` and `3391dcc` : `https://github.com/github-linguist/linguist/compare/f75c570..3391dcc` .

To learn more about other comparison options, see "[About comparing branches in pull requests](#)."

Comparing across forks

You can compare your base repository and any forked repository. This is the view that's presented when a user performs a Pull Request to a project.

To compare branches on different repositories, preface the branch names with user names. For example, by specifying `octocat:main` for `base` and `octo-org:main` for `compare` , you can compare the `main` branch of the repositories respectively owned by `octocat` and `octo-org` .

Here's an example of a [comparison between two repositories](#).

Comparisons across commits

You can compare a single commit in Git to the commit's predecessors using two types of notation.

Notation	Meaning	Example	Comparison
<code>^</code>	One commit prior. Repeat the <code>^</code> character to indicate one more commit further back in the history.	<code>96d29b7^^^^</code> Represents the commit five commits prior to <code>96d29b7</code> .	View comparison
<code>~N</code>	N commit(s) prior.	<code>96d29b7~5</code> Represents the commit five commits prior to <code>96d29b7</code> .	View comparison

Further reading

- "[Changing the base branch of a pull request](#)"

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