GIT Porcelain CheatSheet

The Software Engineer's Corner

Aug 08 2022

Contents

Introduction

- I list many of the most common Git porcelain commands below
- To maximize effectiveness of these commands, add them to your .gitconfig Alias list

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Creates and Clones

Command	Desc
git init	Initialize a local Git repository
git init –bare	Create a bare repository set to the current working directory
git clone [repo_url]	Clone public repository

Adds and Removes

Command	Desc
git add [file-name]	Add a file to the staging area
git add -A	Add all new, deleted, and changed files to the staging area
git add .	Add new files and modifications, without deletions, to the staging area
git rm -r [file-name.txt]	Remove a file (or folder)
git commit -m "[commit message]"	Commit changes
git commit -a -m "[commit message]"	Stage all tracked files and commit changes
git commit –amend	Add staged changes to the most recent commit do not create a new commit
git rm -r –cached .	Unstage and remove paths only from the index, leave Working tree files alone

Audits and Analyses

Command	Desc
git status	Check status
git status -sbu	Check status with concise, branch info, and untracked file details
git log	View changes

Command	Desc
git log –stat	View changes with extra information about altered files
git log –summary	View changes (detailed)
git log –oneline	View changes (briefly)
git log master..origin/master –stat	TBD
git log origin/master..master –stat	TBD
git diff	TBD
git diff –cached	TBD
git diff [source branch] [target branch]	TBD
git checkout [commitid]	View a previous commit
git reflog	View the local, chronological history of a repository

Undos and Restores

Command	Desc
git reset [commitid]	Resets to [commitid], rather than to HEAD, the default
git reset –soft	Resets the HEAD, leaves all your staged and working files as is
git reset –mixed	Resets the HEAD and your staged files, but not the working directory
git reset –hard	Resets the HEAD, your staged files, and working directory to mach the most recent commit
git revert [commitid]	Revert commit changes
git clean -df	Remove all non-tracked files and directories from working directory

Synchronizes

Command	Desc
git fetch origin [branch name]	Download commits, files, and refs from a remote repository into your local repo
git pull	Update local repository to the newest commit
git pull origin [branch name]	Pull changes from remote repository
git push origin –delete [branch name]	Delete a remote branch
git push origin [branch name]	Push a branch to your remote repository
git push -u origin [branch name]	Push changes to remote repository (and remember the branch)
git push	Push changes to remote repository (remembered branch)

Command	Desc
git push origin --delete [branch name]	Delete a remote branch

Branches

Command	Desc
git branch	List of branches (the asterisk denotes the current branch)
git branch -a	List all branches (local and remote)
git branch [branch name]	Create a new branch
git branch -d [branch name]	Delete a branch
git branch -D [branch name]	Delete a branch forcefully
git branch -m [old branch name] [new branch name]	Rename a local branch
git checkout -b [branch name]	Create a new branch and switch to it
git checkout -b [branch name] origin/[branch name]	Clone a remote branch and switch to it
git checkout [branch name]	Switch to a branch
git checkout -	Switch to the branch last checked out
git checkout -- [file-name.txt]	Discard changes to a file

Merges

Command	Desc
git merge [branch name]	Merge a branch into the active branch
git merge [source branch] [target branch]	Merge a branch into a target branch
git merge --ff-only	resolve the merge as a fast-forward when possible, or exit operation

Rebases

Command	Desc
git rebase [branch name]	Move the current branches commits to the tip of [branch name]
git rebase [commitid]	Move the current branches commits to the tip of [commitid]
git rebase -i [new base]	Interactive rebase and select actions for each commit

Command	Desc
git rebase origin/master	Move the current branches commits to the tip of the remote branch

Remotes

Command	Desc
git remote add origin [url]	Add a remote repository
git remote set-url origin [url]	Set a repository's origin branch to SSH

Patches

Command	Desc
git format-patch [reference_branch]	Create a patch for each commit in current but not in [reference_branch]
git format-patch [commitid]	Create a patch for [commitid] in current branch
git am <[patch_file_name]	Apply a patch to the current branch

Backups

Command	Desc
git archive master –format=zip –output=[file]	Pack a snapshot of working dir (no .git dir) into a single zip or tar file
git bundle create [path]	Pack repo contents into a single .pack file for transport, backup, etc
git stash	Save your local modifications and revert the working dir to HEAD commit
git stash apply	Write latest stash on top of the current working tree state
git stash clear	Remove all stashed entries

Configures

Command	Desc
git config –global user.name "your_username"	Set globally Username
git config –global user.email "sample@gmail.com"	Set globally Email id
git config –global –list	Get global config

References

Git Commands - Git-Scm