



\$ git branch

\$ git logs

# this is the *definitive* guide to git

\$ git fetch

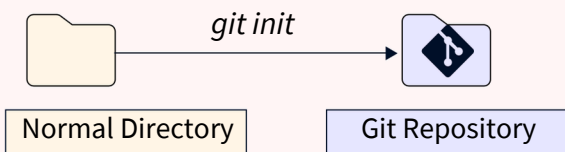
\$ git status

## SETUP & INIT

Configuring user information, initializing and cloning repositories.

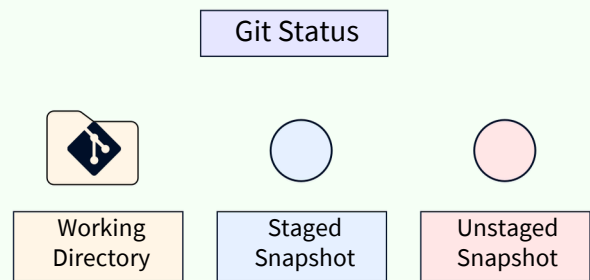
### \$ git init

Initialize an existing directory as a Git repository.



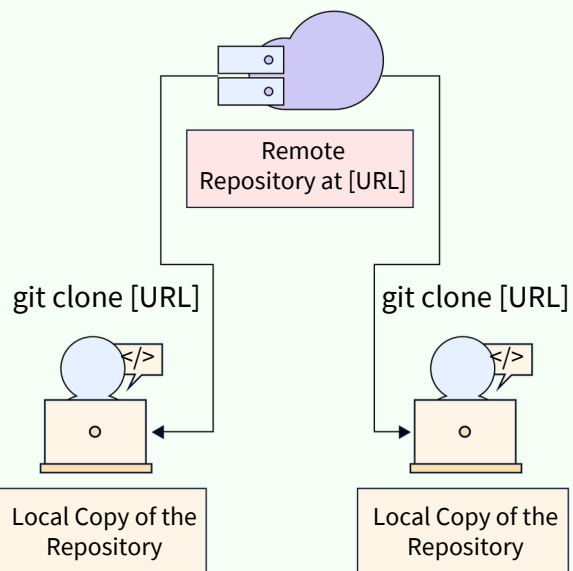
### \$ git status

Show modified files in working directory, staged for your next commit.



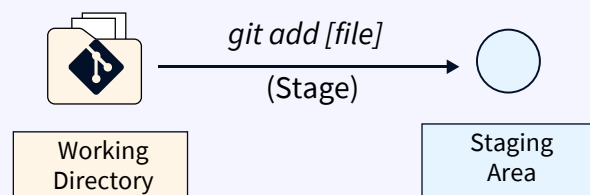
### \$ git clone [url]

Retrieve an entire repository from a hosted location via URL.



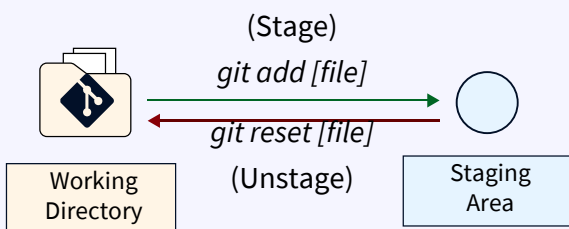
### \$ git add [file]

Add a file as it looks now to your next commit (stage).



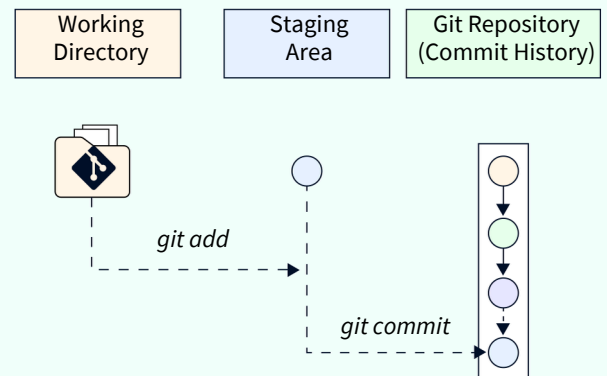
`$ git reset [file]`

Unstage a file while retaining the changes in working directory.



`$ git commit -m "[descriptive message]"`

Commit your staged content as a new commit snapshot.



`$ git diff`

Diff of what is changed but not staged

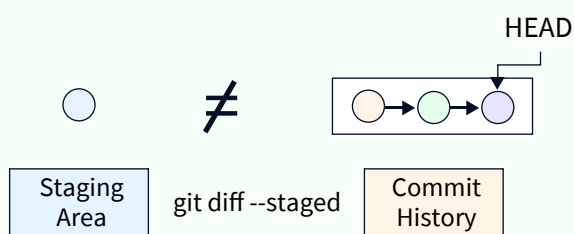


## BRANCH & MERGE

Isolating work in branches, changing context, and integrating changes.

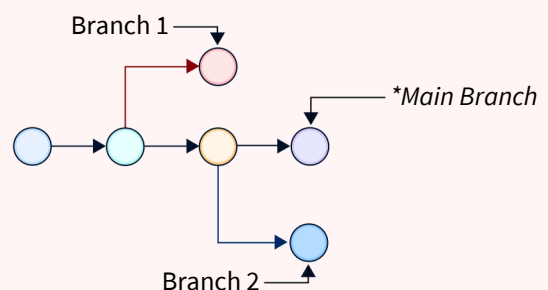
`git diff --staged`

Diff of what is staged but not yet committed.



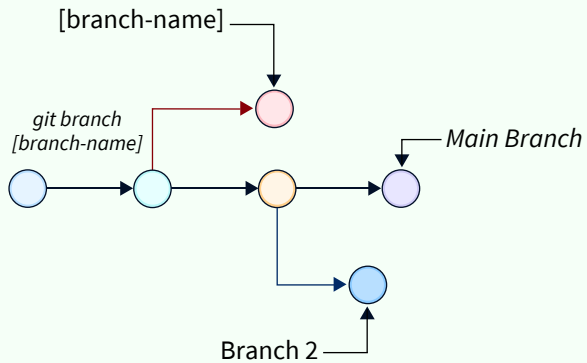
`$ git branch`

List your branches. A \* will appear next to the currently active branch.



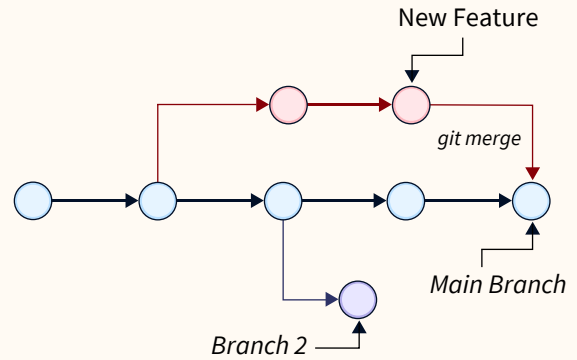
## \$ git branch [branch-name]

Create a new branch at the current commit.



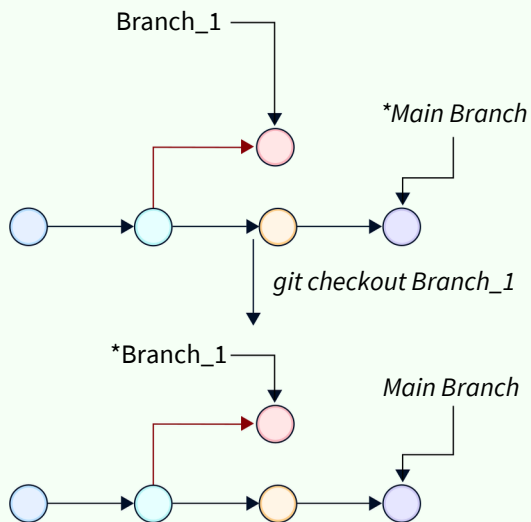
## \$ git merge [branch]

Merge the specified branch's history into the current one.



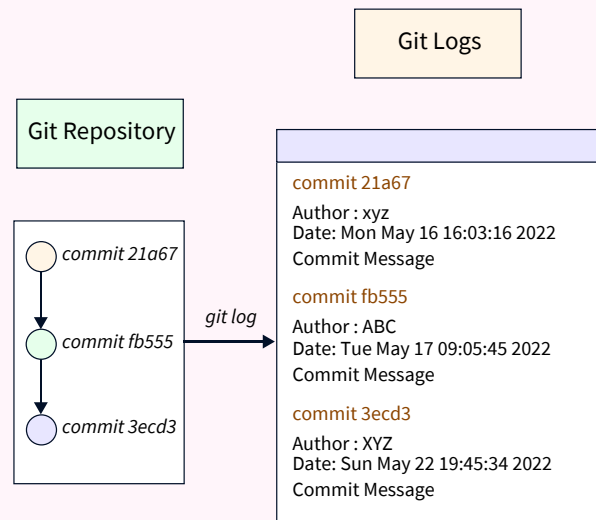
## \$ git checkout

Switch to another branch and check it out into your working directory.



## \$ git log

Add a file as it looks now to your next commit (stage).



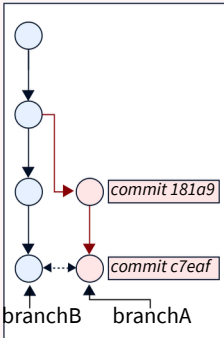
# INSPECT & COMPARE

Configuring user information,  
initializing and cloning repositories.

\$ git log branchB..branchA

Show the commits on branchA that are not on branchB.

Git Repository



Git Logs

commit 181a9

Author : XYZ

Date: Mon May 16 16:03:16 2022

Commit Message

commit c7eaf

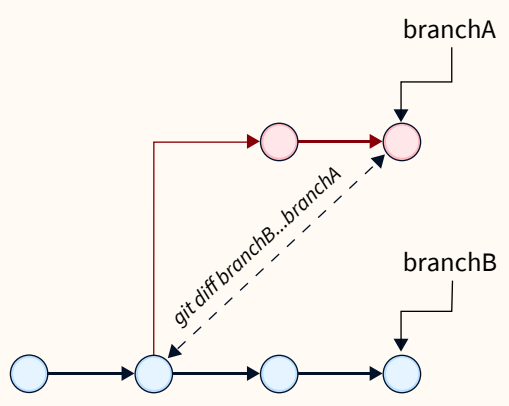
Author : ABC

Date: Tue May 17 09:05:45 2022

Commit Message

\$ git diff branchB...branchA

Show the diff of what is in branchA that is not in branchB.



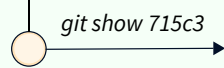
\$ git log --follow [file]

Show the commits that changed file, even across renames.

\$ git show [SHA]

Show any object in Git in human-readable format.

commit 715c3



git show 715c3

commit 715c3

Author : XYZ

Date: Mon May 16 16:03:16 2022

Commit Message

File1

File1 Changes

File2

File2 Changes

...

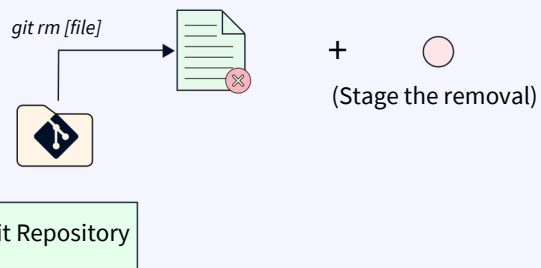
04

## TRACKING PATH CHANGES

Versioning file removes and path changes.

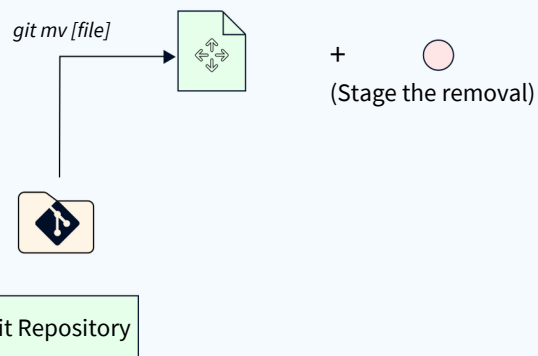
```
$ git rm [file]
```

Delete the file from the project and stage the removal for commit.



```
$ git mv [existing-path] [new-path]
```

Change an existing file path and stage the move.



```
$ git log --stat -M
```

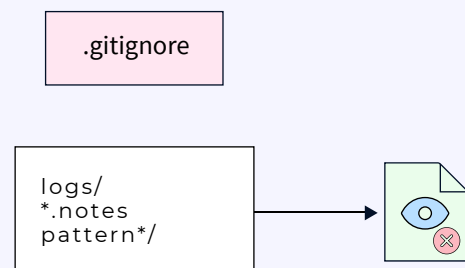
Show all commit logs with indication of any paths that moved.

## IGNORING PATTERNS

Preventing unintentional staging or committing of files.

```
logs/  
*.notes  
pattern*/
```

Save a file with desired patterns as .gitignore with either direct string matches or wildcard globs.



```
$ git config --global core.excludesfile [file]
```

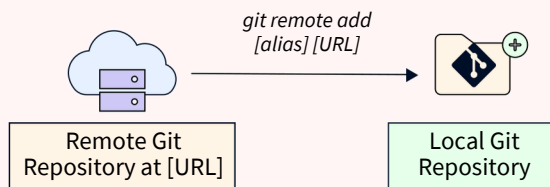
System wide ignore pattern for all local repositories

## SHARE & UPDATE

Retrieving updates from another repository and updating local repos.

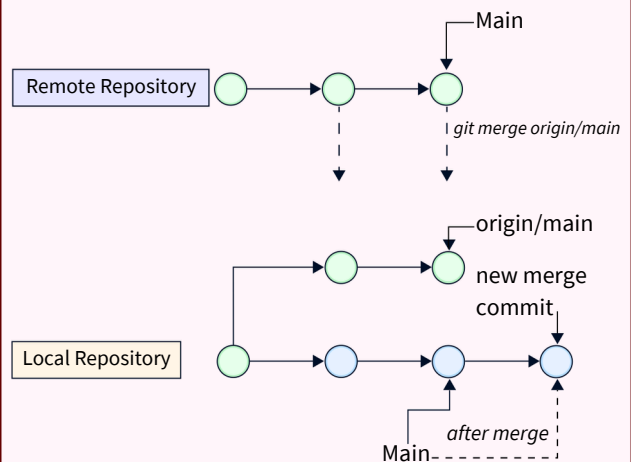
`$ git remote add [alias] [url]`

Add a git URL as an alias.



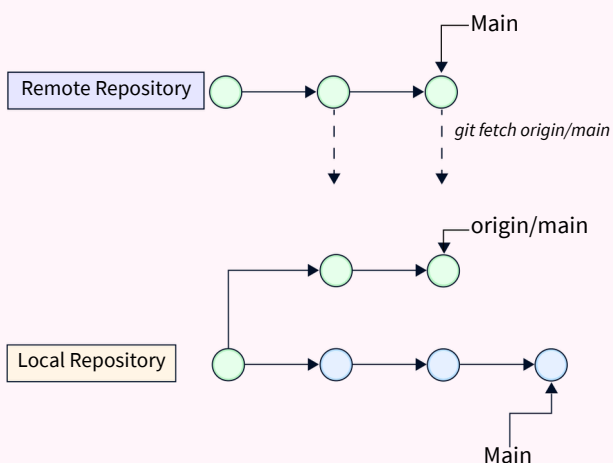
`$ git merge [alias]/[branch]`

Merge a remote branch into your current branch to bring it up to date.



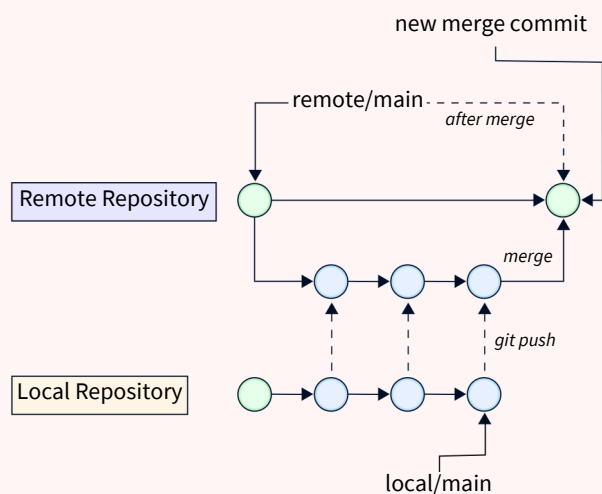
`$ git fetch [alias]`

Fetch down all the branches from that Git remote.



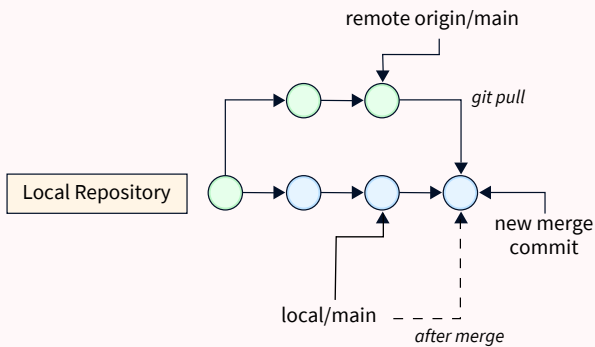
`$ git push [alias] [branch]`

Transmit local branch commits to the remote repository branch.



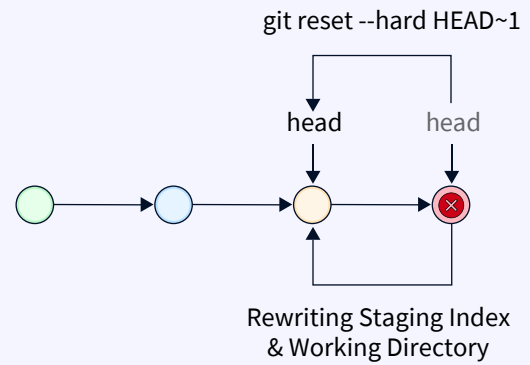
## \$ git pull

Fetch and merge any commits from the tracking remote branch.



## \$ git reset --hard [commit]

Clear staging area, rewrite working tree from specified commit.



## REWRITE HISTORY

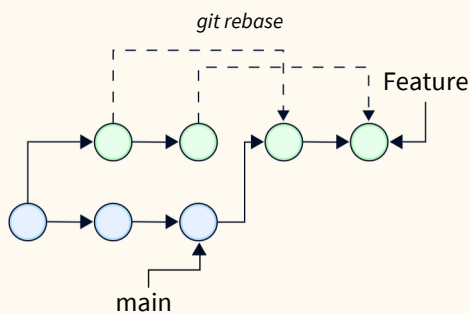
Rewriting branches, updating commits and clearing history.

## TEMPORARY COMMITS

Temporarily store modified, tracked files in order to change branches.

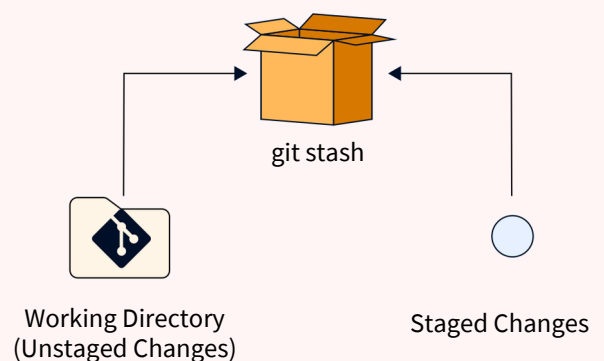
## \$ git rebase [branch]

Apply any commits of the current branch ahead of specified one.



## \$ git stash

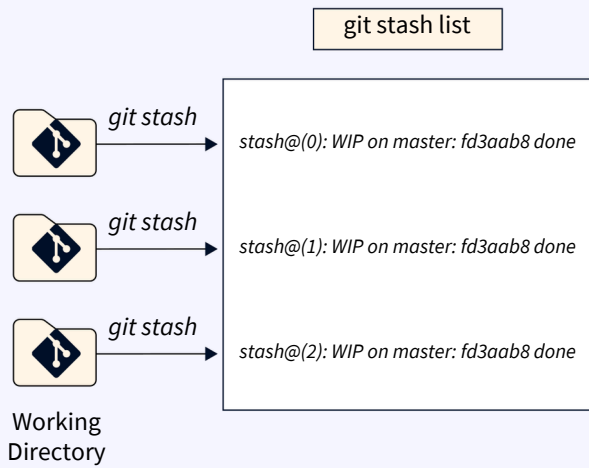
Save modified and staged changes.





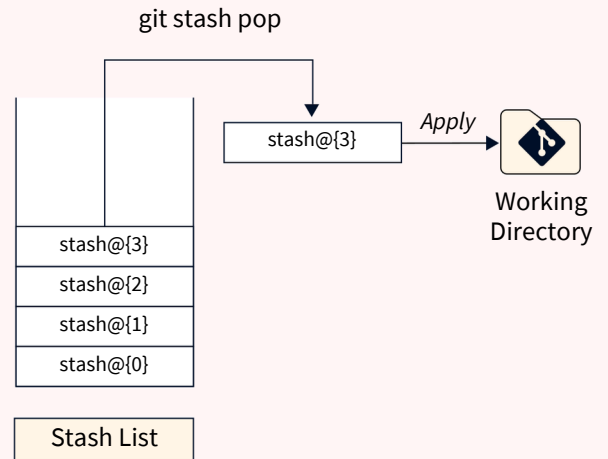
## \$ git stash list

List stack-order of stashed file changes.



## \$ git stash pop

Write working from the top of the stash stack.



## \$ git stash drop

Discard the changes from the top of the stash stack.

