

# jj - A fresh approach

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2026.05.02

Ich

Motivation

Walkthrough

Conflicts

Reset

[go/small-cl](#)

Change context  
ongy

# Wer bin ich?

- Senior Software Engineer @ Google
- ~4 Jahre SWE  $\Rightarrow$  Senior SWE @ Intrinsic
- ~4 Jahre SWE  $\Rightarrow$  Manager @ IGEL
- [github.com/Ongy](https://github.com/Ongy)
- Blog ( 2 Einträge im Jahr)

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- Daten
- Scripte
- Code
- Experimentieren





- Freie Software darf für jeden Zweck genutzt werden und ist frei von Einschränkungen wie dem Ablauf einer Lizenz oder willkürlichen geografischen Beschränkungen.
  - Freie-Software-Code darf ohne Vertraulichkeitsvereinbarungen oder ähnliche Einschränkungen von allen untersucht werden.
  - Freie Software darf praktisch kostenfrei kopiert und weitergegeben werden.
  - Freie Software darf beliebig modifiziert und angepasst werden. Verbesserungen dürfen weitergegeben werden.
- [fsfe.org/freesoftware/freesoftware.de.html](https://fsfe.org/freesoftware/freesoftware.de.html)



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# Setup

```
$ mkdir repository && cd repository
$ jj git init
  Initialized repo in "."
$ jj log
@ rlsznuol ongyerth@google.com 2026-04-26 10:19:17 5a74790e
| (empty) (no description set)
* zzzzzzzz root() 00000000
```

## Add something

```
$ echo Hi > file
```

```
$ jj status
```

```
Working copy changes:
```

```
A file
```

```
Working copy (@) : rlsznuol 93b79ba4 (no description set)
```

```
Parent commit (@-): zzzzzzzz 00000000 (empty) (no description set)
```

## Give it meaning

```
$ jj describe -m "Add Hi file"
```

```
Working copy (@) now at: rlsznuol e935518c Add Hi file
```

```
Parent commit (@-)      : zzzzzzzz 00000000 (empty) (no description set)
```

```
$ jj new
```

```
Working copy (@) now at: qsovzzoq e3305fca (empty) (no description set)
```

```
Parent commit (@-)      : rlsznuol e935518c Add Hi file
```

## Commit to it

```
$ jj commit -m "Add Hi file"
Working copy (@) now at: zrkyvyks 56906abd (empty) (no description set)
Parent commit (@-)      : rlsznuol 9541ba58 Add Hi file
$ jj status
@ zrkyvyks ongyerth@google.com 2026-04-26 11:01:46 56906abd
| (empty) (no description set)
* rlsznuol ongyerth@google.com 2026-04-26 11:01:46 9541ba58
| Add Hi file
* zzzzzzzz root() 00000000
```

## Diff it

```
$ echo Ho > file
$ jj diff
diff --git a/file b/file
index b14df6442e..359031ecbb 100644
--- a/file
+++ b/file
@@ -1,1 +1,1 @@
-Hi
+Ho
```

# Abandon

```
$ jj abandon
```

```
Abandoned 1 commits:
```

```
  zrkyvyks 0699e4dd (no description set)
```

```
Working copy (@) now at: kxrvoszs 63fb2230 (empty) (no description set)
```

```
Parent commit (@-)      : rlsznuol 9541ba58 Add Hi file
```

```
Added 0 files, modified 1 files, removed 0 files
```

```
$ cat file
```

```
Hi
```

# Begriffsklärung

```
$ jj log
@ kxrvoszs ongyerth@google.com 2026-04-26 11:18:24 63fb2230
| (empty) (no description set)
* rlsznuo1 ongyerth@google.com 2026-04-26 11:01:46 main 9541ba58
| Add Hi file
~
```

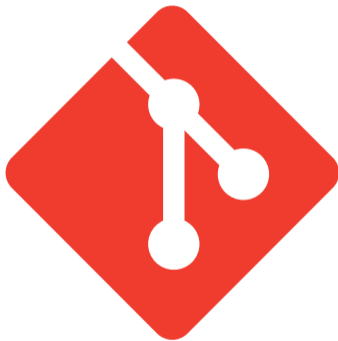
[Change ID](#)

[Bookmark](#)

[Commit ID](#)

## Change ändern

```
$ echo Ho > file
$ jj commit -m "Change file contents"
Working copy (@) now at: xsolmwxx 316c6d34 (empty) (no description set)
Parent commit (@-)      : kxrvoszs 37c4df3f Change file contents
$ echo Hi > file
$ echo status
Working copy changes:
M file
Working copy (@) : xsolmwxx bde7f783 (no description set)
Parent commit (@-): kxrvoszs 37c4df3f Change file contents
$ jj squash
Working copy (@) now at: kntvmymn ba67b498 (empty) (no description set)
Parent commit (@-)      : kxrvoszs 065cdd37 (empty) Change file content.
```







- De-facto Industrie Standard
- Distributed Version Control System
- Verwendet von allen vorher genannten Plattformen (Forges)
- Verwendet für alle vorher gezeigten Projekte

## Git Push

```
$ jj git remote add origin git@github.com:Ongy/jj-example.git
$ jj bookmark create main -r rlsznuol
  Created 1 bookmarks pointing to rlsznuol 9541ba58 main | Add Hi file
$ jj git push --allow-new
  Changes to push to origin:
  Add bookmark main to 9541ba58dbb5
```

# Immutable

```
$ jj describe -r rlsznuol -m "New message"
Error: Commit 9541ba58dbb5 is immutable
Hint: Could not modify commit: rlsznuol 9541ba58 main | Add Hi file
Hint: Immutable commits are used to protect shared history.
Hint: For more information, see:
      - https://jj-vcs.github.io/jj/latest/config/#set-of-immutable-commits
      - `jj help -k config`, "Set of immutable commits"
Hint: This operation would rewrite 1 immutable commits.
```

```
$ jj log
@ sowvuyuv ongyerth@google.com 2026-04-26 19:18:01 b603d6c9
| (empty) (no description set)
* kxrvoszs ongyerth@google.com 2026-04-26 19:17:18 b04db90b
| Change file contents
| * tmzvwurn ongyerth@google.com 2026-04-26 19:17:53 6bd473d6
|-/ Add file2
* rlsznuol ongyerth@google.com 2026-04-26 11:01:46 main 9541ba58
| Add Hi file
~
```

# Merge

```
$ jj new kxrvoszs tmzwvurn
Working copy (@) now at: xmqmvxrw 70af2923 (empty) (no description set)
Parent commit (@-)      : kxrvoszs b04db90b Change file contents
Parent commit (@-)      : tmzwvurn 6bd473d6 Add file2
Added 1 files, modified 0 files, removed 0 files
```

# Merge

```
$ jj log
@   xmqmvxrw ongyerth@google.com 2026-04-26 19:19:59 70af2923
|-\ (empty) (no description set)
| * tmzwwurn ongyerth@google.com 2026-04-26 19:17:53 6bd473d6
| | Add file2
* | kxrvoszs ongyerth@google.com 2026-04-26 19:17:18 b04db90b
|-/ Change file contents
* rlsznuol ongyerth@google.com 2026-04-26 11:01:46 main 9541ba58
| Add Hi file
~
```

# Rebase

```
$ jj rebase -s tmzwvurn -d kxrvoszs && jj new tmzwvurn
Rebased 1 commits onto destination
Working copy (@) now at: nklktxzv 14b4c0f9 (empty) (no description set)
Parent commit (@-)      : tmzwvurn 9a3103dc Add file2
Added 1 files, modified 0 files, removed 0 files
```

```
$ jj log
@ nklktxzv ongyerth@google.com 2026-04-26 19:27:35 14b4c0f9
| (empty) (no description set)
* tmzwwurn ongyerth@google.com 2026-04-26 19:27:35 9a3103dc
| Add file2
* kxrvoszs ongyerth@google.com 2026-04-26 19:17:18 b04db90b
| Change file contents
* rlsznuol ongyerth@google.com 2026-04-26 11:01:46 main 9541ba58
| Add Hi file
~
```

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**Conflicts**

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## Conflict Premisse

```
$ jj log
@ pxumovyx ongyerth@google.com 2026-04-27 19:17:44 50298083
| (empty) (no description set)
* pqrxyvqs ongyerth@google.com 2026-04-27 19:17:44 487e6060
| Set content to he
| * rxrnnrrs ongyerth@google.com 2026-04-27 19:17:20 51e43340
|-/ Set content to ho
* rlsznuol ongyerth@google.com 2026-04-26 11:01:46 main 9541ba58
| Add Hi file
~
```

## Conflict Merge

```
$ jj new pqrxyvqs rxrnnrrs
Working copy (@) now at: zpmrvvwl 4ae309c0 (conflict) (empty) (no desc
Parent commit (@-)      : pqrxyvqs 487e6060 Set content to he
Parent commit (@-)      : rxrnnrrs 51e43340 Set content to ho
Added 0 files, modified 1 files, removed 0 files
Warning: There are unresolved conflicts at these paths:
file      2-sided conflict
```

## Conflict Marker

```
$ cat file
<<<<<<< Conflict 1 of 1
%%%%%%%%% Changes from base to side #1
-Hi
+He
+++++++ Contents of side #2
Ho
>>>>>>> Conflict 1 of 1 ends
```

## Conflict New

```
$ jj new
Working copy (@) now at: qwtpkws1 234030be (conflict) (empty) (no desc:
Parent commit (@-)      : zpmrvvw1 4ae309c0 (conflict) (empty) (no desc:
Warning: There are unresolved conflicts at these paths:
file      2-sided conflict
```

## Conflict Fix

```
$ echo He > file
```

```
$ jj log
```

```
@ qwtpkws1 ongyerth@google.com 2026-04-27 19:22:27 8bb1fdc7
```

```
| (no description set)
```

```
* zpmrvvwl ongyerth@google.com 2026-04-27 19:19:08 4ae309c0 conflict
```

```
|- \ (empty) (no description set)
```

```
| * rxrnnrrs ongyerth@google.com 2026-04-27 19:17:20 51e43340
```

```
| | Set content to ho
```

```
* | pqrxyvqs ongyerth@google.com 2026-04-27 19:17:44 487e6060
```

```
|- / Set content to he
```

```
* rlsznuol ongyerth@google.com 2026-04-26 11:01:46 main 9541ba58
```

```
| Add Hi file
```

```
~
```

## Online Docu

```
$ jj log -r @
  @ uwtzkwyv ongyerth@google.com 2026-05-02 07:53:16 7b20924b
  | (empty) (no description set)
$ jj log -r @-
  * qvrxtqkp ongyerth@google.com 2026-05-02 07:53:16 52d4a640
  | (empty) Enable my fancy feature
$ jj log -r '@ | @-'
  @ uwtzkwyv ongyerth@google.com 2026-05-02 07:53:16 7b20924b
  | (empty) (no description set)
  * qvrxtqkp ongyerth@google.com 2026-05-02 07:53:16 52d4a640
  | (empty) Enable my fancy feature
```

# Beispiel

```
$ jj log -r  
  '(::@ & commiter_date(after:"2025-11-25") ~  
    description(substring:"RELNOTES"))'  
  -T "commit_id ++ \"\n\" -G | wc -l  
??
```

```
$ jj log -r  
  '(::@ & commiter_date(after:"2025-11-25") &  
    author(substring:"My Manager"))'  
  -T "commit_id ++ \"\n\" -G | wc -l  
??
```

## Grundlage

Es ist besser viele kleine Änderungen zu haben, statt einer großen.

- Review
- Bisect
- Conflicts vermeiden

## Small CLs

```
$ jj log -r 'trunk()::@'
@ uwtzkwyv ongyerth@google.com 2026-05-02 07:53:16 7b20924b
* qvrxtqkp ongyerth@google.com 2026-05-02 07:53:16 52d4a640
| Enable my fancy feature
* womkozwp ongyerth@google.com 2026-05-02 07:53:16 718bea3b
| Implement my fancy feature
* lwnuxorv ongyerth@google.com 2026-05-02 07:53:16 8704e5da
| Introduce MY_FANCY_FEATURE_FLAG
* rlsznuol ongyerth@google.com 2026-04-26 11:01:46 main 9541ba58
| Add Hi file
~
```

```
$ $ jj log
@ uywqtplz ongyerth@google.com 2026-05-02 12:02:23 177e3116
| (empty) (no description set)
| * pqrxyvqs ongyerth@google.com 2026-04-27 19:17:44 487e6060
|-/ Set content to he
| * rxrnnrrs ongyerth@google.com 2026-04-27 19:17:20 51e43340
|-/ Set content to ho
* rlsznuol ongyerth@google.com 2026-04-26 11:01:46 main 9541ba58
| Add Hi file
~
```

```
$ jj edit pqrxyvqs  
Working copy (@) now at: pqrxyvqs 487e6060 Set content to he  
Parent commit (@-)      : rlsznuol 9541ba58 main | Add Hi file  
Added 0 files, modified 1 files, removed 0 files
```

## New (and squash)

```
$ jj new pqrxyvqs
```

```
Working copy (@) now at: oqtsyuup 0cacac17 (empty) (no description set)
```

```
Parent commit (@-)      : pqrxyvqs 487e6060 Set content to he
```

```
Added 0 files, modified 1 files, removed 0 files
```

Live (terminal)

Live (terminal)

- Codeberg Logo in public domain
- Gitlab Logo Mark MIT Licenses
- GitHub Logo Allowed in Blogs/Articles
- BitBucket Logo Atlassian embraces fair use
- Home Assistant Logo CC SA 4.0
- Tux Any use with attribution.  
Attribution: lewing@isc.tamu.edu Larry Ewing and The GIMP
- Chromium Logo
- Firefox Logo CC SA 4.0