# ELECTORSHIP SERIES



# Writing Change Logs that Make Sense The Linux Foundation

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Did you ever think, I wish?

- commit log
  - describes the change clearly?
  - includes background information to do a better review/maintain/learn?
- I wrote a better commit log to maintain my own code?

Did you ever find problems in your patch as you describe the change?



Commit log describes what the commit does and why the commit is needed in the first place:

- Self review describing the change could result in discovering a better way
- Reviewers gives them context about the change (what/why/how)
- Permanent record serves as a document that gets added to the code base
- Maintainers and developers easier to maintain a well understood change
- New developers easier to understand a well documented code change

What's in it for you - Easier to get the patch accepted and easier to maintain.



Use imperative sentences to read like a request for change:

- "Add xyz feature"
- "Fix xyz bug"
- Write concise subject lines that don't end with a period
- Spell check
- Describe what is being fixed/changed/added and why (not how unless it adds to what and why)
- Include supporting information as needed:
  - Compiler warnings, sparse, smatch, coccicheck, panic messages, and so on
  - Enhance the supporting information explain why the warning is valid
- If applicable, add commit id that is being fixed:
  - Linux kernel uses "Fixes" tag to clearly identify the commit.
- Reference: <u>How to Write a Git Commit Message</u>





commit ec0fa0b659144d9c68204d23f627b6a65fa53e50

afs: Fix deadlock between writeback and truncate

- What Describes the how the lock works and what it does
  - Documents current state for reviewers, maintainers, new developers
- Why What is wrong with the current code and how it fails
  - Helps understand why the change is necessary
- Includes fix details
- Includes command output examples
  - Documents new state for reviewers, maintainers, new developers





<u>commit 986b9eacb25910865b50e5f298aa8e2df7642f1b</u> kernel/sys.c: fix prototype of prctl\_get\_tid\_address()

Identify good info. included in this commit

commit 23224e45004ed84c8466fd1e8e5860f541187029

mm: remove kzfree() compatibility definition

Share your thoughts on this commit





commit 77377064c3a94911339f13ce113b3abf265e06da

KVM: ioapic: break infinite recursion on lazy EOI

Share your thoughts on this commit

commit a7a12b5a0f950bc6b9f7153390634ea798738db9

net/sched: act\_tunnel\_key: fix OOB write in case of IPv6 ERSPAN tunnels

Share your thoughts on this commit





#### commit 28802e7c0c9954218d1830f7507edc9d49b03a00

net: usb: qmi\_wwan: add Cellient MPL200 card

Practice session - how can this commit log be improved?

commit 33c8256b3bcc0425caec2bb7511e34176f464348

drm/amd/display: Change ABM config init interface

Practice session - how can this commit log be improved?





commit c7cc9200e9b4a2ac172e990ef1975cd42975dad6

macsec: avoid use-after-free in macsec\_handle\_frame()

Practice session - how can this commit log be improved?

commit 6d6b8b9f4fceab7266ca03d194f60ec72bd4b654

perf: Fix task\_function\_call() error handling

Practice session - how can this commit log be improved?





Discussion:

General consensus around considering audience while writing commit logs.

Compared Linux kernel commit logs with <u>U-Boot project commit log adding a device id</u>.

## ELF LIVE MENTORSHIP SERIES

### Thank you for joining us today!

We hope it will be helpful in your journey to learning more about effective and productive participation in open source projects. We will leave you with a few additional resources for your continued learning:

- The <u>LF Mentoring Program</u> is designed to help new developers with necessary skills and resources to experiment, learn and contribute effectively to open source communities.
- <u>Outreachy remote internships program</u> supports diversity in open source and free software
- <u>Linux Foundation Training</u> offers a wide range of <u>free courses</u>, webinars, tutorials and publications to help you explore the open source technology landscape.
- <u>Linux Foundation Events</u> also provide educational content across a range of skill levels and topics, as well as the chance to meet others in the community, to collaborate, exchange ideas, expand job opportunities and more. You can find all events at <u>events.linuxfoundation.org</u>.