

# Basic Git commands

Here is a list of some basic Git commands to get you going with Git.

For more detail, check out the [Atlassian Git Tutorials](#) for a visual introduction to Git commands and workflows, including examples.

| Git task                             | Notes  | Git commands  |
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| <b>Tell Git who you are</b>          | Configure the author name and email address to be used with your commits.<br>Note that Git <a href="#">strips some characters</a> (for example trailing periods) from user.name. | <code>git config --global user.name "Sam Smith"</code><br><code>git config --global user.email sam@example.com</code> |
| <b>Create a new local repository</b> |  | <code>git init</code>   |
| <b>Check out a repository</b>        | Create a working copy of a local repository:   | <code>git clone /path/to/repository</code>  |
|                                      | For a remote server, use:  | <code>git clone username@host:/path/to/repository</code>  |
| <b>Add files</b>                     | Add one or more files to staging (index):  | <code>git add &lt;filename&gt;</code><br><code>git add *</code>   |
| <b>Commit</b>                        | Commit changes to head (but not yet to the remote repository):   | <code>git commit -m "Commit message"</code>   |
|                                      | Commit any files you've added with <code>git add</code> , and also commit any files you've changed since then:   | <code>git commit -a</code>  |
| <b>Push</b>                          | Send changes to the master branch of your remote repository:   | <code>git push origin master</code>   |
| <b>Status</b>                        | List the files you've changed and those you still need to add or commit:   | <code>git status</code>   |
| <b>Connect</b>                       | If you haven't connected your local  | <code>git remote add origin &lt;server&gt;</code>   |

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| <b>to a remote repository</b>            | repository to a remote server, add the server to be able to push to it:  |   |
|  | List all currently configured remote repositories:   | <code>git remote -v</code>  |
| <b>Branches</b>                          | Create a new branch and switch to it:  | <code>git checkout -b &lt;branchname&gt;</code>   |
|  | Switch from one branch to another:   | <code>git checkout &lt;branchname&gt;</code>  |
|  | List all the branches in your repo, and also tell you what branch you're currently in:                         | <code>git branch</code>   |
|  | Delete the feature branch:   | <code>git branch -d &lt;branchname&gt;</code>   |
|  | Push the branch to your remote repository, so others can use it:   | <code>git push origin &lt;branchname&gt;</code>   |
|  | Push all branches to your remote repository:   | <code>git push --all origin</code>  |
|  | Delete a branch on your remote repository:   | <code>git push origin :&lt;branchname&gt;</code>  |
| <b>Update from the remote repository</b> | Fetch and merge changes on the remote server to your working directory:  | <code>git pull</code>   |
|  | To merge a different branch into your active branch:   | <code>git merge &lt;branchname&gt;</code>   |
|  | View all the merge conflicts:<br>View the conflicts against the base file:<br>Preview changes, before merging: | <code>git diff</code><br><code>git diff --base &lt;filename&gt;</code><br><code>git diff &lt;sourcebranch&gt; &lt;targetbranch&gt;</code> |
|  | After you have manually resolved any conflicts, you mark the changed file:                                     | <code>git add &lt;filename&gt;</code>   |
| <b>Tags</b>                              | You can use tagging to mark a significant changeset, such as a release:  | <code>git tag 1.0.0 &lt;commitID&gt;</code>   |
|  | CommitId is the leading characters   | <code>git log</code>  |

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|                           | of the changeset ID, up to 10, but must be unique. Get the ID using:  |  |
|                           | Push all tags to remote repository:   | <code>git push --tags origin</code>  |
| <b>Undo local changes</b> | If you mess up, you can replace the changes in your working tree with the last content in head: Changes already added to the index, as well as new files, will be kept. | <code>git checkout -- &lt;filename&gt;</code>                                |
|                           | Instead, to drop all your local changes and commits, fetch the latest history from the server and point your local master branch at it, do this:                        | <code>git fetch origin</code><br><code>git reset --hard origin/master</code> |
| <b>Search</b>             | Search the working directory for <code>foo()</code> :   | <code>git grep "foo()"</code>  |

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