

Git

(or version control in general..)

invited talk in the scope of the hochleistungslabor's meeting series:
**very intelligent researchers giving insights
into national and international approaches.**

Rostock, 2015-04-08

Martin Scharm

"FINAL".doc



FINAL.doc!



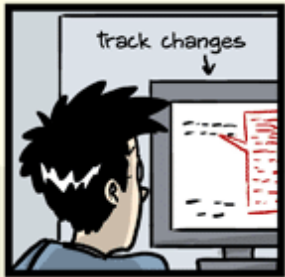
FINAL_rev.2.doc



FINAL_rev.6.COMMENTS.doc



FINAL_rev.8.comments5.
CORRECTIONS.doc



FINAL_rev.18.comments7.
corrections9.MORE.30.doc



FINAL_rev.22.comments49.
corrections.10.#@\$%WHYDID
ICOMETOGRADSCHOOL????.doc



JORGE CHAM © 2012

NOT SO LONG AGO.
IN A GALAXY CLOSE BY...

HEY GEORGE
WHAT'S UP?

I ACCIDENTILY
DELETED ANOTHER
PAGE OF MY
MANUSCRIPT...

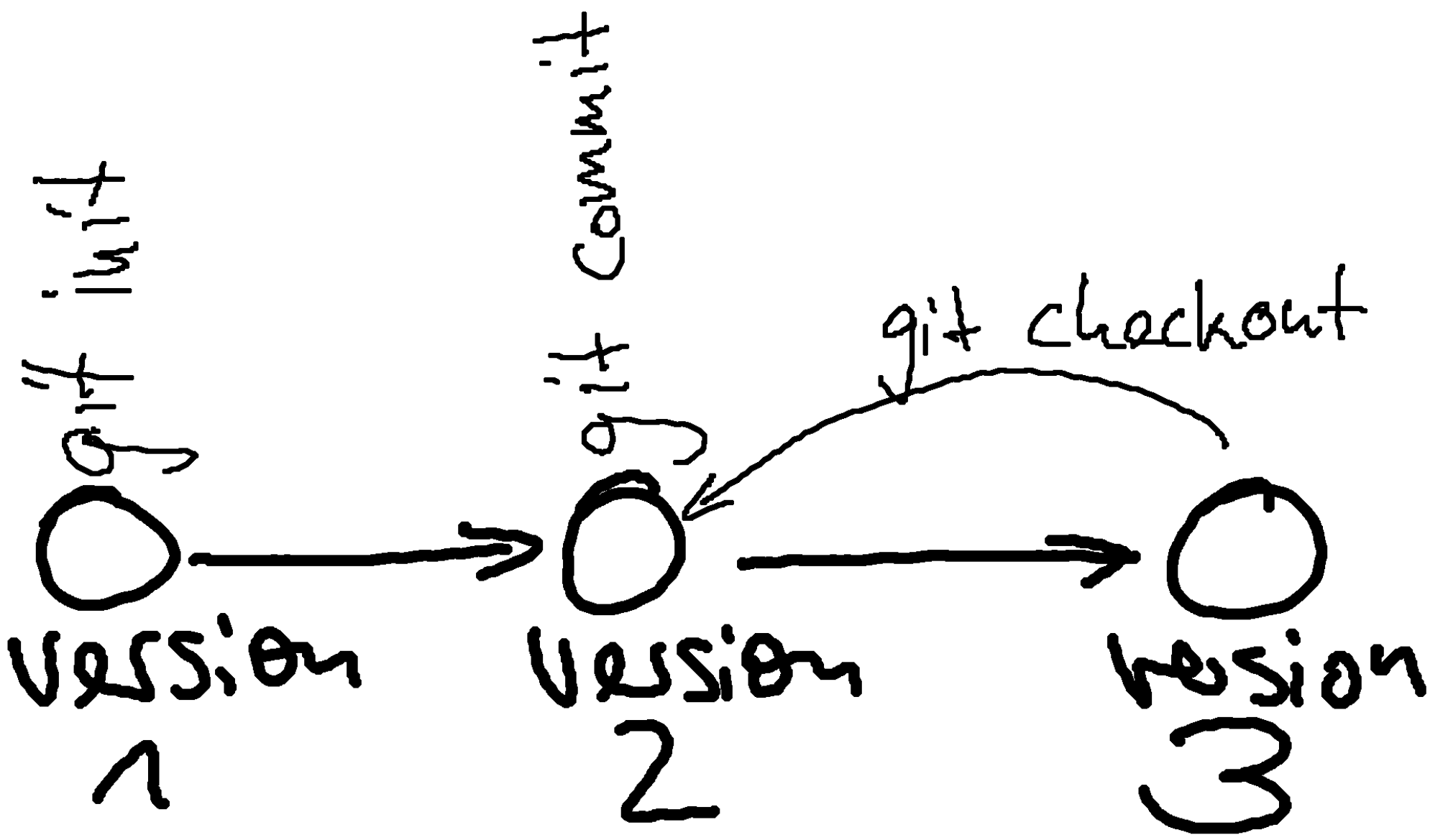
NOT THIS STUPID
'SUN BATTLE' THING
AGAIN...

IT'S NOT STUPID!
- YOUR STUPID!

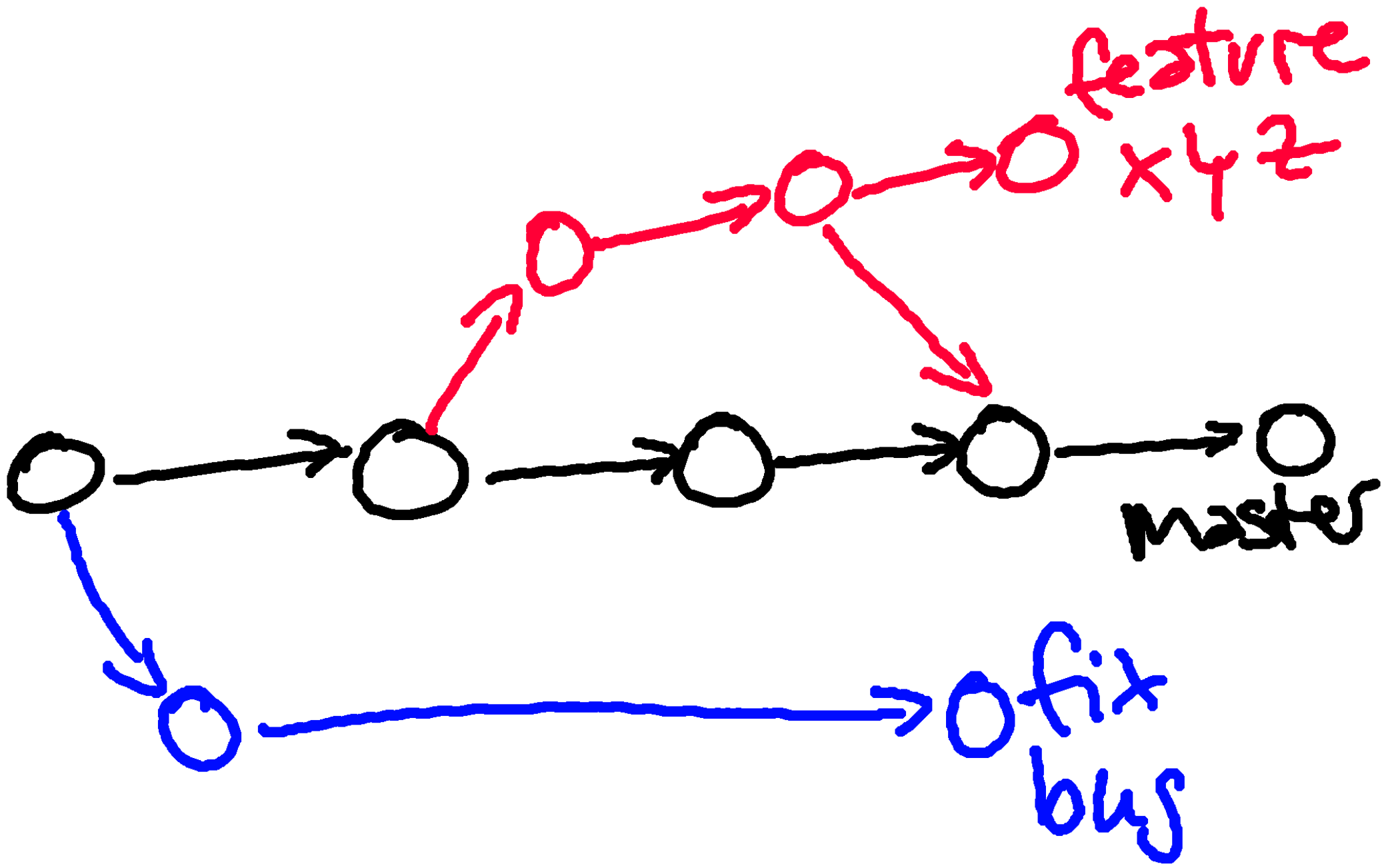
OH WELL...
YOU HAD IT ALL
UNDER VERSION
CONTROL RIGHT?

VERSION CON-WHAT?

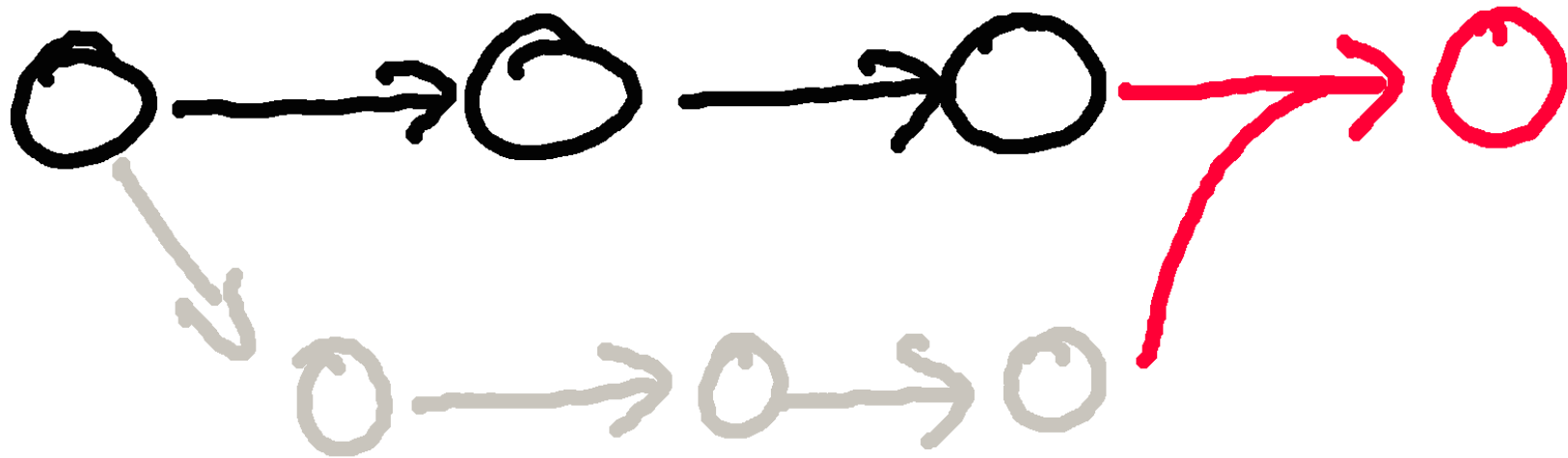
UGH...



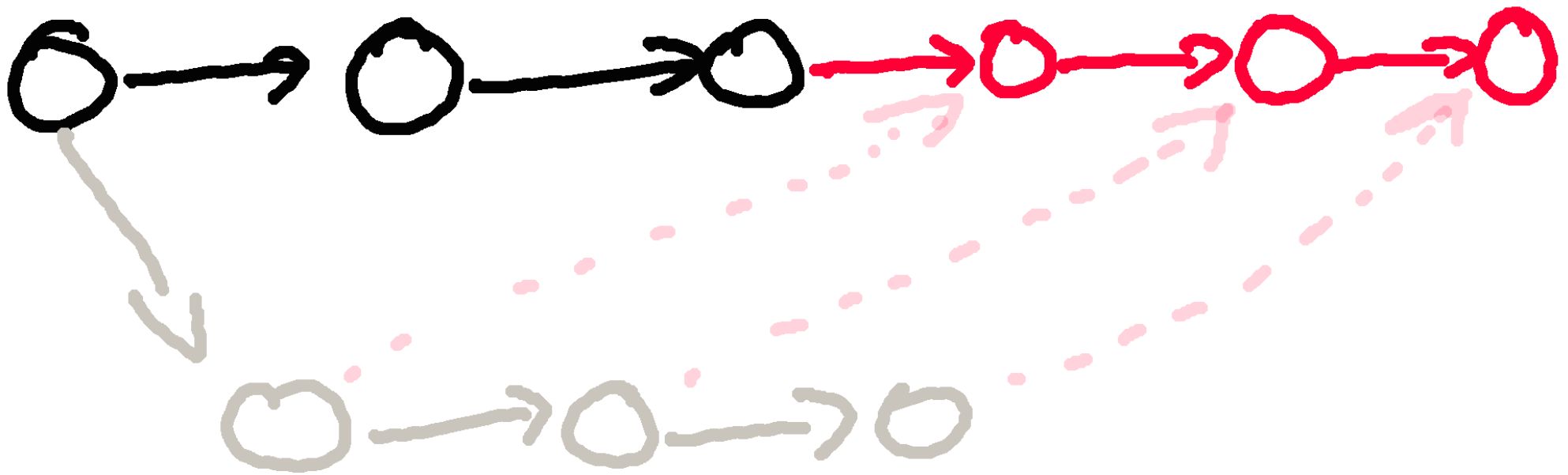
time



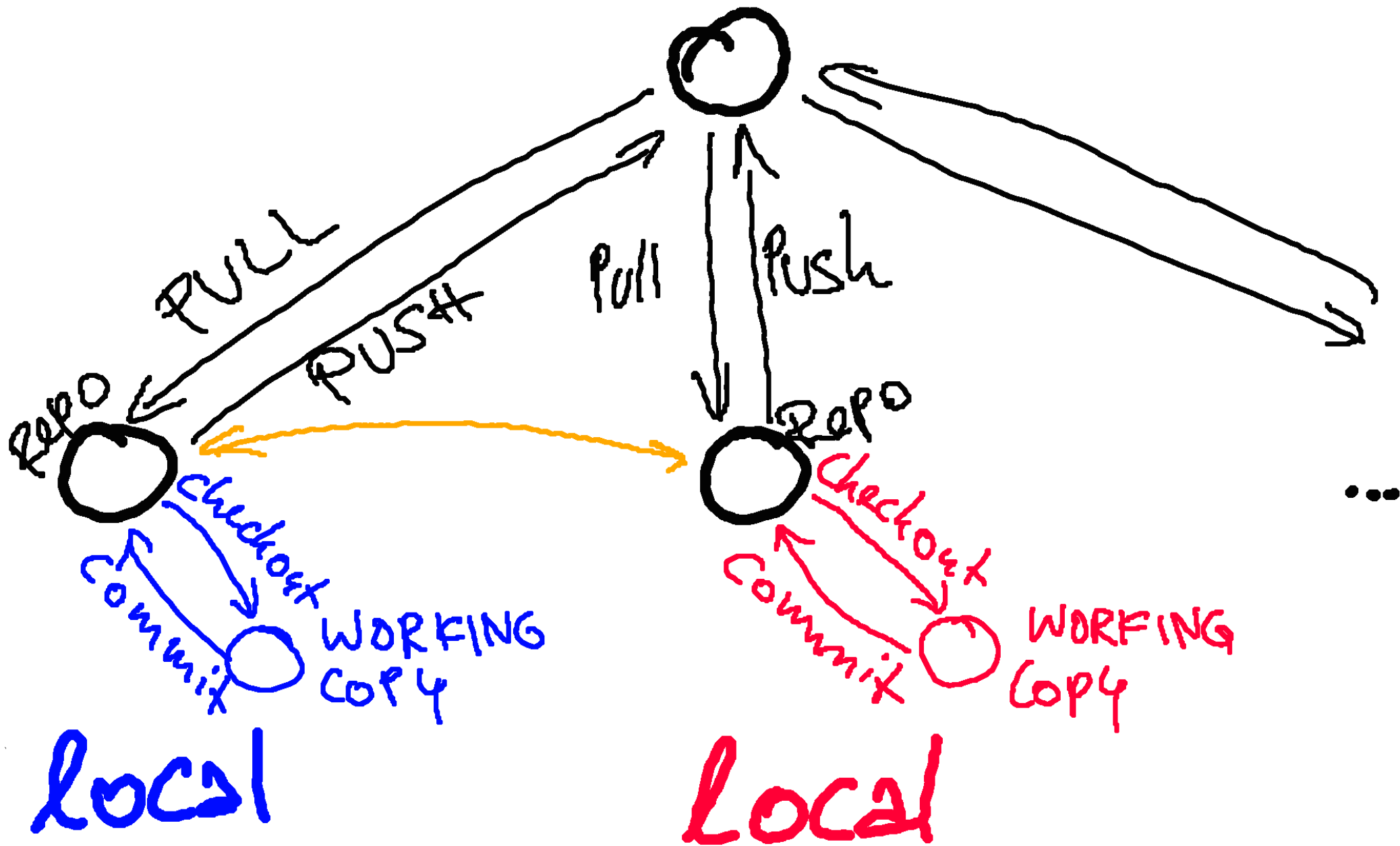
MERGE



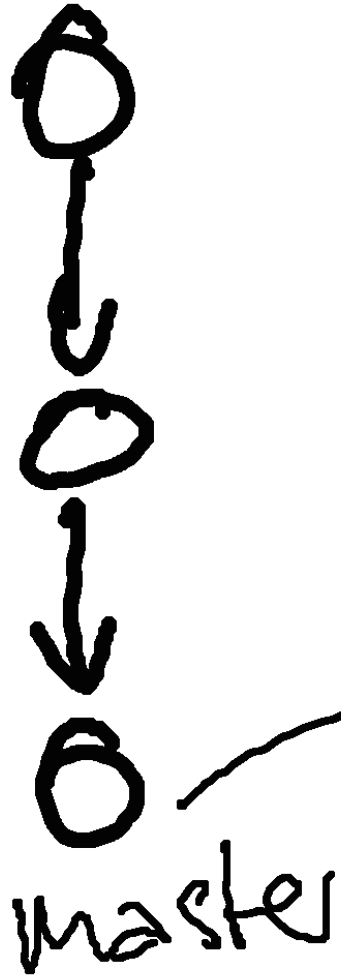
REBASE



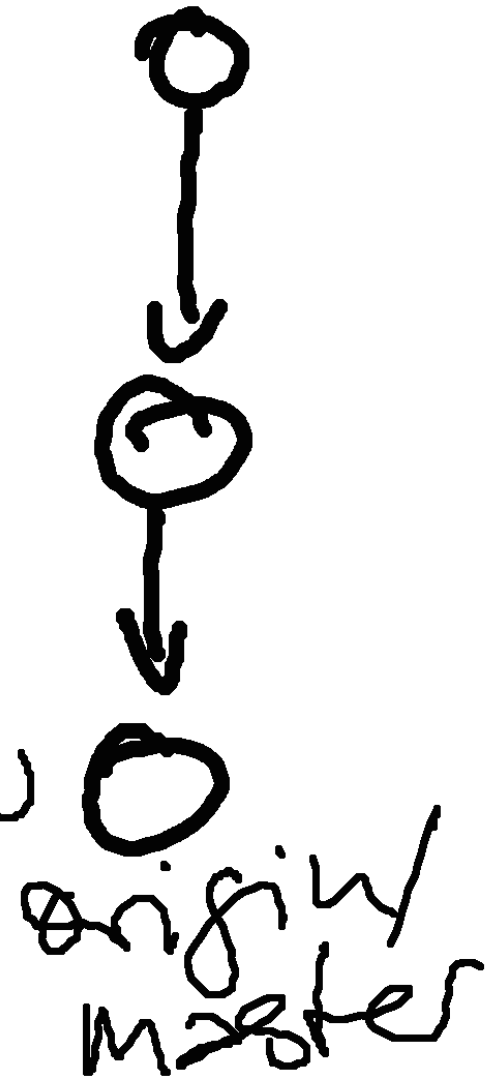
REMOTE



Local



Remote



track



local

remote

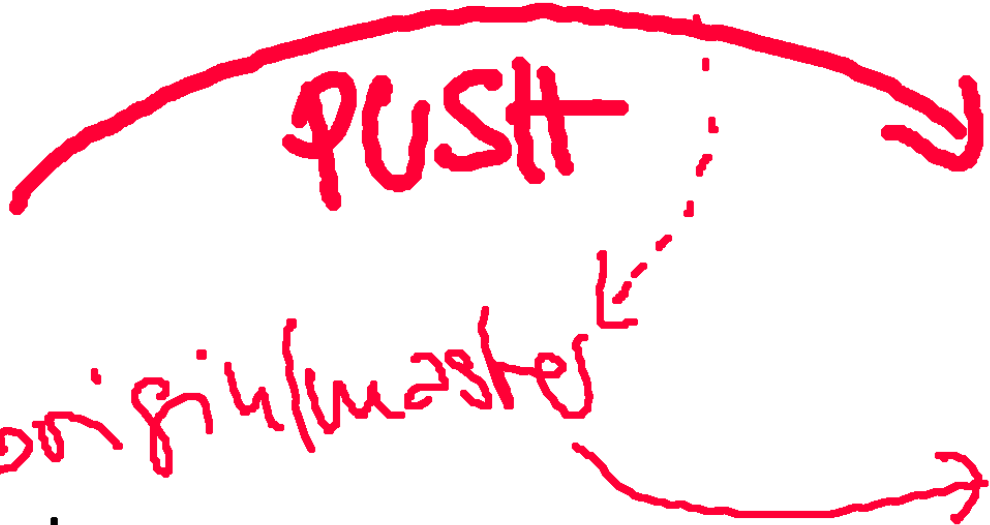


origin/master



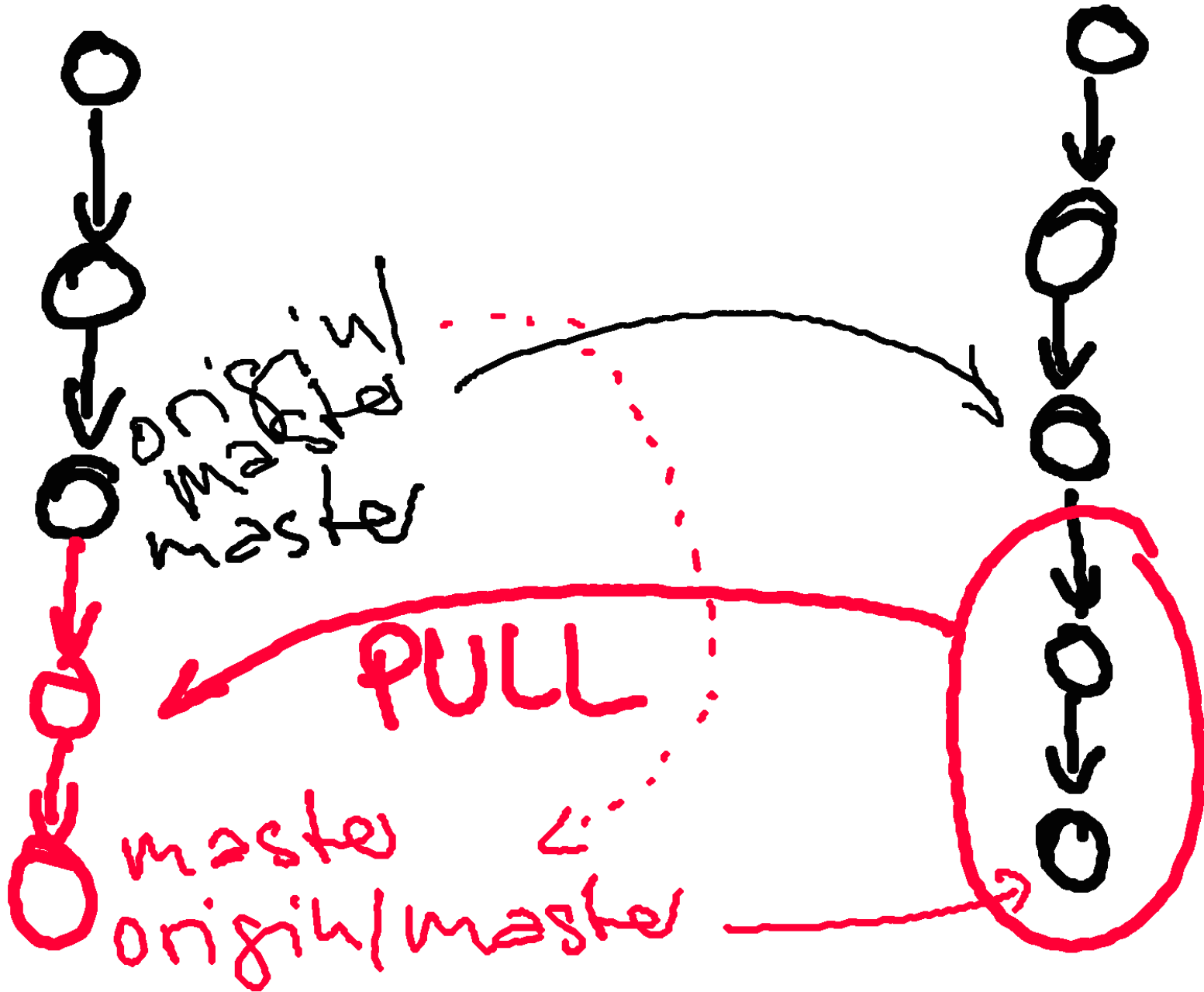
PUSH

origin/master



local

remote



Push = send changes

Pull = get changes

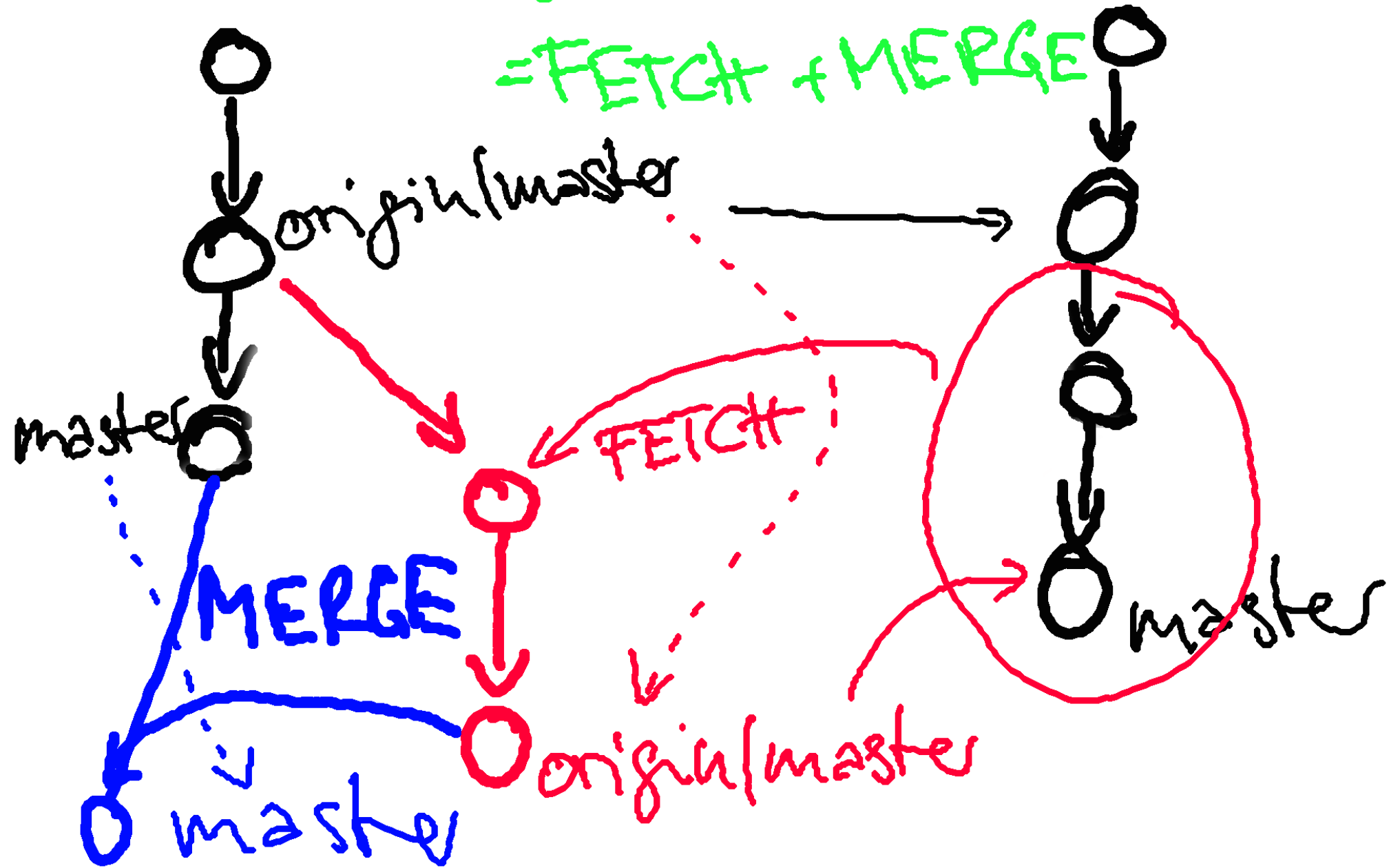
(= Fetch + Merge)

(-- rebase
→ REBASE)

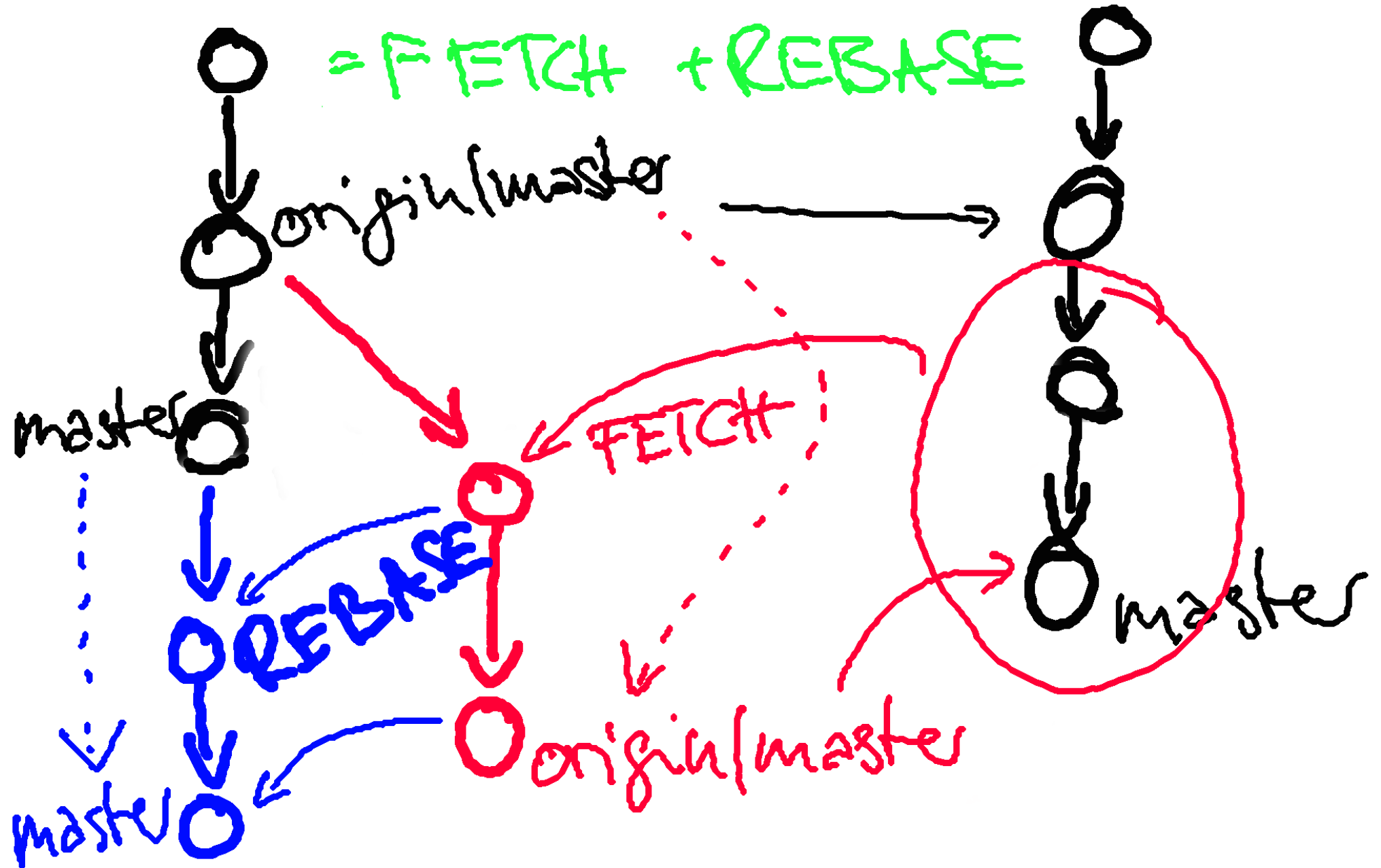
local **PULL**

remote

= FETCH + MERGE



Local PULL --rebase remote



Let's also look at...

- Commit messages/ hashes/ etc
- What are branches for?
- What are tags?
- Debug something + cherry-pick
- Undoing things in git
- Change a commit message
- Git diff
- Git log
- Git stash
- Github, bitbucket, etc
- Sync multiple machines/ backup
- Which files (not) to version-control!? → .gitignore
- Git modules
- Git aliases
- Relative pathes (^ and ~)
- Anything you want to see?

Common Problems

- Detached head
- Merge conflicts + strategies
- Cannot pull/push
- Collaboration? Common remote? SSH-Key/certificates etc...
- Git in cloud (dropbox/unison and stuff)
- Anything you experienced?

	COMMENT	DATE
○	CREATED MAIN LOOP & TIMING CONTROL	14 HOURS AGO
○	ENABLED CONFIG FILE PARSING	9 HOURS AGO
○	MISC BUGFIXES	5 HOURS AGO
○	CODE ADDITIONS/EDITS	4 HOURS AGO
○	MORE CODE	4 HOURS AGO
○	HERE HAVE CODE	4 HOURS AGO
○	AAAAAAAAA	3 HOURS AGO
○	ADKFJSLKDFJSDKLFJ	3 HOURS AGO
○	MY HANDS ARE TYPING WORDS	2 HOURS AGO
○	HAAAAAAAAAANDS	2 HOURS AGO

AS A PROJECT DRAGS ON, MY GIT COMMIT MESSAGES GET LESS AND LESS INFORMATIVE.