

Git Commands

SETUP AND CONFIGURATION

1. **git**: git is a distributed version control system for code management.
Options: -v, -h, -P, -p
Usage: git add [file names]
git clone [git repository URL]
2. **config**: Helps in setting up the repository and global options.
Options: -replace-all, -get, -add
Usage: git config -global user.name [username]
git config -list
3. **help**: Provides help information about Git.
Options: -a, -c, -g
Usage: git help -all
git status -help

GETTING AND CREATING PROJECTS

1. **init**: Initialize an empty git repository or reinitialize an existing one.
Options: -q, -bare
Usage: git init
2. **clone**: Get the remote repository into the directory
Options: -l, -s
Usage: git clone [git repository URL]

BASIC SNAPSHOTTING

1. **add**: To stage changes.
Options: -f, -v
Usage: git add [file name], . [all changes]
2. **status**: Know the changes between commit, commits, working tree, etc.
Options: -s, -v, -long, -b
Usage: git status
3. **diff**: Display differences between commits, the working tree, or branches.

Options: -color, -[commit1] [commit2], -cached

Usage: git diff, git diff [commit1] [commit2], git diff -color

4. **commit**: Record changes to the repository.
Options: -m, -a, -v
Usage: git commit -m "[commit message]", git commit -am "[commit message]"
5. **reset**: Reset current HEAD to the specified state.
Options: -soft, -mixed, -hard
Usage: git reset -soft [commit], git reset -hard HEAD^

BRANCHING AND MERGING

1. **branch**: List, create, or delete branches.
Options: -r, -d, -m
Usage: git branch
2. **checkout**: Switch branches or restore working tree files.
Options: -b, -B, -force
Usage: git checkout [branch-name], git checkout -b [branch-name]
3. **merge**: Join two or more development histories together.
Options: -squash, -abort, -commit
Usage: git merge [branch-name] - merge a branch into current branch
4. **log**: Display commit logs.
Options: -oneline, -graph
Usage: git log, git log -oneline, git log -graph
5. **stash**: Stash changes in a dirty working directory away.
Options: save, list, pop, apply
Usage: git stash save, git stash list, git stash pop, git stash apply
6. **worktree**: Manage multiple working trees associated with a single Git repository.
Options: list, prune
Usage: git worktree list, git worktree prune

SHARING AND UPDATING

1. fetch: Fetch command is used to retrieve changes from a remote repository without merging them into your local branch.
Options: -all, -a, -force
Usage: git fetch, git fetch origin, git fetch -all, git fetch -force
2. pull: Used to fetch and merge changes from a remote repository into the current branch.
Options: -rebase, -squash
Usage: git pull, git pull origin main, git pull -rebase
3. push
4. remote

INSPECTION AND COMPARISON

1. show: shows one or more things [commits, tags. etc]
Options: -format=[oneline — short — medium — full, -pretty]
Usage: git show -oneline
2. log: provide commit info
Options: -source, -full-diff
Usage: git log

PATCHING

1. apply
2. cherry-pick
3. rebase
4. revert

DEBUGGING

1. grep: Find matching pattern
Options: -a, -i
Usage: git grep -i [text]

GUIDES

1. gitignore: Intentionally untrack some files
Usage: *.exe [.gitignore]

EMAIL

1. request-pull: Get pending changes summary.
Options: -p
Usage: git request-pull [version number] [URL] [branch name]

EXTERNAL SYSTEMS

1. svn: Operate between Subversion repository and git.
Options: -s, -no-metadata, -parent
Usage: git svn rebase

ADMINISTRATION

1. clean
2. filter-branch
3. archive
4. bundle

SERVER ADMIN

1. daemon: A git repository server.
Options: -export-all, -base-path
Usage: git daemon -export-all -base-path=.
2. update-server-info: To help dumb server update auxiliary info file.
Options: -f
Usage: git update-server-info

PLUMBING COMMANDS

1. commit-tree
2. show-ref
3. update-index
4. revert