

# Basics

## Bare basics

### semantic versioning

<https://semver.org/>

### clone

- `git clone <url>` clone an arbitrary repository

### add

- `git add .` add all files to stage

### commit

- `git commit -m "some commit message"` commit staged changes with inline commit message

### checkout -> switch

- switch: [git-scm.com](https://git-scm.com)
  - `git switch -c <branch-name>` create new branch and switch to it
- checkout:
  - `git checkout <branch-name>` checkout the branch with given name
  - `git checkout -b <branch-name>` create and checkout a new branch with given name

### remotes

- `git push`
- `git fetch`
- `git pull`

### log

`git log`

- `--graph` show visual graph in the terminal
- `--all` list all branches, not only current branch

alias in `~/.gitconfig`:

```
[alias]
lg1 = log --graph --abbrev-commit --decorate --format=format:'%C(bold blue)%h%C(reset) -
%C(bold green)(%ar)%C(reset) %C(white)%s%C(reset) %C(dim white)-
%an%C(reset)%C(auto)%d%C(reset)' --all
lg2 = log --graph --abbrev-commit --decorate --format=format:'%C(bold blue)%h%C(reset) -
%C(bold cyan)%aD%C(reset) %C(bold green)(%ar)%C(reset)%C(auto)%d%C(reset)%n'
%C(white)%s%C(reset) %C(dim white)- %an%C(reset)'
lg = lg1
```

# config

## local

```
git config user.email "your_email@abc.example"
git config user.name "Example Name"
```

## filemode

ignore filemod: `git config (--global) core.fileMode false`

## lineend

on linux: `git config --global core.autocrlf input`

on windows: `git config --global core.autocrlf true`

to keep `LF` as end of line in the repo. check [git docs](#)

## store credentials

- in plaintext in `~/.git-credentials`
  - `git config --global credential.helper store`

- add personal accesstoken to credetinal files:

```
git credential approve << EOF
protocol=https
host=gitlab.com
username=private-token
password=<<your personal access token>>
EOF
```

- content in files:

```
# ~/.gitconfig
[user]
    email = myMail@mymail.com
    name = Me
[credential]
    helper = store

# ~/.git-credentials
https://private-token:.....@gitlab.com
```

- in cache

- `git config credential.helper 'cache --timeout=<timeout>'`
- timeout in seconds (default 900 sec)

## others

# Git Data Transport Commands

<http://osteelle.com>

