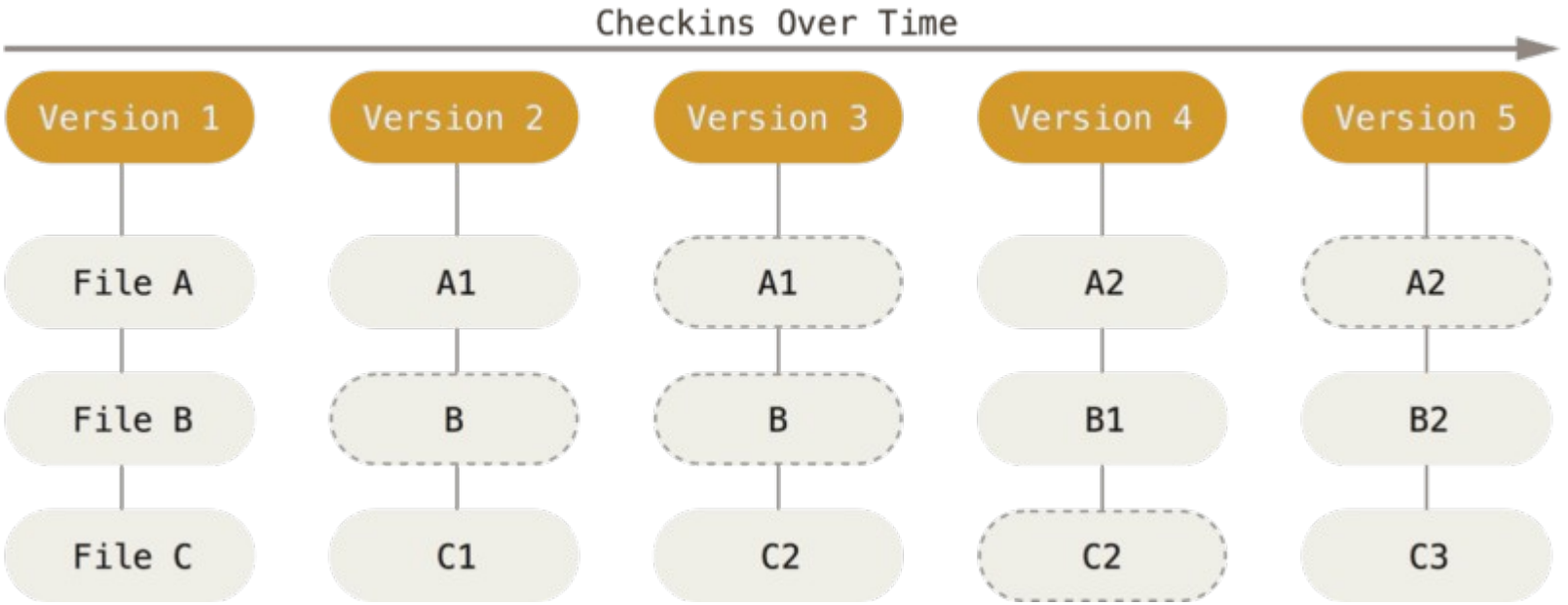
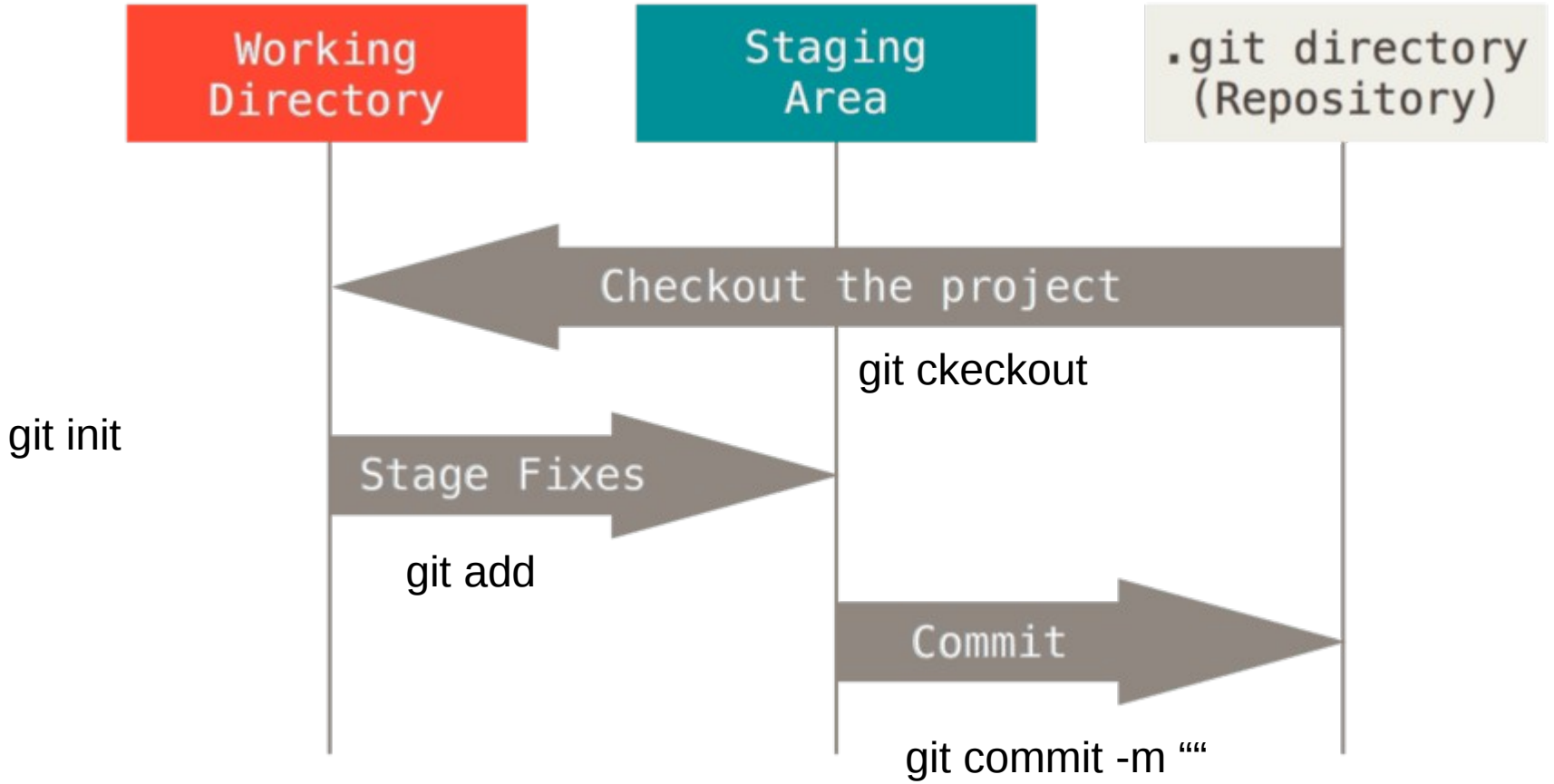
Git Version Control System



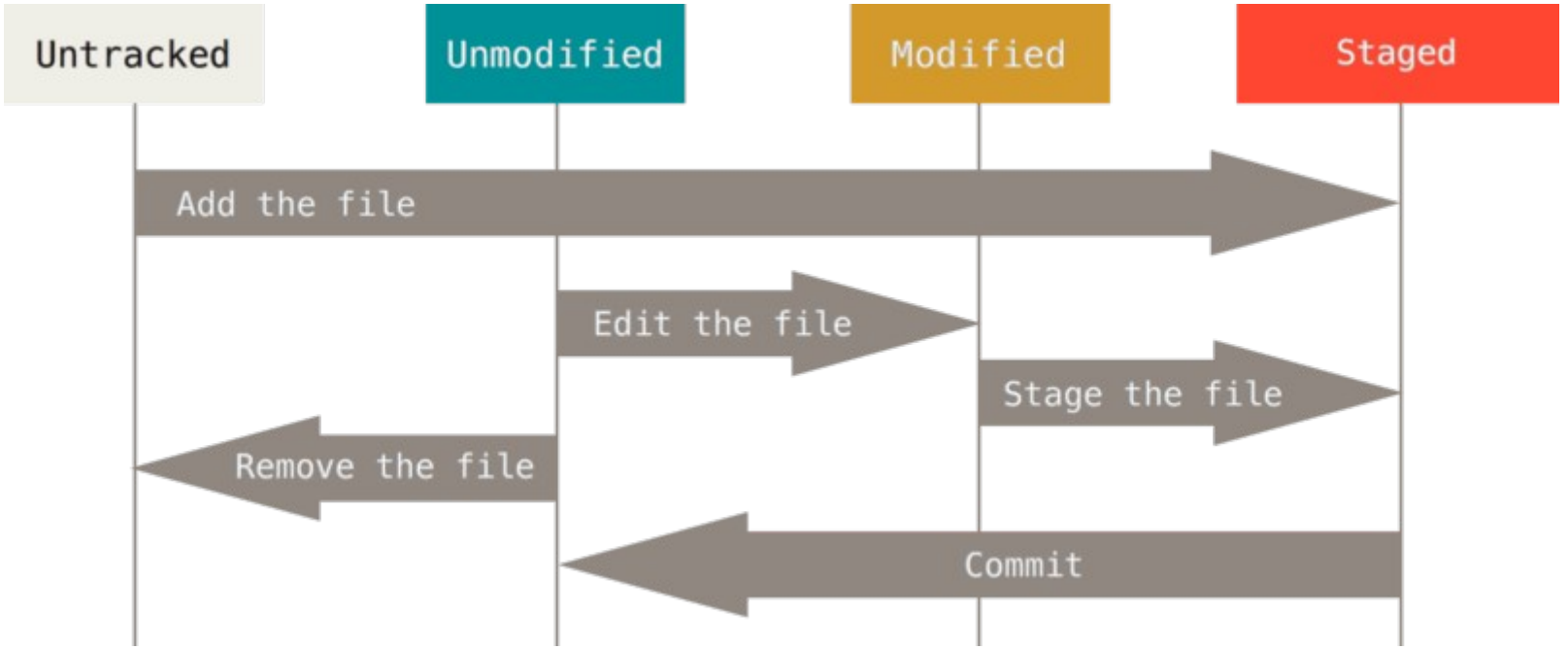
Main states


Working Directory
Staging Area
.git directory (Repository)
Checkout the project
git ckeckout
git init
Stage Fixes
git add
Commit
git commit -m ““

States of a file

untracked

tracked



Text 3

- Commited files are tracked
- New files which are not staged are untracked
- Git add to stage files
- Git commit to commit
- Stage files after editing them
- Remove files to make them untracked
- Git status to check the status of files in the working directory
- .gitignore to ignore files
- Git log -p -2 to see commit history
- Git log –oneline –all –graph –decorate

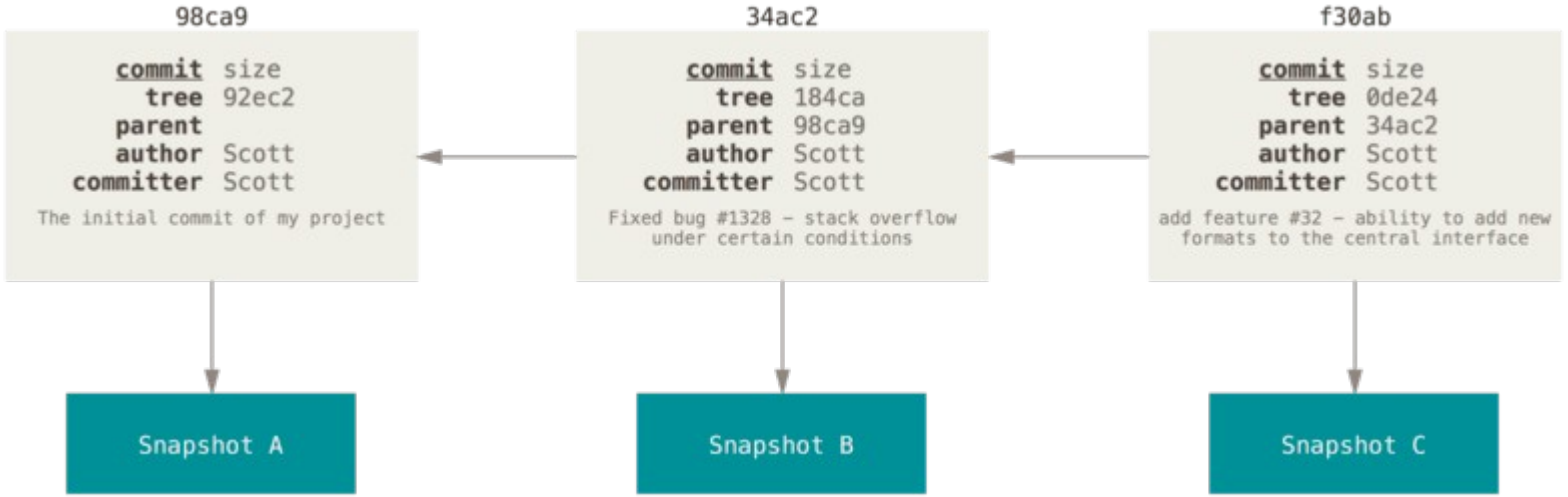
Remote Repositories

GitHub

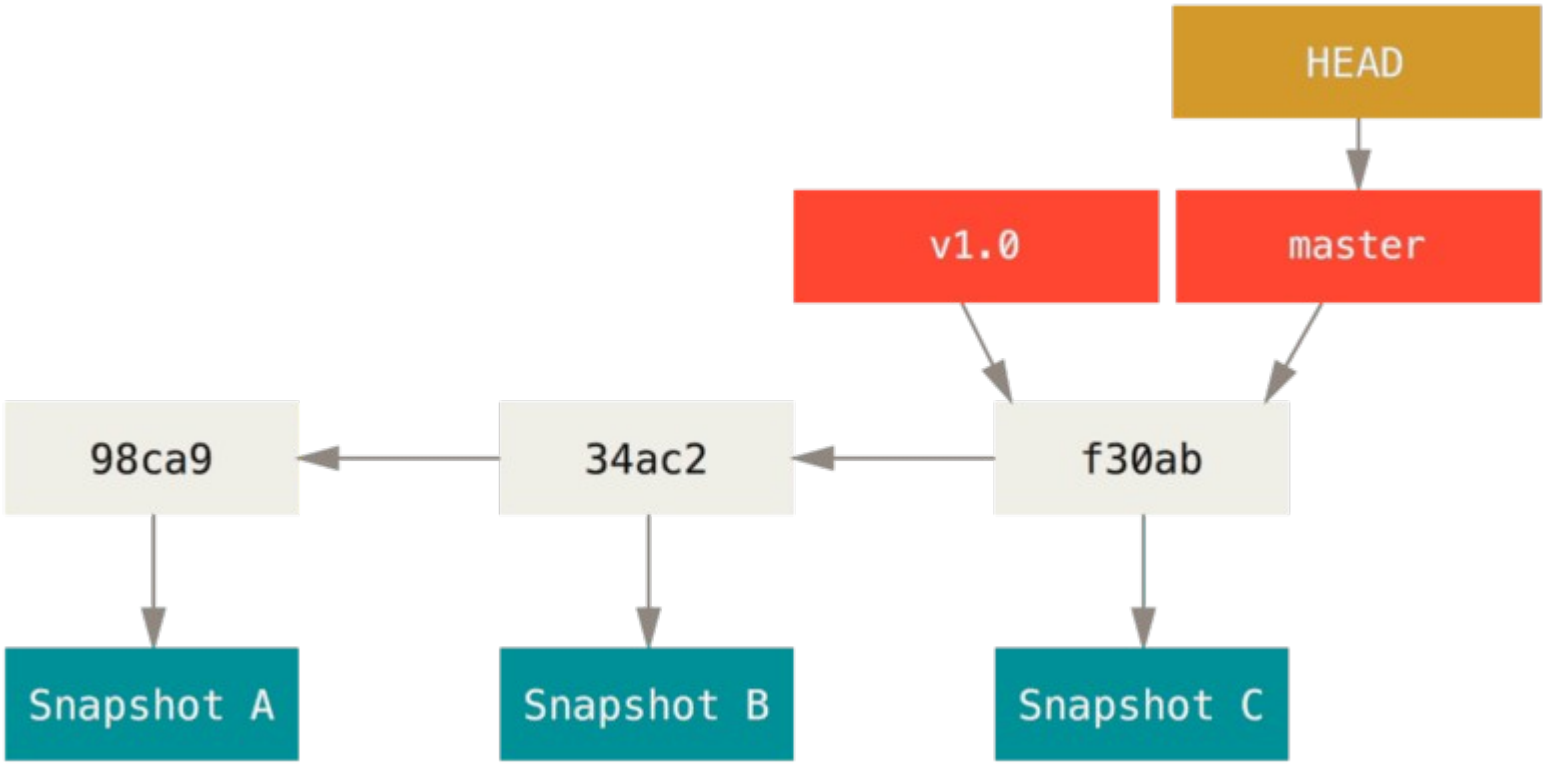
Text 4

- Git remote -v to show remotes
- Add remotes with: git remote add name link
- Can fetch with git fetch
- Fetch does not merge
- Git pull to fetch and merge
- Git push name if you have push rights

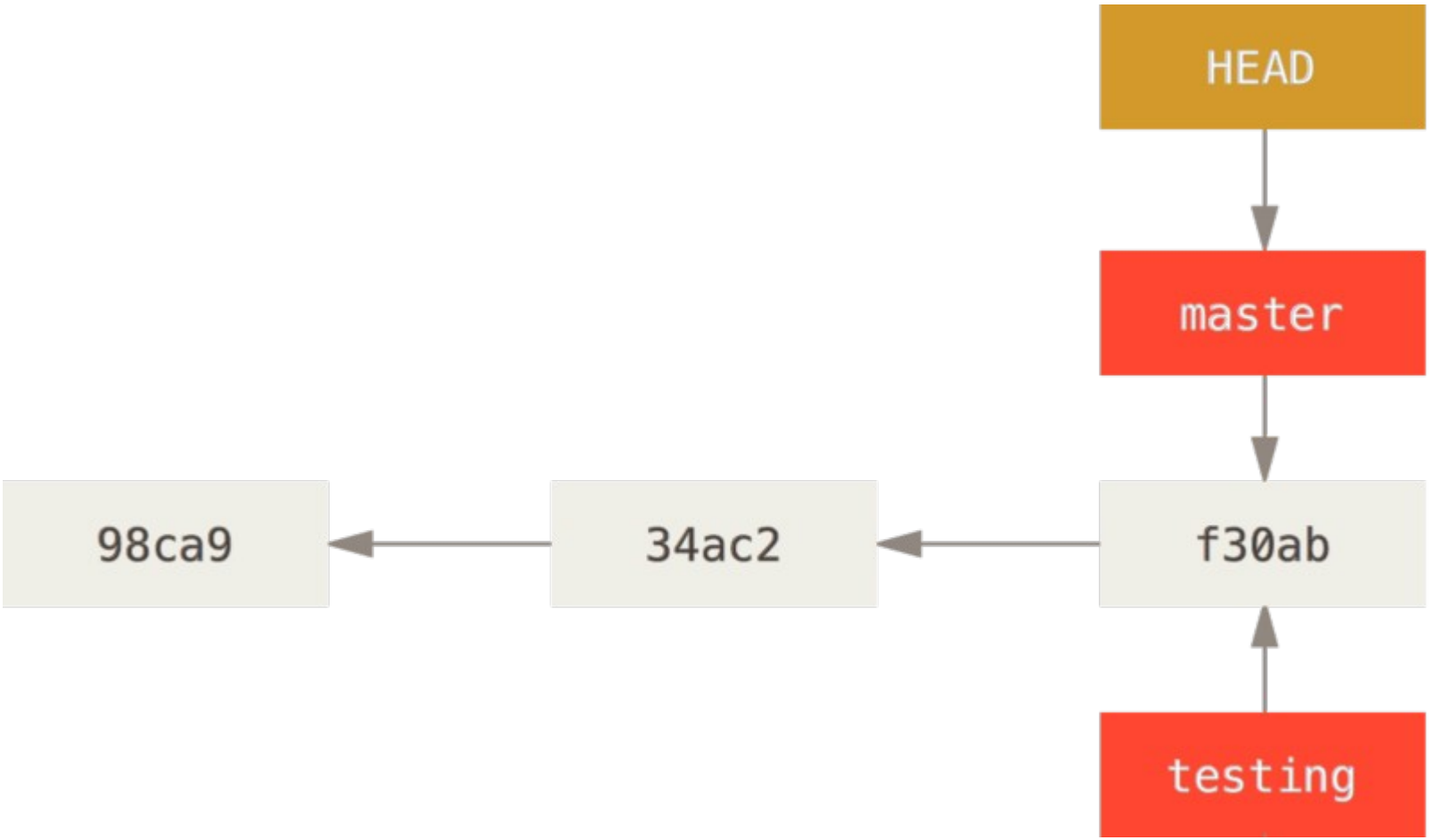
Commit Tree


98ca9
commit size
tree 92ec2
parent
author Scott
committer Scott
The initial commit of my project
34ac2
commit size
tree 184ca
parent 98ca9
author Scott
committer Scott
Fixed bug #1328 - stack overflow under certain conditions
f30ab
commit size
tree 0de24
parent 34ac2
author Scott
committer Scott
add feature #32 - ability to add new formats to the central interface
Snapshot A
Snapshot B
Snapshot C

Branch and Commits

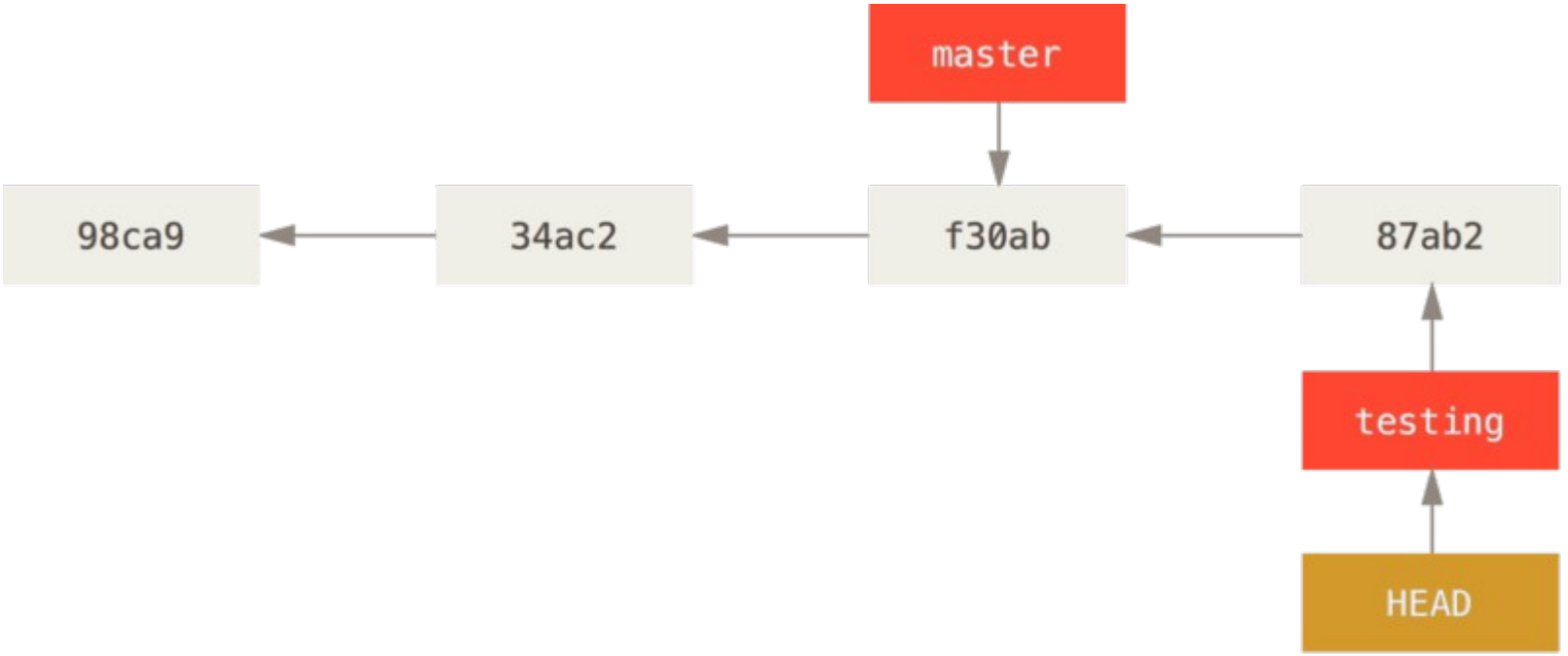


New branch



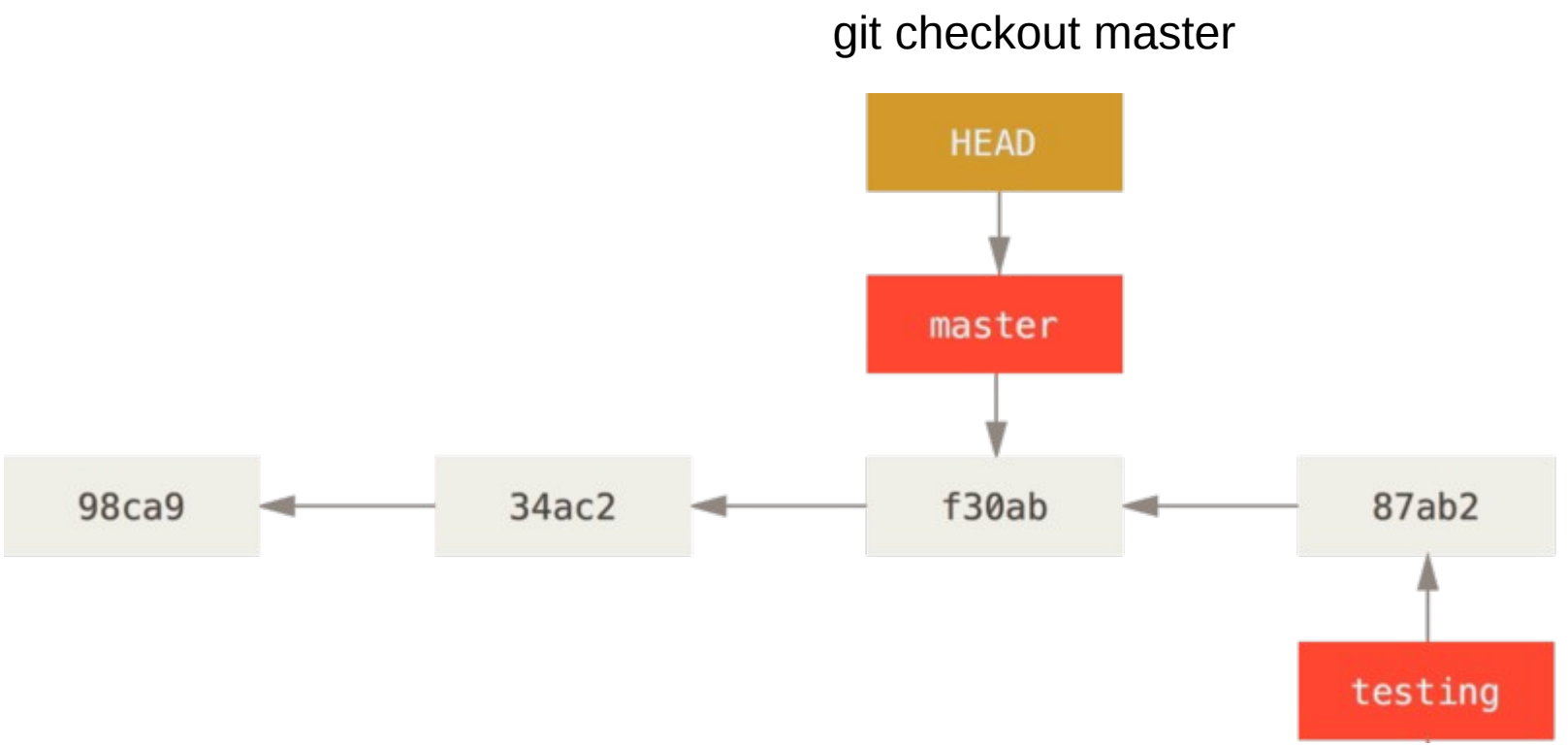
git branch testing

New Commit

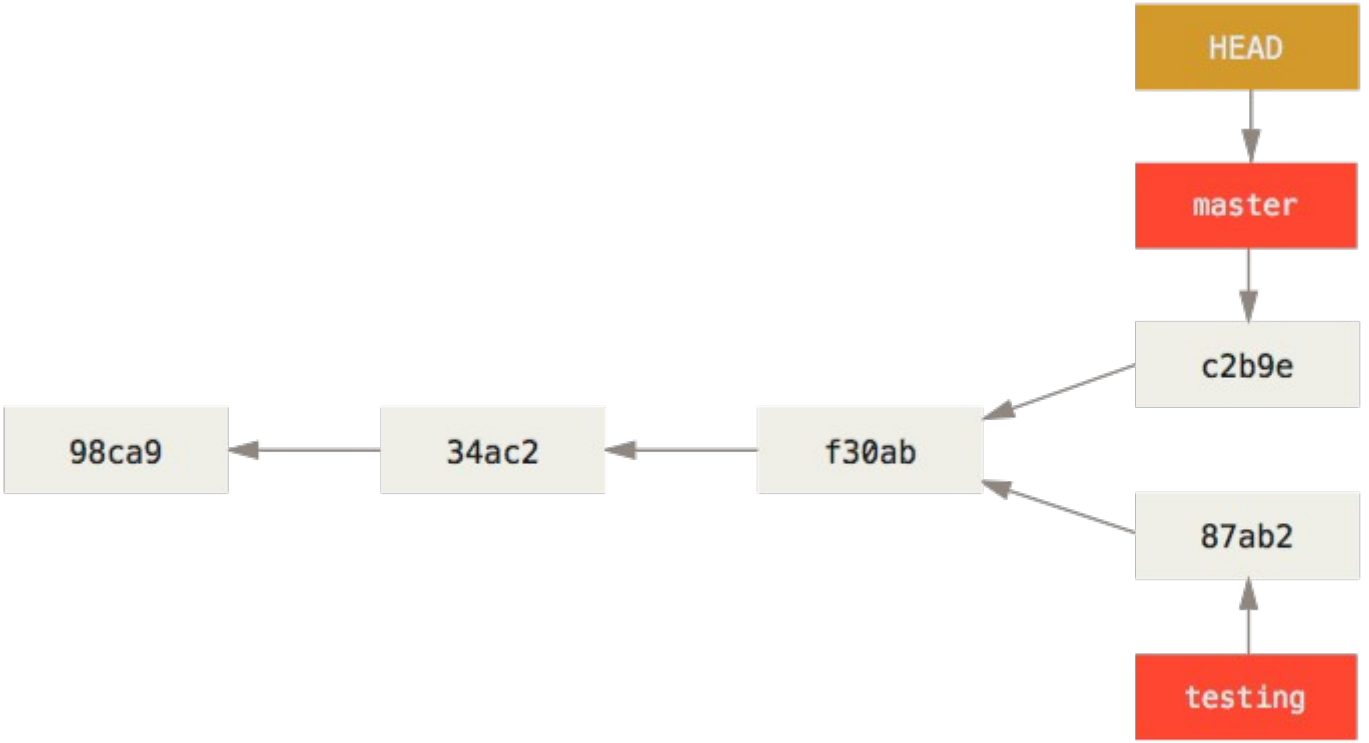


git status

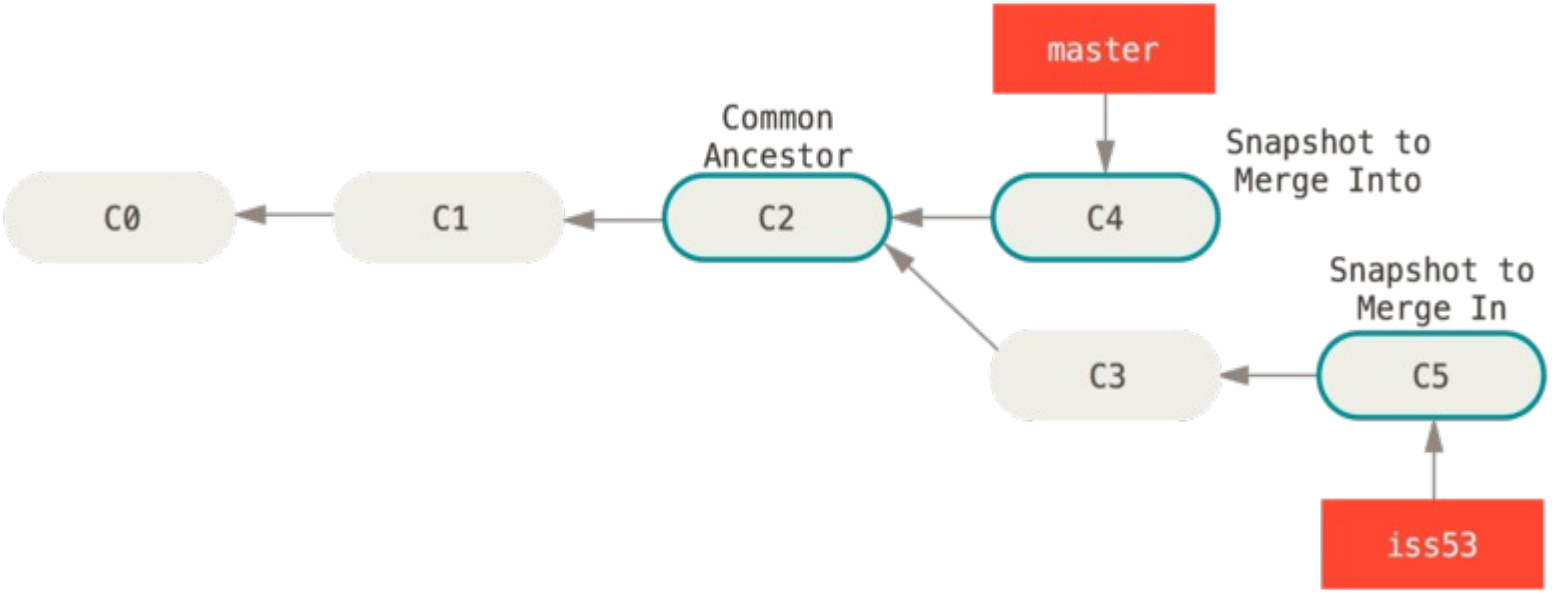
Change to master branch



New master commit



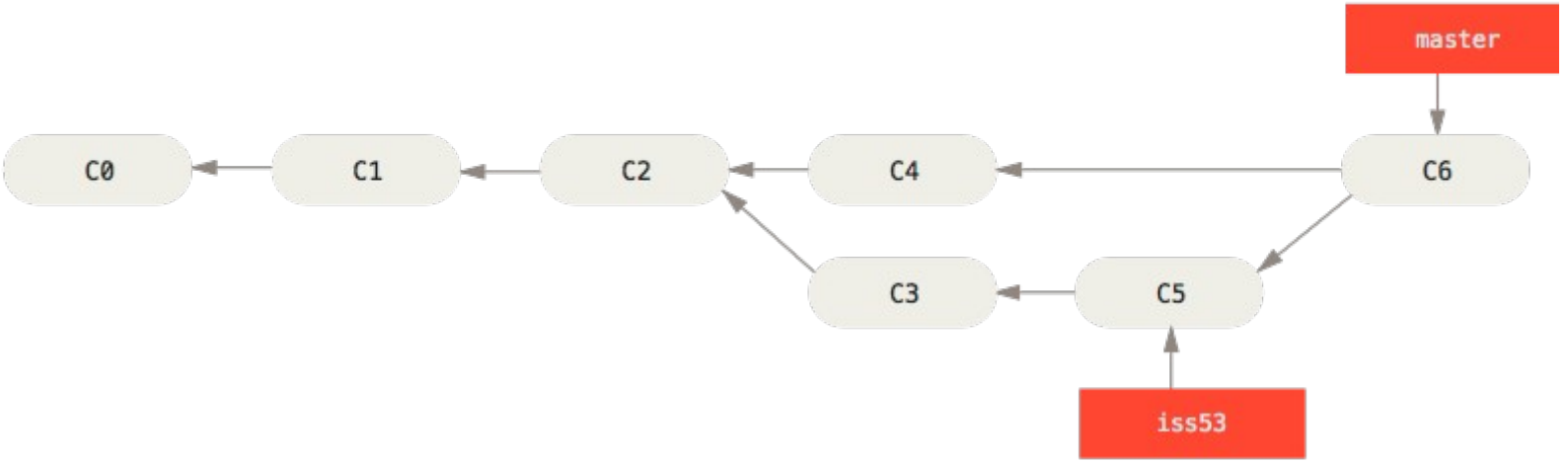
Merging



git checkout master

Merging

git merge iss53



git branch -d iss53

Git Log example

git log –oneline –graph –decorate --all

```
*   5e9bc38 (HEAD, master) merge and solve conflict
|\
| * 9856fad (unicorn) Einhorn
* | 6475267 3.Zeile über den Wolken
|/
* a8dd7a6 added 2. line
* 6754c67 started poem
```