

# Deal with (g)it

Top 5 tips to make the best out of (g)it



# #1 Sign your commits

Make visible you are the real owner of a commit.

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main


Commits on Jan 10, 2022

**README more like read deez nuts**  
torvalds committed on Jan 10, 2022 4 [f0326ef](#)

Commits on Dec 24, 2021

**Rename files**  
torvalds committed on Dec 24, 2021 16 [8f991f9](#)

Commits on Dec 5, 2021

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**torvalds** Linus Torvalds  
Portland, OR  
Committed to this repository

**...iously skepti**  
torvalds committed on Nov 23, 2021 13 [0bb33e3](#)

**when the whitespace sus**  
torvalds committed on Nov 22, 2021 12 [5eaa2b0](#)

Commits on Oct 31, 2021

**UwU**  
torvalds committed on Oct 31, 2021 27 [dbed716](#)

Commits on Oct 30, 2021

**sussy little baka uwu**  
torvalds committed on Oct 30, 2021 118 [4f503a0](#)

# Are these commit from Linus?

- this is a real github repo
- these are real commits

GitHub: Amog-OS/AmogOS

Fellow linux redditors may know this already

# Anyone can be Linus!

- git config is not verifying anything

So you can set up your local config ...

```
git config --global user.name "torvalds"  
git config --global user.email "torvalds@osdl.org"
```

... and be Linus:

```
touch proof  
git stage proof  
git commit -m "I am Linus!"
```

... at least thats what its going to look like

main

Commits on Jan 24, 2023

chore: Remove PR template

timo-reymann committed last week ✓

Verified



1ed42c0



chore(issues): Add new bug report template

timo-reymann committed last week ✓

Verified



cf9a9ec



chore(issues): Add new feature request template

timo-reymann committed last week ✓

Verified



834ac2d



Commits on Jan 23, 2023

ci: replace github release orb with github cli

timo-reymann committed last week ✓

Verified



8b4e8a1



Commits on Nov 8, 2022

docs: Add FOSSA badge

timo-reymann committed on Nov 8, 2022 ✓

✓ This commit was signed with the committer's **verified signature**.

timo-reymann  
Timo Reymann

GPG key ID: 7BA81B655ECE9ABC  
[Learn about vigilant mode.](#)

5958



Commits on Oct 14, 2022

chore(sonar): Add config

timo-reymann committed on Oct 14, 2022 ✓

Verified



efad6d



docs: Add sonarcloud badges

timo-reymann committed on Oct 14, 2022 ✓

Verified



e7adce8



chore: Align tests with go conventions

timo-reymann committed on Oct 14, 2022 ✓

Verified



08fd2b8



Commits on Sep 18, 2022

docs: Add dependabot badge

timo-reymann committed on Sep 18, 2022 ✓

Verified



753af63



# Verified commits to the rescue!

- signed with **GPG**
- visible on all git hosting platforms
- checkable with the git cli

GPG stands for GNU Privacy Guard and is a free tool to sign and encrypt things

# Setting it up is easy - 3 steps to victory

1. create a [GPG](#) key ([Tutorial](#))
2. add the key to your user profile on the git hosting platform (e.g. [GitHub](#))
3. configure your local git installation:

```
# set gpg key
git config --global user.signingkey <key-id>

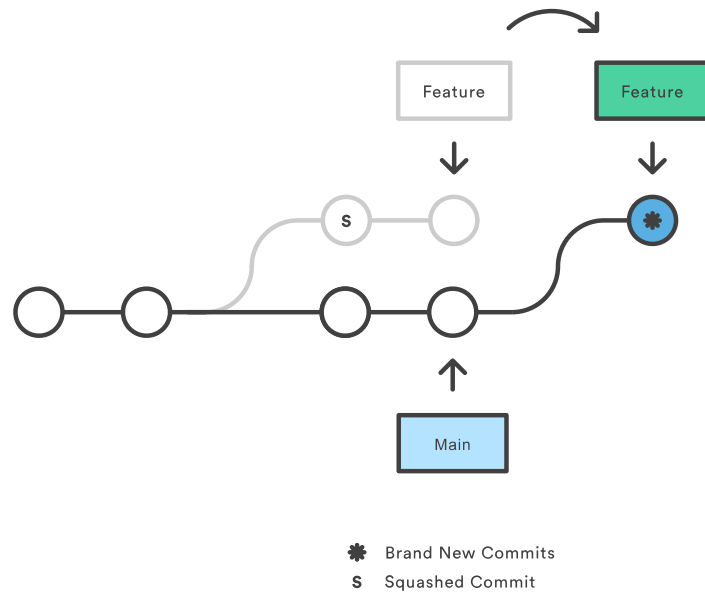
# autosign commits
git config --global commit.gpgsign true
```

Alternative: Use [GPG Key Creation Assistant](#) - created by me

## #2 Keep your history clean

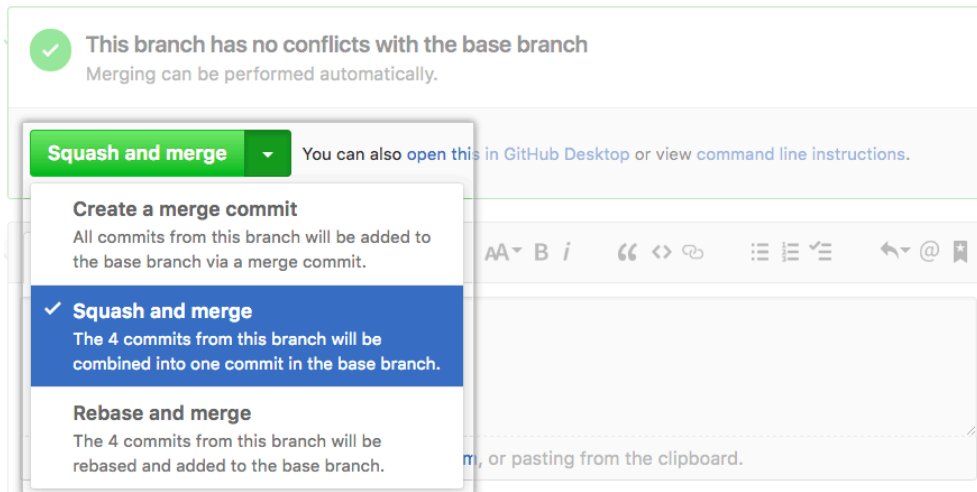
| accountants don't use erasers or they end up in jail

But luckily we are not accountants!

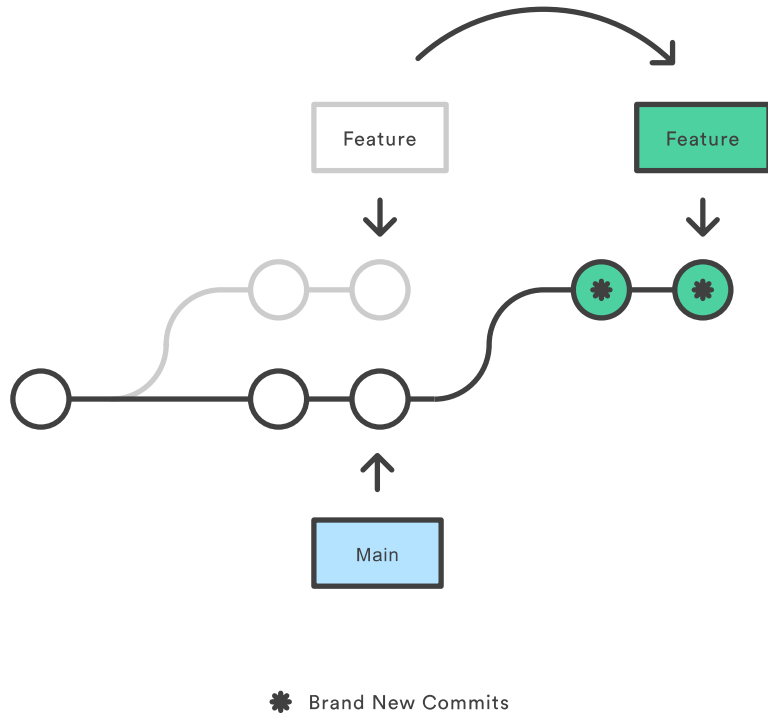


# Squash your feature branches

- powerful feature allowing you to combine multiple commits
- supported by git hosters such as GitHub/GitLab on PRs







## Rebase your changes

- local repo is not up to date
- main branch has evolved faster than feature branch
- smaller changes most of the time don't need to be merged

## #3 Simplify your daily life

Git and your shell has more to offer than just builtin commands!

## Add helper tools

- any command that's prefixed with `git-` can be a git command
- `git-semver-tag` becomes `git semver-tag`

# Create alias in your git config

- entire shell command
- another subcommand

e.g. here are mine:

```
[alias]
p = pull
squash-all = "!f(){ git reset $(git commit-tree HEAD^{tree} -m \"${1:-A new start}\");};f"
sync = "!f() { git pull --rebase && git push; };f"
```

# Alias entire git commands

- for the extreme lazy
- add to your shellrc

```
# use gpush
alias gpush = "git push"

# use commit "my message"
alias commit = "git stage . && git commit -m"
```

## #4 Use branches and tags wisely

Nothing is immutable by default.

# Choose the right branching concept

- trunk based development is a valid choice
- build your workflow around the real world, not some theory
- committing to the main branch is not (always) a sin
- be creative and think out of the box
- don't see branching concepts as a religion

# Tags are not immutable

- tags can be changed and deleted, making them also work as pointers
- that can break dependency pins
- only unique thing in git are commit hashes



## #5 Rely on conventions

Who doesn't love conventions?

# Commit with respect to conventional commits

- be specific about your impact
- short and concise description
- explain details in the body

The format is super simple:

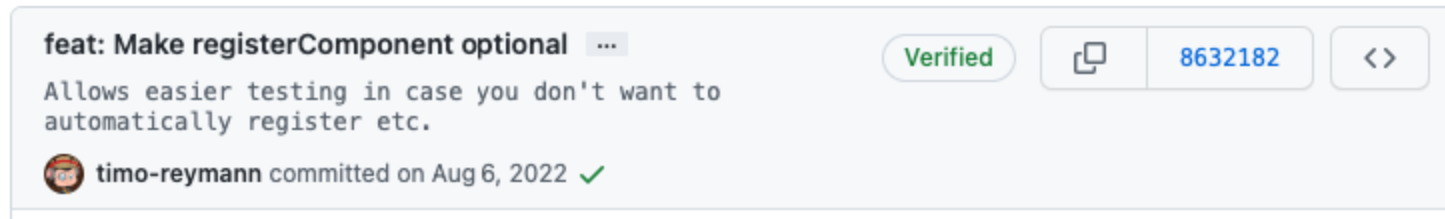
```
<type>[(optional scope)]: <description>  
  
[optional body]  
  
[optional footer(s)]
```

# Use the commit body

- the commit can have a body, use it when required
- collapses by default in web UIs and toolings
  - when viewing the history:



- after clicking on the dots:



# Use Conventional Comments on PRs

- no more undertone in your comments
- clear scope and less words to type and read
- take time for praise as well

The format, again, is super simple:

```
<label> [(decorations)]: <subject>  
  
[discussion]
```

## Recap

- sign your commits with GPG
- keep the history clean, dont hesitate to use erasers
- make your daily life easier with git and shell alias as well as third party packages and scripts
- be aware tags and branches are mutable all the way, only reliable thing are commit hashes
- use conventions for commits and PRs, don't forget about the message body



# Q&A

Questions, concerns, ideas? - Now is the time

# That's (g)it

Slides (Source):

[github/timo-reymann/slides-deal-with-git](https://github.com/timo-reymann/slides-deal-with-git)

Slides (HTML):

[deal-with-git.slides.timo-reymann.de](http://deal-with-git.slides.timo-reymann.de)

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Twitter: [@timo\\_reymann](https://twitter.com/timo_reymann)

GitHub: [timo-reymann](https://github.com/timo-reymann)

# In case of fire



**1. git commit**



**2. git push**



**3. leave building**