

# Introduction to Git

\* Version control: (Source code Management)

Types

client-server

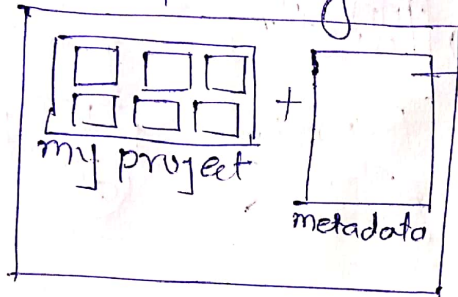
Distributed

{ Track & provide control over changes in source code }

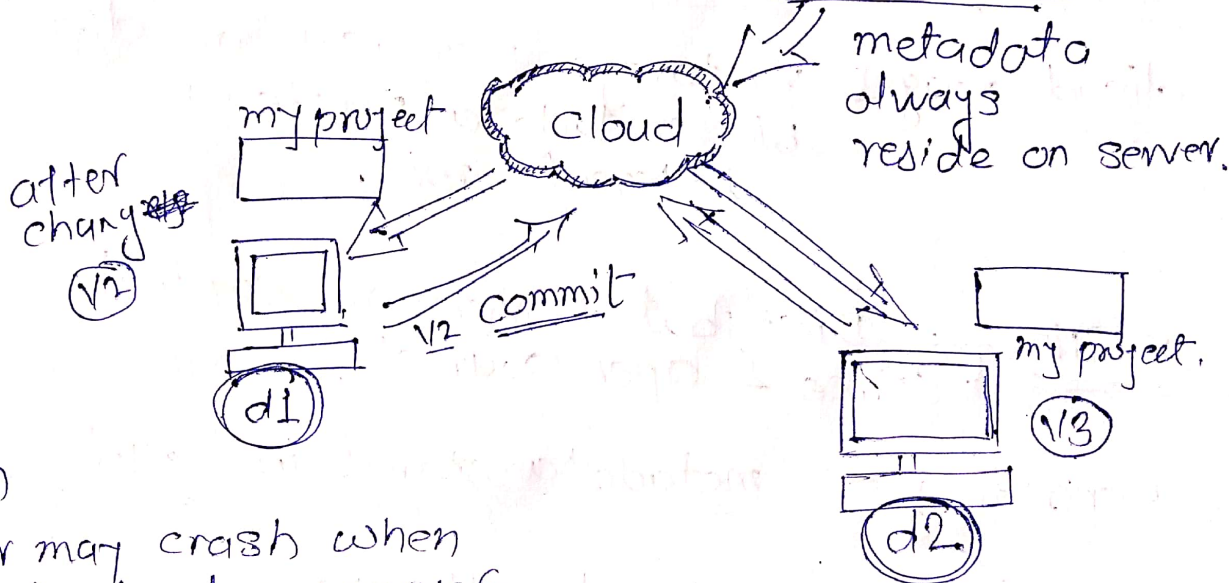
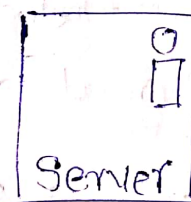
Not Git

Repository → project + metadata

(V1)



owner  
file  
version  
date & time



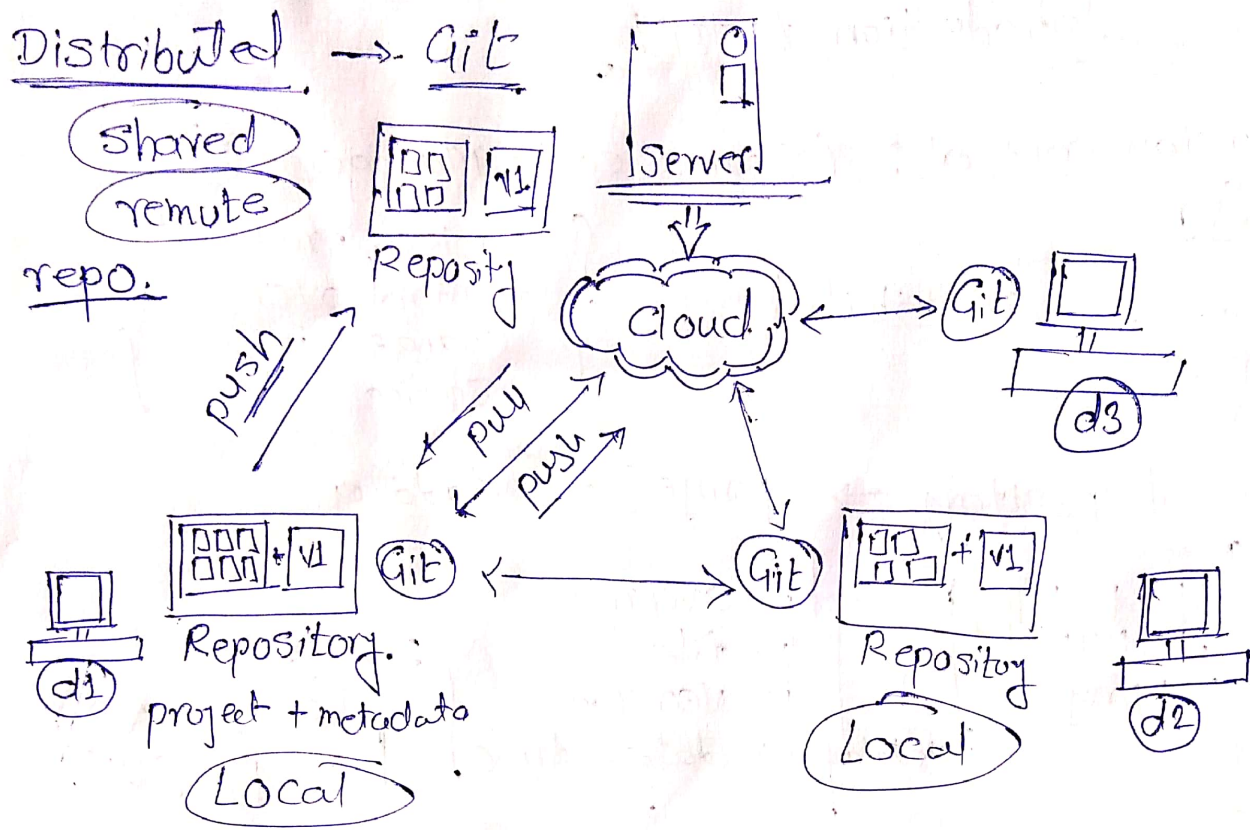
problem

- Server may crash when there is load on server
- ⇒ all m/c are dependent on server.

Dependency

advantage

metadata always reside on single m/c which is server.



advantage → Backup over all m/c

disadvantages → storage increases on client-  
b/c metadata reside on different m/c.

\* Git → Distributed version control  
- (free & open source).

Repository → metadata stored in .git (hidden)

git init → create git repo

add → hello.c → Staging Area → Repository

git status → status of repo.

git add . → add changes

Commit → move changes from  
staging area to repo.



git commit -a -m "commit\_message"

move file from staging area to repo.

git diff → view changes in file.  
of current file wrt last version.

git add . → create another version  
and add to staging area.

git log -2 → see last two ~~at~~ commit.

22. git checkout → All ~~checkout~~ version before  
commit can undo all changes.

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\* Remote repo :

git remot add origin "path"

git clone → make git repo & download repo.

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