



FAIR DATA
AUSTRIA

INTRODUCTION TO GIT

7.12.2021

HOSTED BY TU WIEN,
CENTER FOR RESEARCH DATA MANAGEMENT



TECHNISCHE
UNIVERSITÄT
WIEN



EVENT SERIES „RESEARCH DATA MANAGEMENT IN AUSTRIA“

The event series „Research Data management in Austria“ is aimed at researchers and/or research support staff and serves to promote networking and exchange on the topic of research data management, writing a data management plan and similar related topics.

Slides and recordings on the project website:

forschungsdaten.at/en/fair-data-austria/materials/

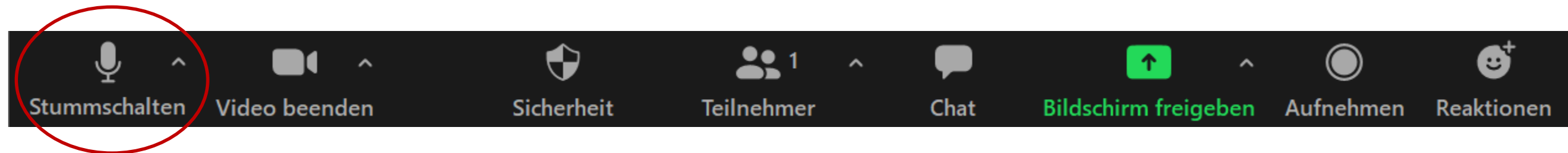


AGENDA

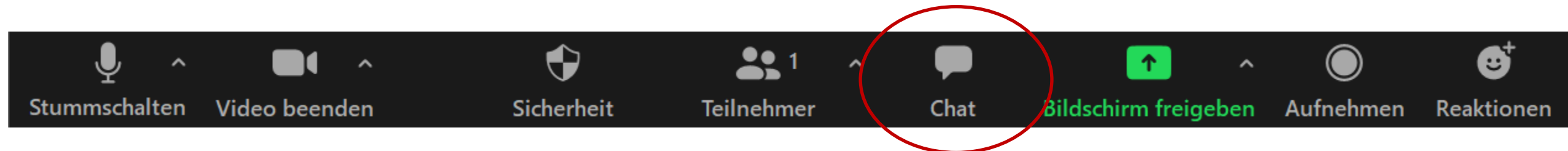
10.00 – 10.10	Welcome and introduction	Barbara Sánchez (TU Wien)
10.10 – 10:20	Introduction to Git	Alexander Spinn (University of Innsbruck)
10:20 – 11:00	Live Demo	Florian Wörister (TU Wien)
11.00 – 11.30	Questions & Answers	Barbara Sánchez (TU Wien)

FORMALITIES

Please turn off your microphone to avoid background noise



Please post your questions in the chat



INTRODUCTION TO GIT

Florian Wörister – TU Wien

Born and raised in Upper Austria

Masters Degree in Software Engineering (TU Wien)

Working at the Center for Research Data Management



INTRODUCTION TO GIT

Alexander Spinn – University of Innsbruck

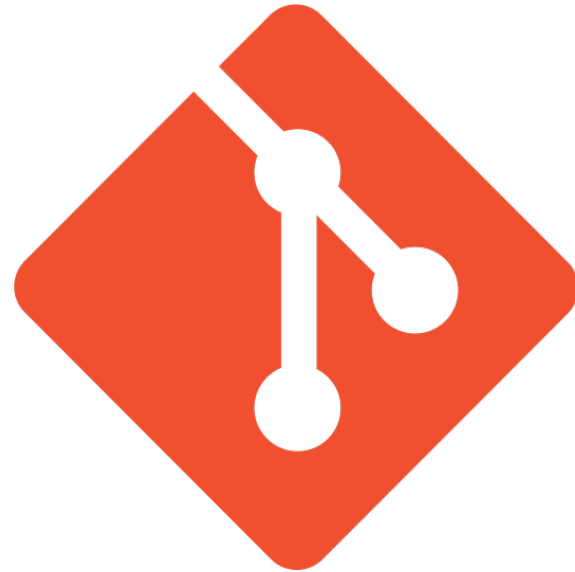
Born and raised in Bolzano, Italy

Masters Degree in Chemistry

Working in IT at the UIBK since 2015



Introduction to Git



git





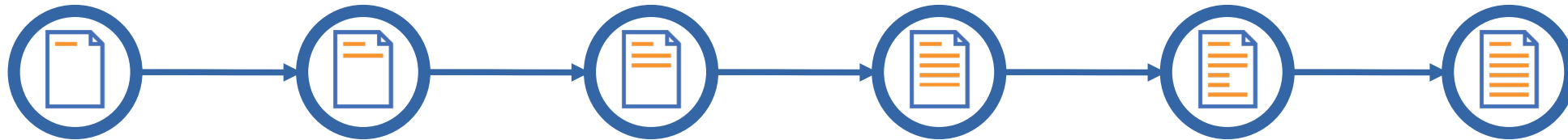
Software to manage versioning, letting you make and track local changes and push them to a remote repository



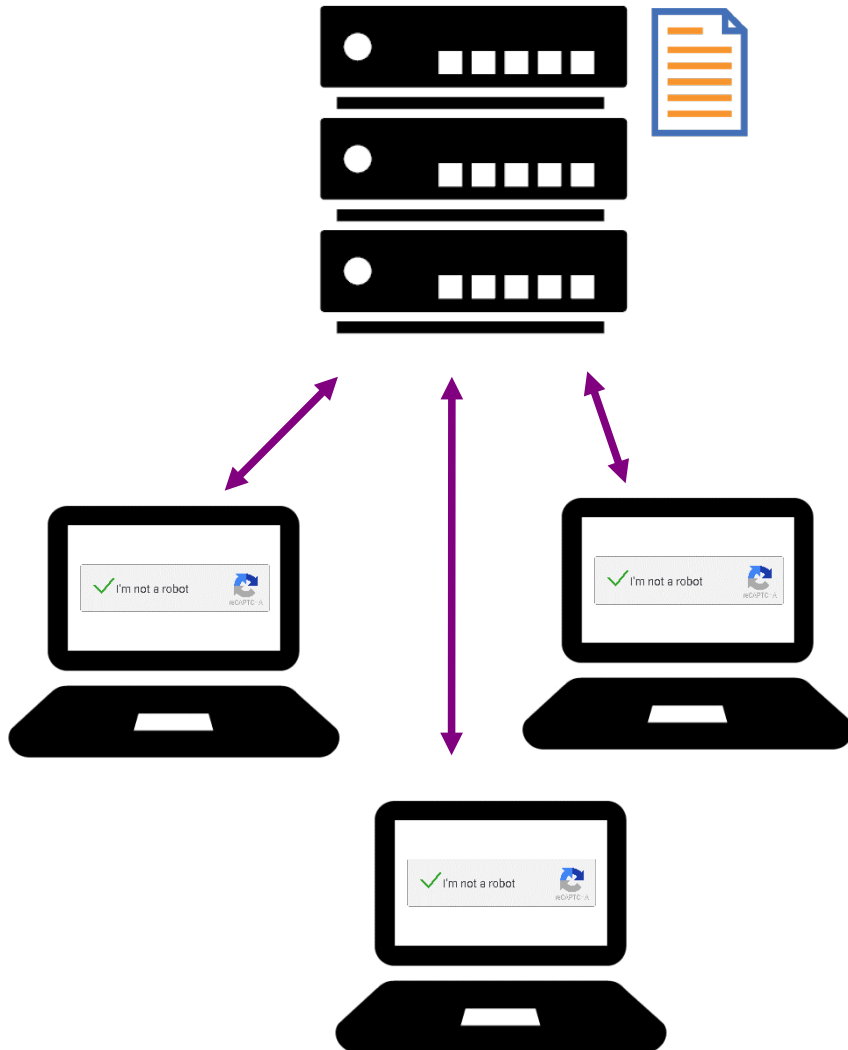
Cloud services to host remote git repositories. They include additional features like issue tracking or access control.



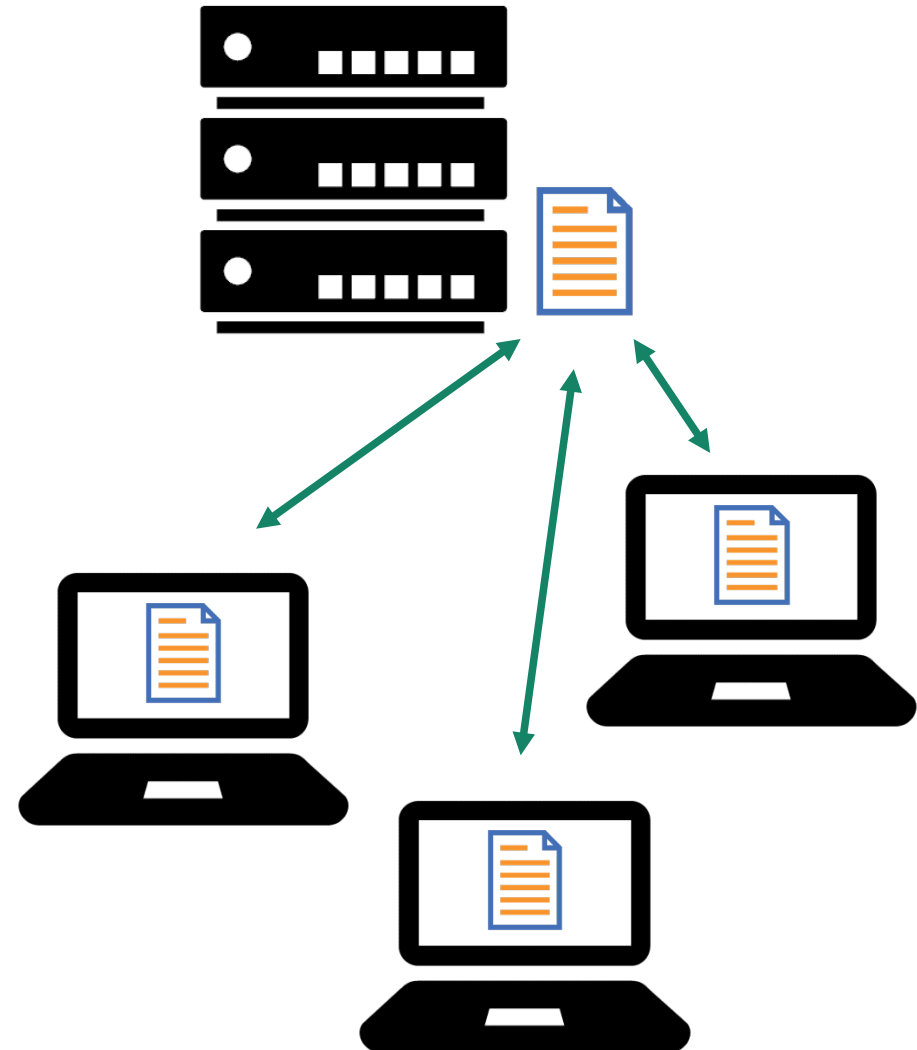
Version Control Systems - Keep track of changes



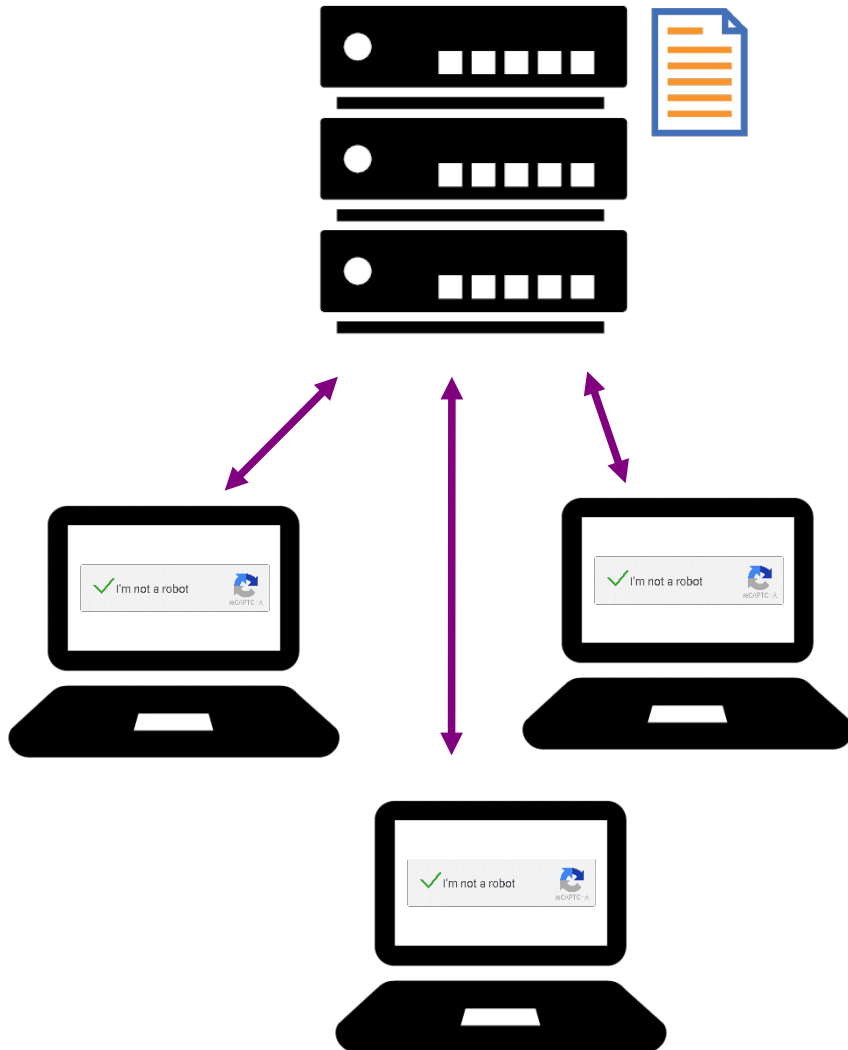
Login & edit remotely



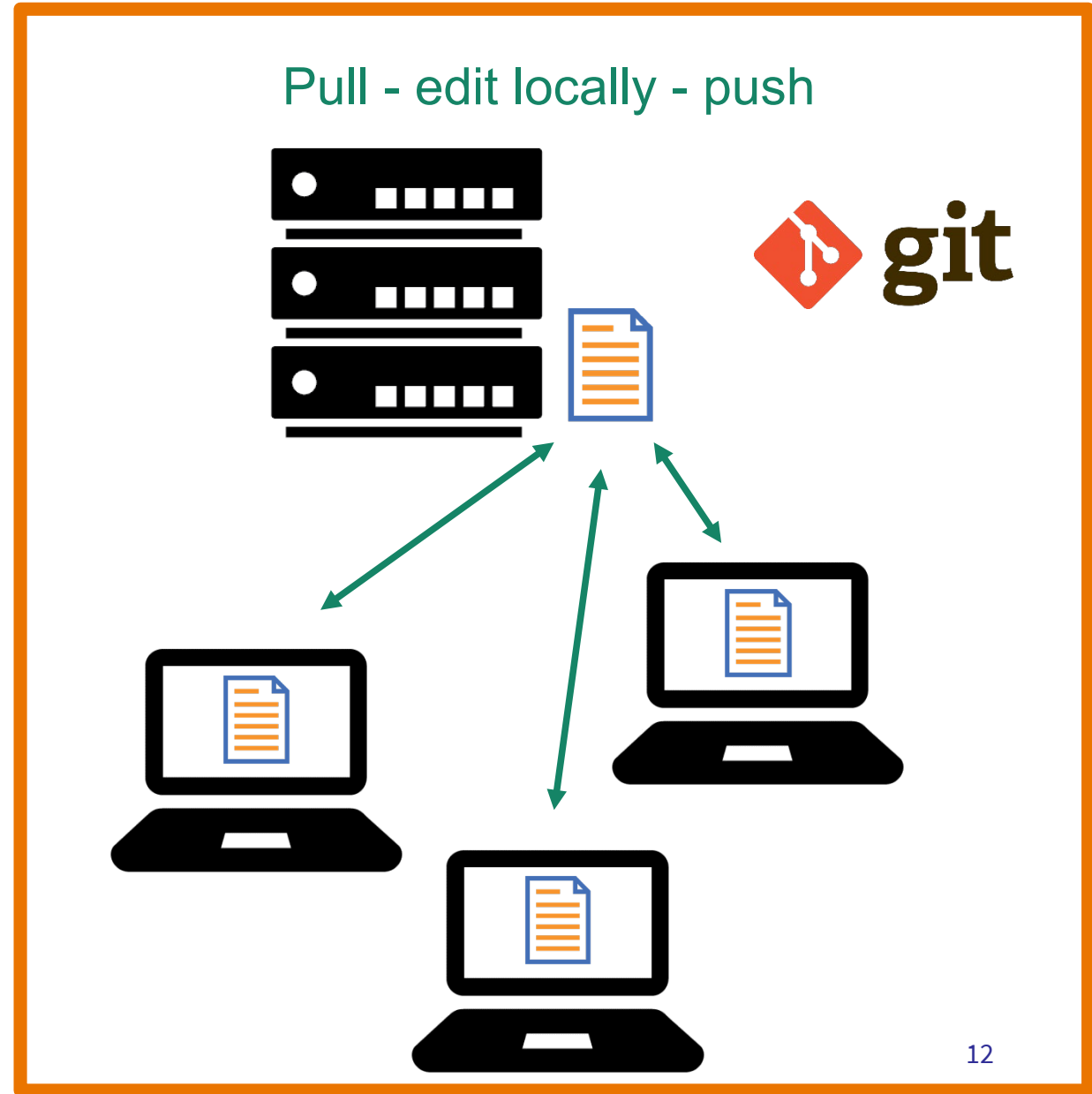
Pull - edit locally - push



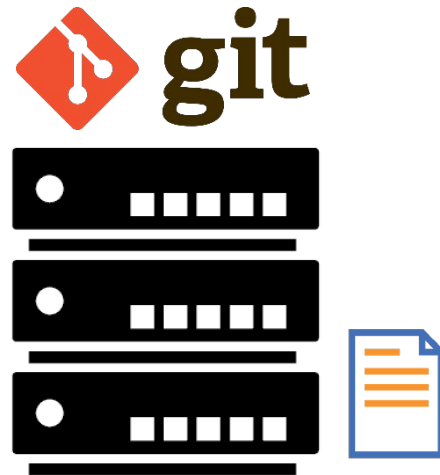
Login & edit remotely

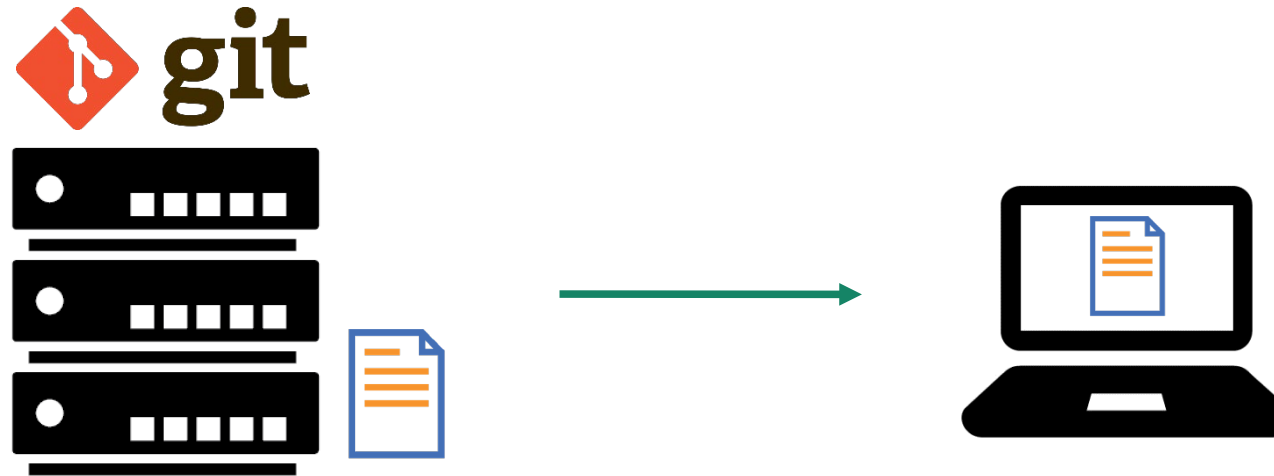


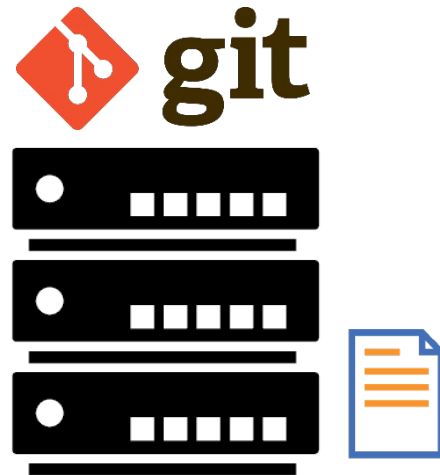
Pull - edit locally - push



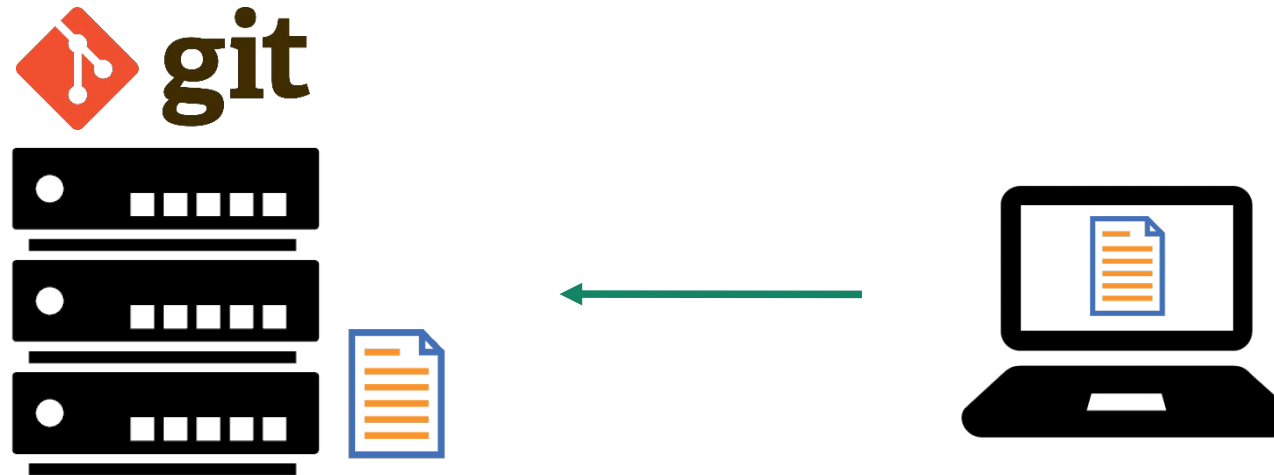
git - Remote server and local client

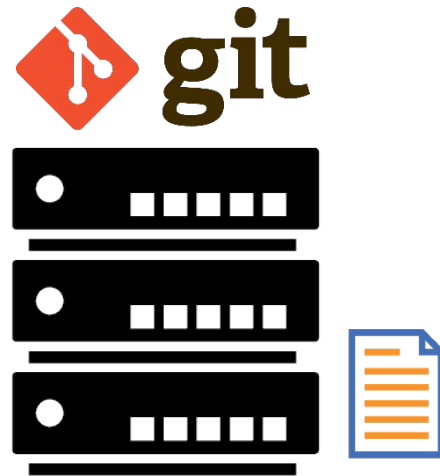


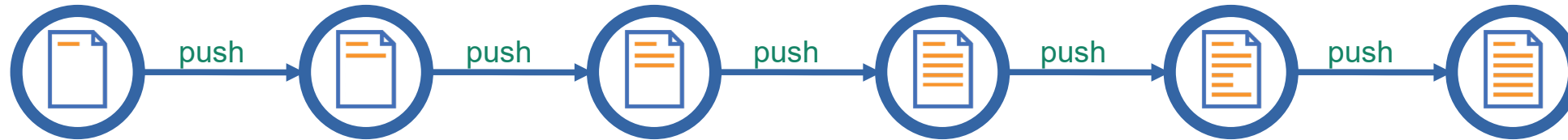


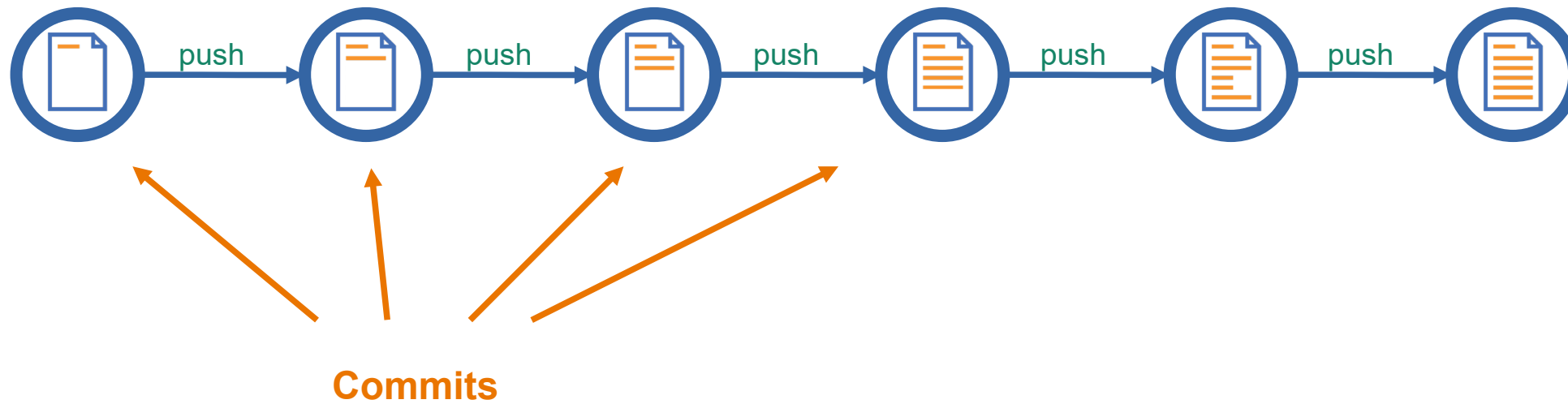


git - Push









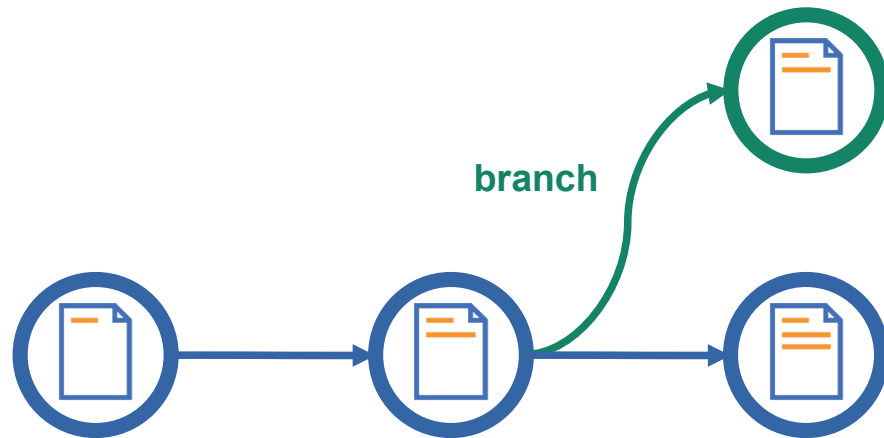
git - Branching and Merging



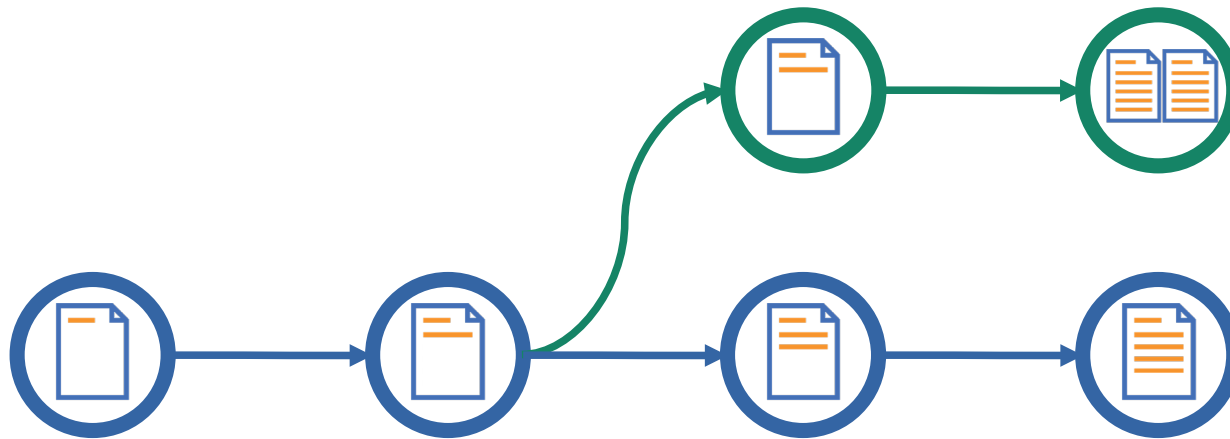
git - Branching and Merging



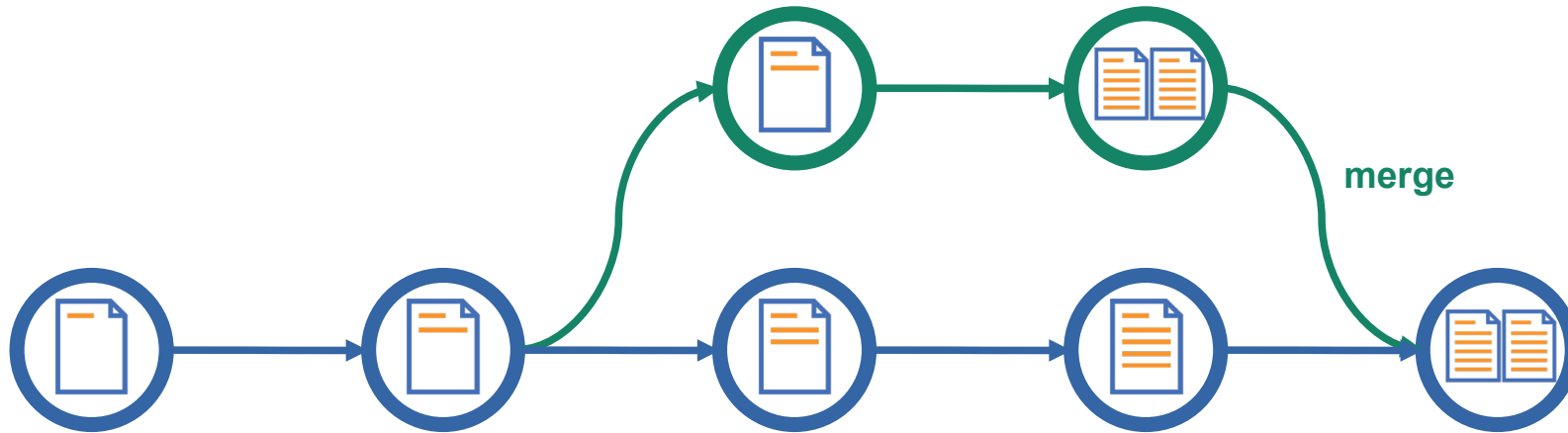
git - Branching and Merging



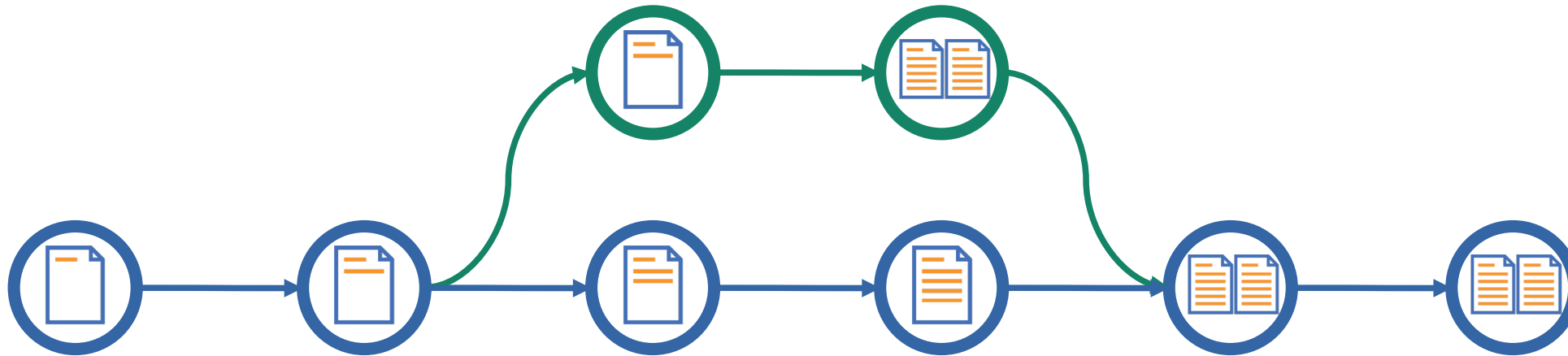
git - Branching and Merging



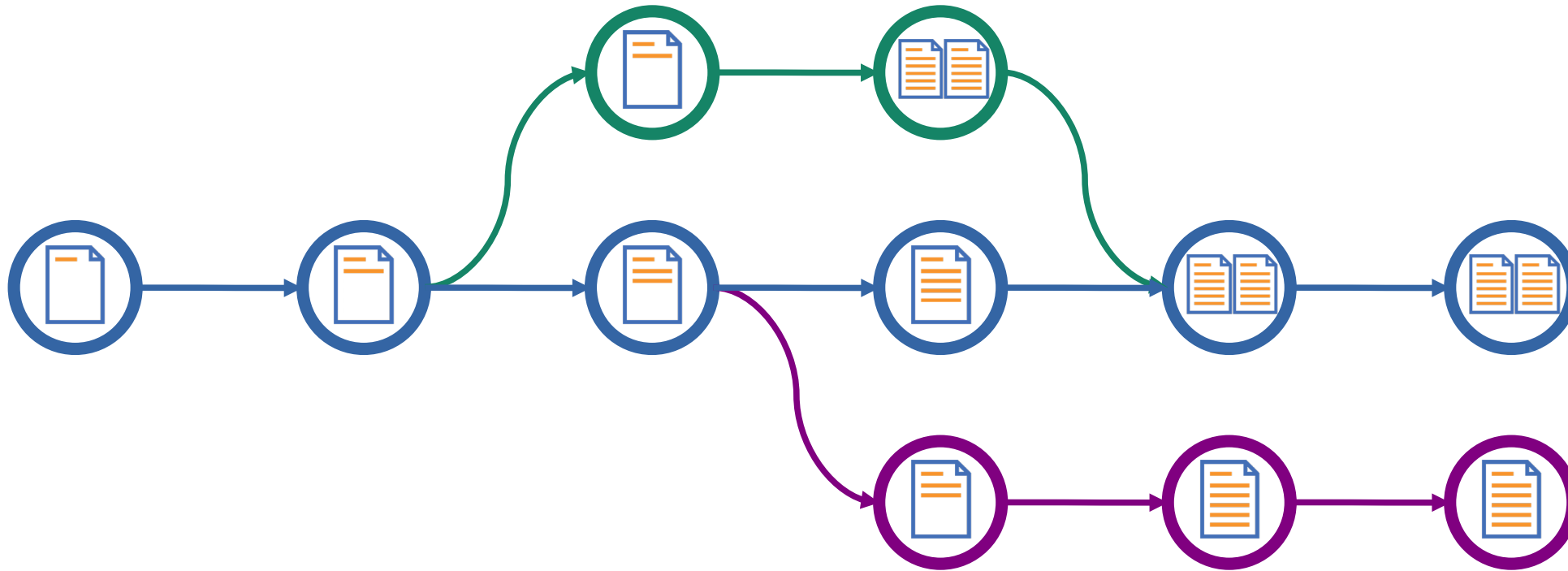
git - Branching and Merging



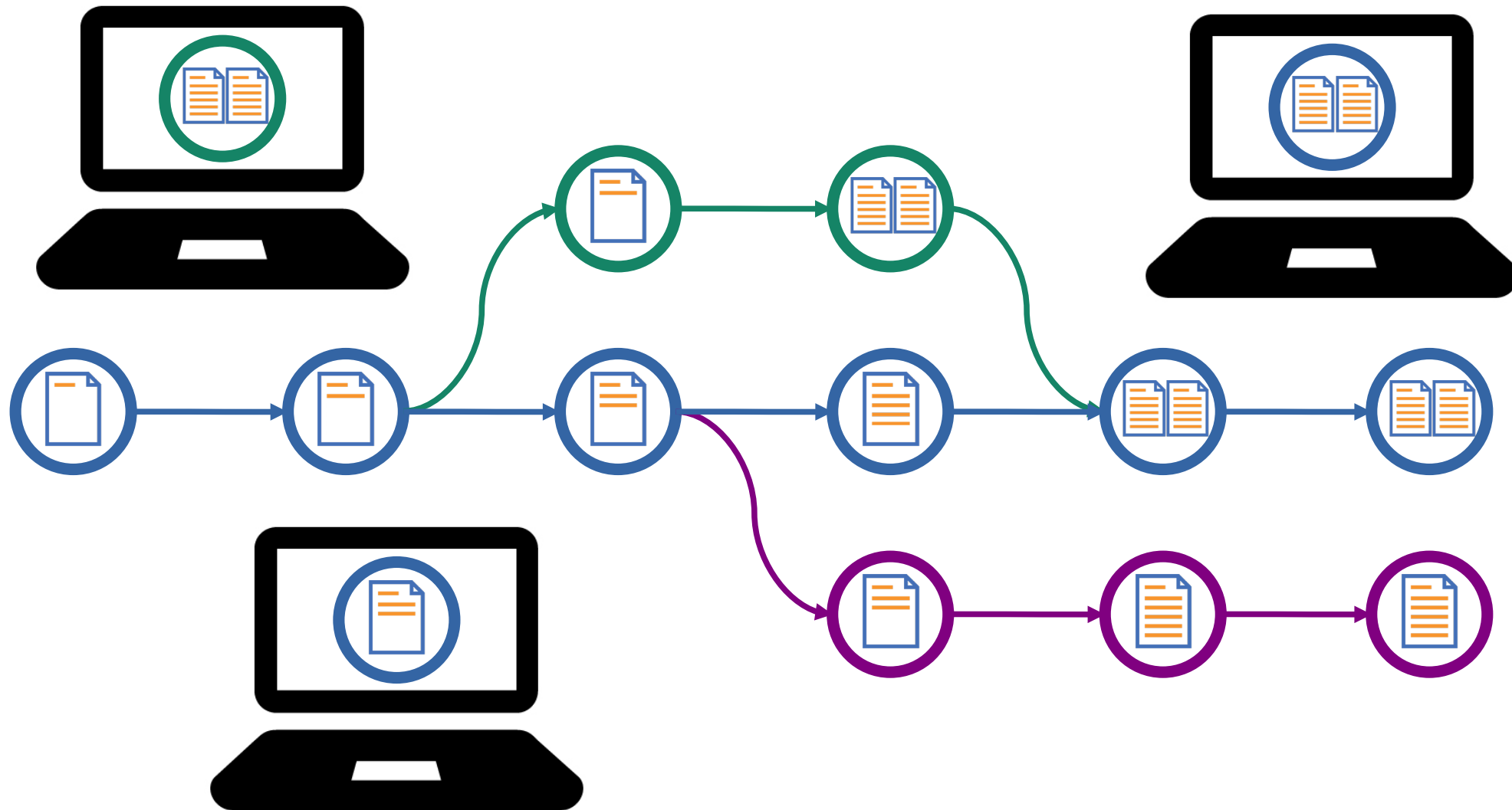
git - Branching and Merging







git - Checkout





Live Demo

*Link to the repository containing the
summary:*

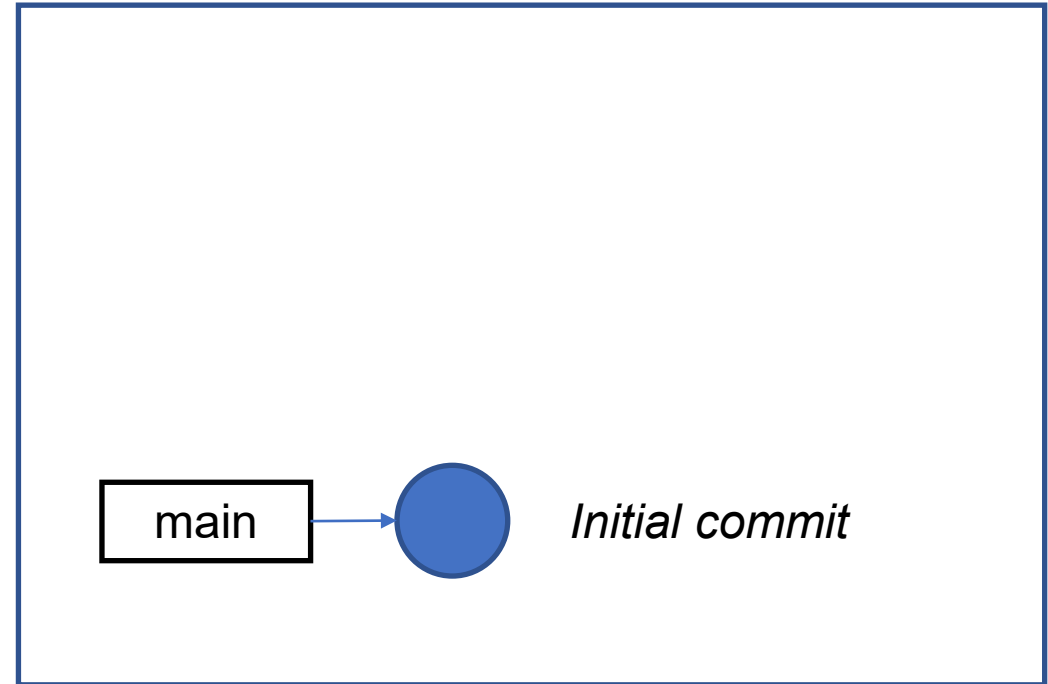
<https://gitlab.com/florianwoerister/fdm-git-workshop-handson>

The Scenario

“After going through the README file, we discovered, that there is a section missing that lists additional training material. We have a bunch of links we want to add to that page. In addition, we are not allowed to add changes to the main branch of this repository... *But how are we going to do that??*”

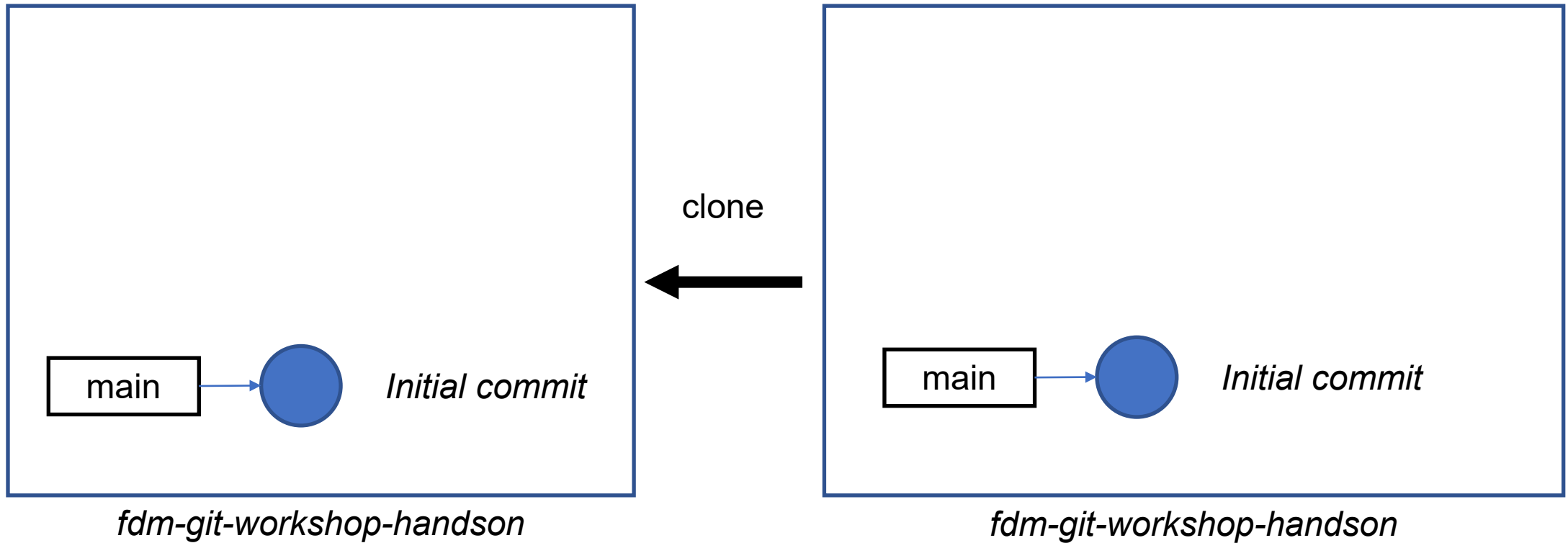
How are we solving this?

1. Clone the repository to local machine
2. Create new branch “add-trainings-material”
3. Commit trainings material to branch “add-trainings-material”
4. Push changes back to GitLab Server
5. Create a “Merge Request”
6. Review “Merge Request”
7. Merge “add-trainings-material” into “main”

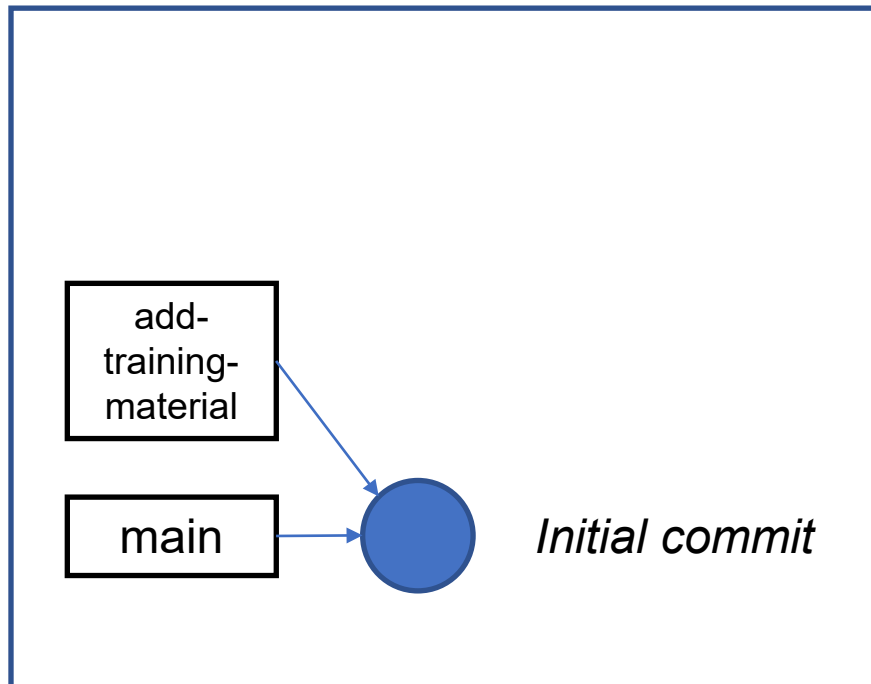


fdm-git-workshop-handson

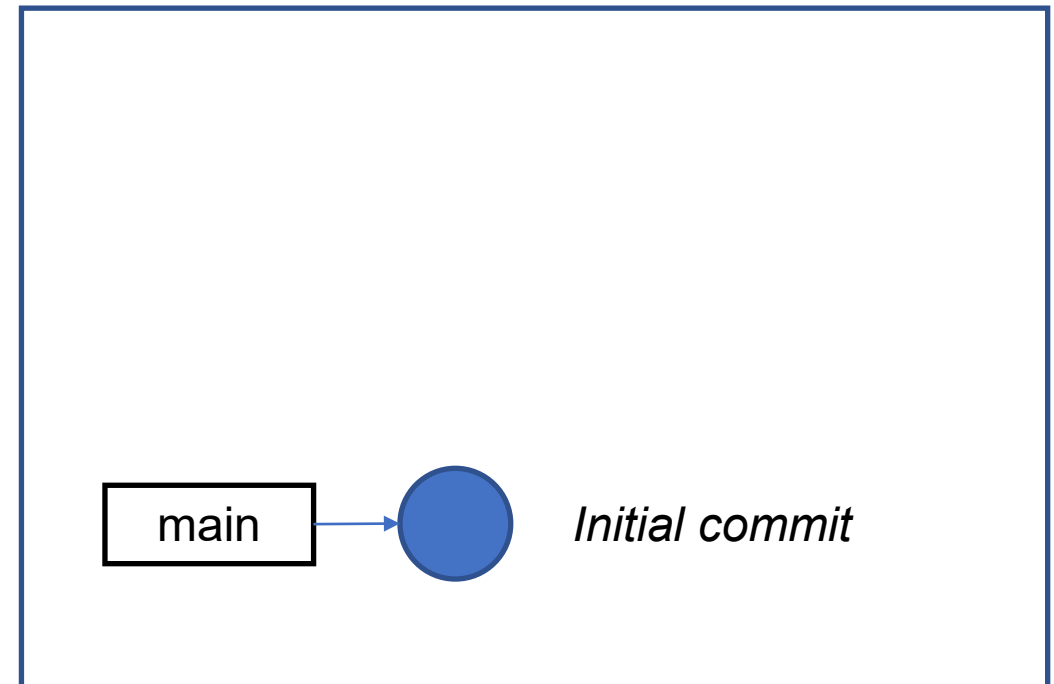
git clone ...



`git checkout -b BRANCHNAME`

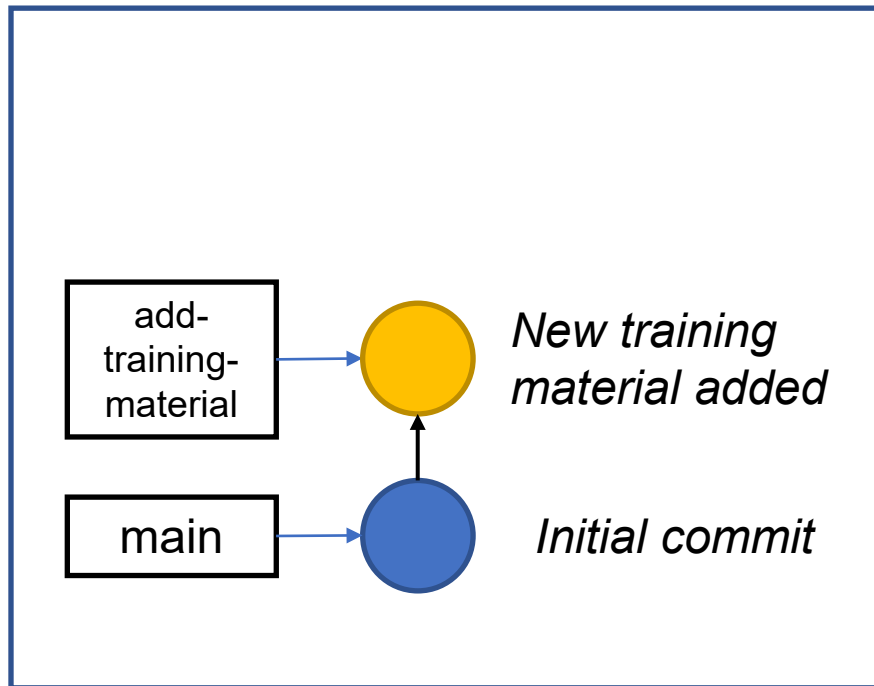


fdm-git-workshop-handson

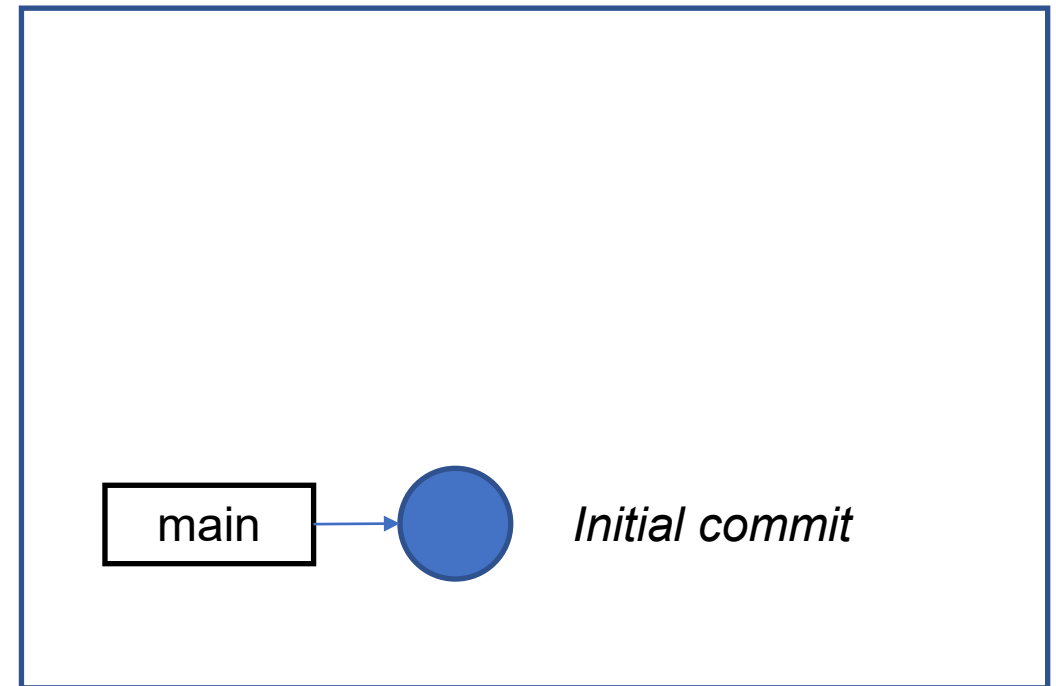


fdm-git-workshop-handson

```
git add README.md  
git commit -m COMMENT
```

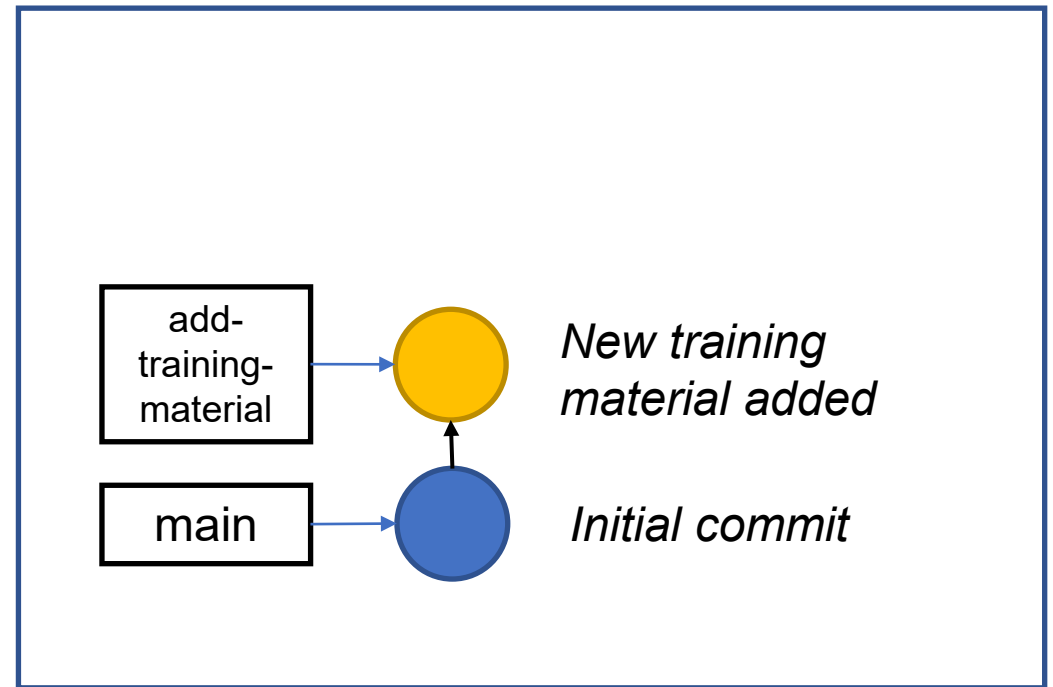
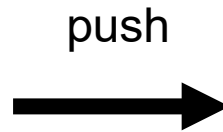
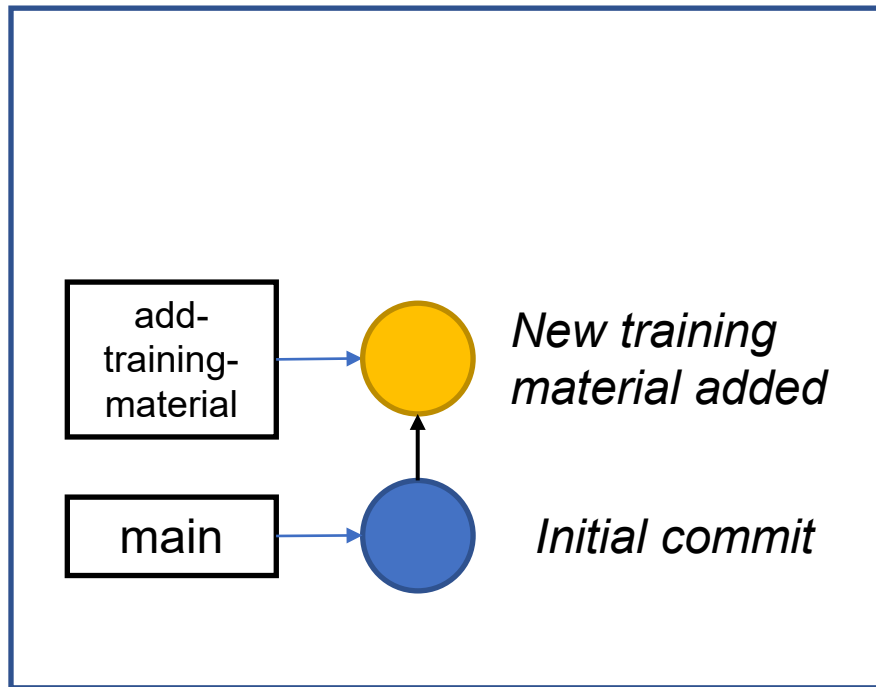


fdm-git-workshop-handson



fdm-git-workshop-handson

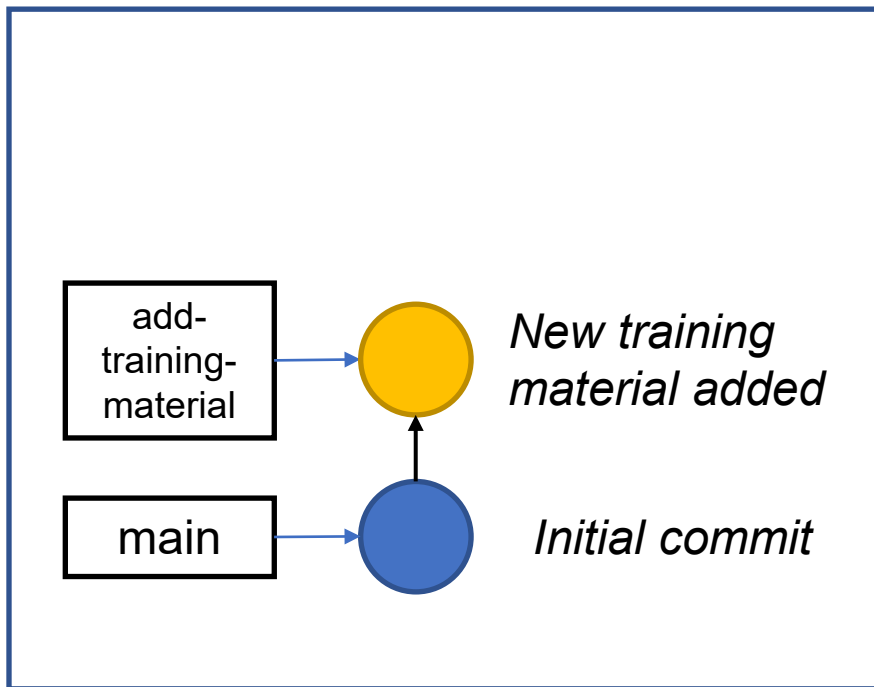
git push



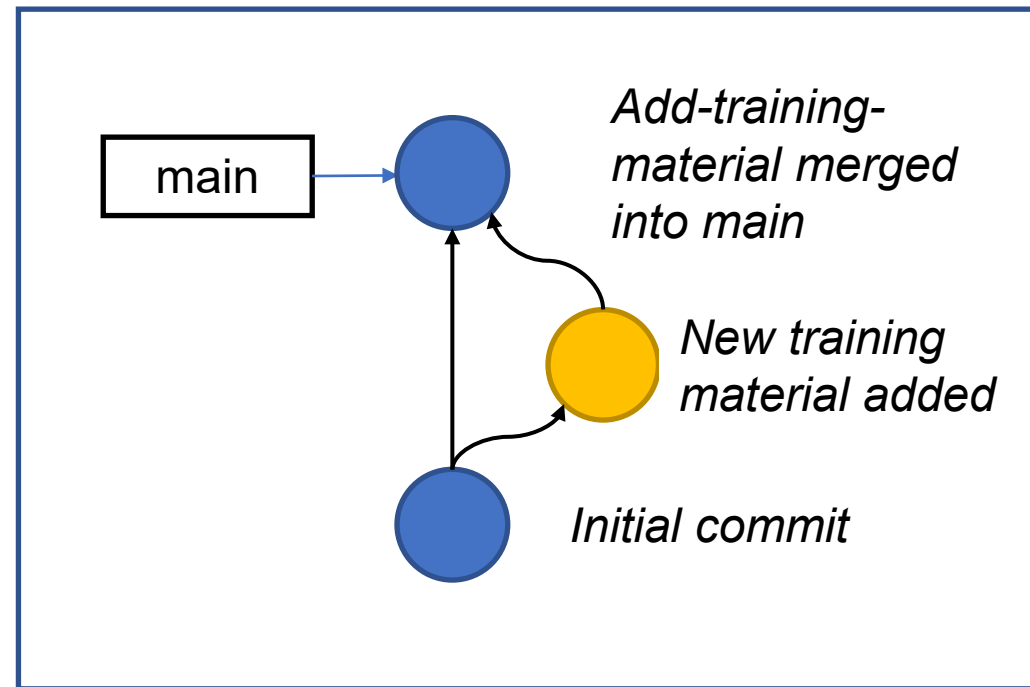
fdm-git-workshop-handson

fdm-git-workshop-handson

git merge



fdm-git-workshop-handson



fdm-git-workshop-handson



SAVE THE DATE

GENERATING SYNERGIES BETWEEN OPEN EDUCATION AND OPEN SCIENCE

<https://forschungsdaten.at/en/fair-data-austria/materials/generating-synergies-between-open-education-and-open-science/>

20 January 2022, 10:00-11:00 am, online

METADATA FOR RESEARCH DATA

<https://forschungsdaten.at/en/fair-data-austria/materials/metadata-for-research-data/>

2 February 2022, 10:00-11:30 am, online

FAIR RESEARCH INFRASTRUCTURE AT INSTITUTIONS - USING THE EXAMPLE OF THE UNIVERSITÄT INNSBRUCK

<https://forschungsdaten.at/en/fair-data-austria/materials/fair-research-infrastructure-at-institutions/>

22 February 2022, 10:00-11:00 am, online



**THANK YOU FOR YOUR
PARTICIPATION & ATTENTION!**