

Git Quick Reference

Getting help:

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|----------------------------------|-------------------------|
| git help <i>command</i> | or |
| git <i>command</i> --help | Show help for a command |

Repository creation:

| | |
|-----------------------------|---|
| git init | Create a repository in the current directory |
| git clone <i>url</i> | Clone a remote repository into a subdirectory |

File operations:

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|--|--|
| git add <i>path</i> | Add file or files in directory recursively |
| git rm <i>path</i> | Remove file or directory from the working tree |
| -f | Force deletion of file(s) from disk |
| git mv <i>path destination</i> | Move file or directory to new location |
| -f | Overwrite existing destination files |
| git checkout [<i>rev</i>] <i>file</i> | Restore file from current branch or revision |
| -f | Overwrite uncommitted local changes |

Working tree:

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|-----------------------------------|--|
| git status | Show status of the working tree |
| git diff [<i>path</i>] | Show diff of changes in the working tree |
| git diff HEAD <i>path</i> | Show diff of stages and unstaged changes |
| git add <i>path</i> | Stage file for commit |
| git reset HEAD <i>path</i> | Unstage file for commit |
| git commit | Commit files that has been staged (with git-add) |
| -a | Automatically stage all modified files |
| git reset --soft HEAD^ | Undo commit & keep changes in the working tree |
| git reset --hard HEAD^ | Reset the working tree to the last commit |

Examining History:

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|---|---|
| git log <i>[path]</i> | View commit log, optionally for specific path |
| git log <i>[from[..<i>to</i>]]</i> | View commit log for a given revision range |
| --stat | List diffstat for each revision |
| -S' <i>pattern</i> ' | Search history for changes matching pattern |
| git blame <i>[file]</i> | Show file annotated with line modifications |

**Remote repositories -
remotes:**

| | |
|---|--|
| git fetch <i>[remote]</i> | Fetch changes from a remote repository |
| git pull <i>[remote]</i> | Fetch and merge changes from a remote repository |
| git push <i>[remote]</i> | Push changes to a remote repository |
| git remote | List remote repositories |
| git remote add <i>remote url</i> | Add remote to list of tracked repositories |

Branches:

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|--|--|
| git checkout <i>branch</i> | Switch working tree to branch |
| -b <i>branch</i> | Create branch before switching to it |
| git branch | List local branches |
| git branch -f <i>branch rev</i> | Overwrite existing branch, start from revision |
| git merge <i>branch</i> | Merge changes from branch |

Exporting and importing:

| | |
|--|---|
| git apply - < <i>file</i> | Apply patch from stdin |
| git format-patch <i>from[..<i>to</i>]</i> | Format a patch with log message and diffstat |
| git archive <i>rev</i> > <i>file</i> | Export snapshot of revision to file |
| --prefix= <i>dir/</i> | Nest all files in the snapshot in directory |
| --format=[<i>tar zip</i>] | Specify archive format to use: <i>tar</i> or <i>zip</i> |

Tags:

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|--|--|
| git tag <i>name</i> [<i>revision</i>] | Create tag for a given revision |
| -s | Sign tag with your private key using GPG |
| -l [<i>pattern</i>] | List tags, optionally matching pattern |

File status flags:

| | |
|----------------------|------------------------------------|
| M modified | File has been modified |
| C copy-edit | File has been copied and modified |
| R rename-edit | File has been renamed and modified |
| A added | File has been added |
| D deleted | File has been deleted |
| U unmerged | File has conflicts after a merge |