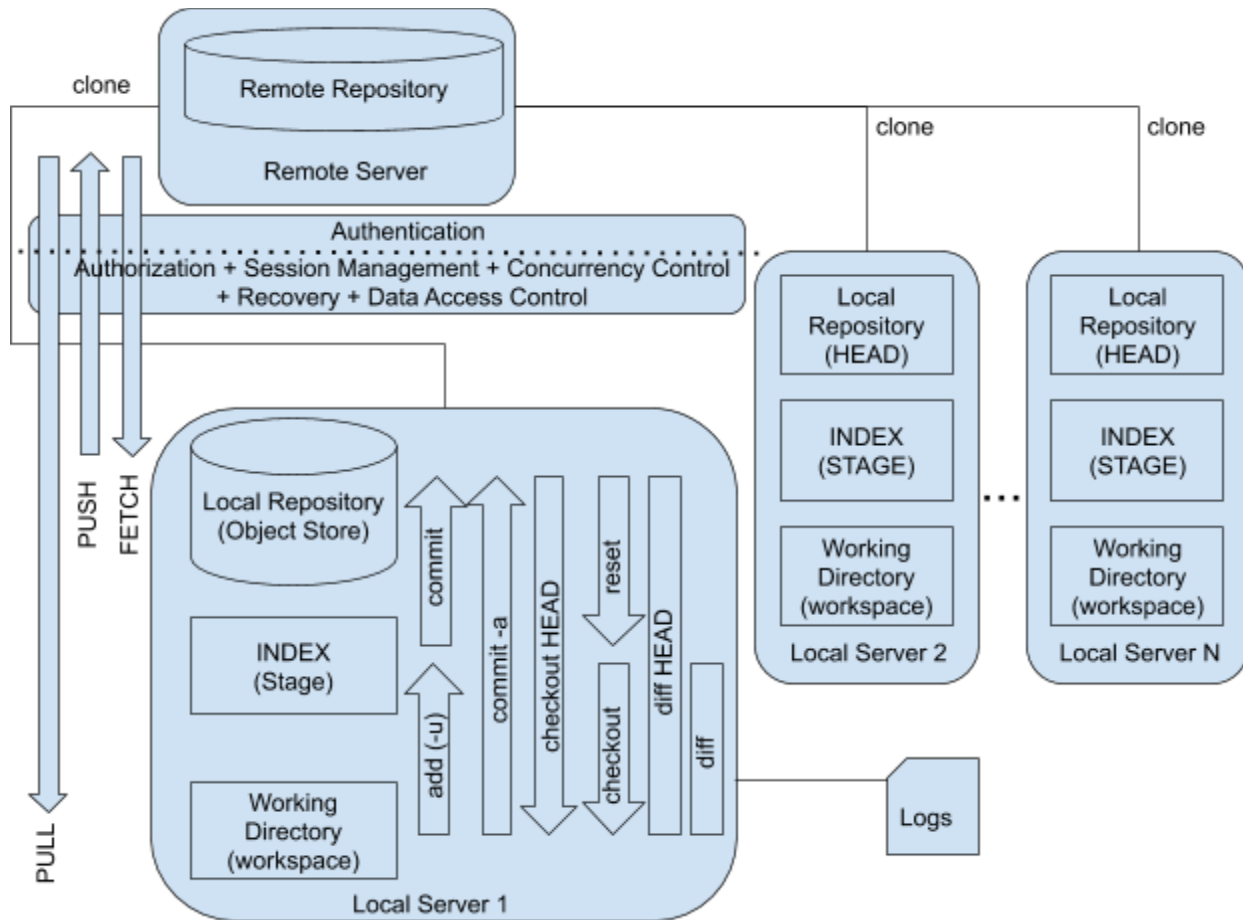
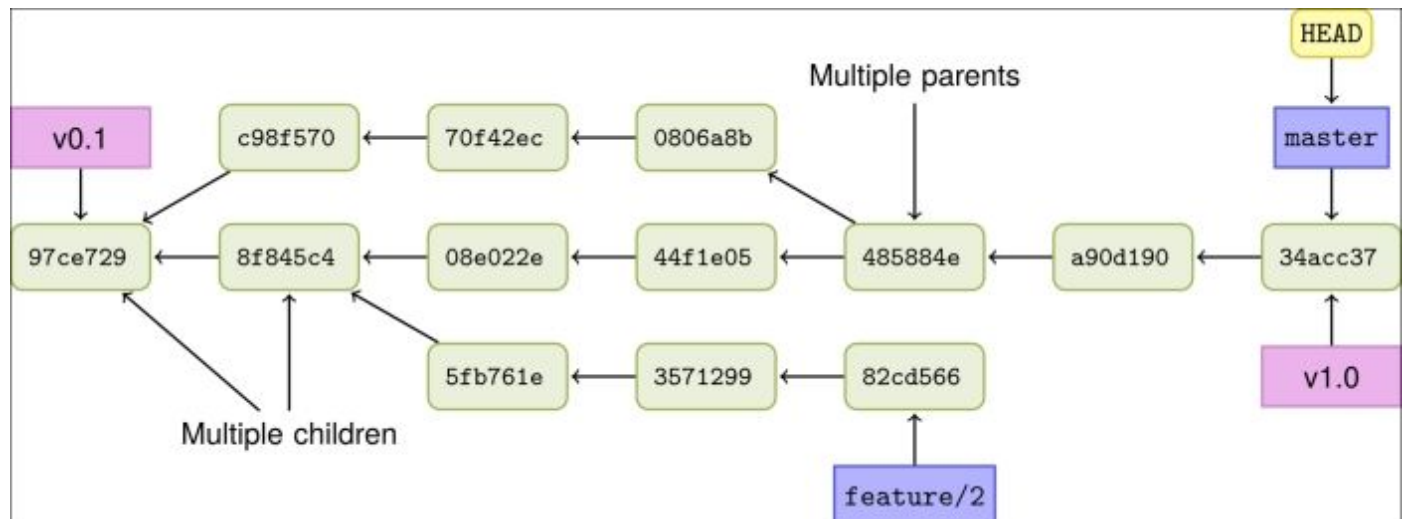


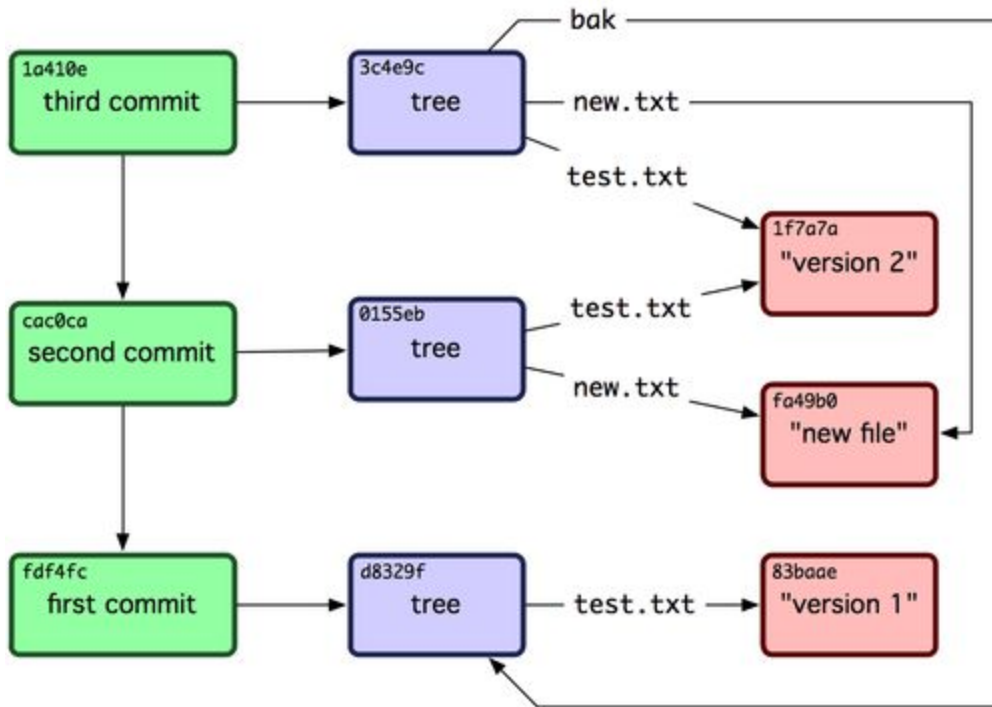
1. Distributed version control architecture:



2. Object Store (Directed Acyclic Graph of Commits):



3. Commit: Merkle tree for modified files



Working Directory: Files that have been modified but not committed yet

Remote Repository: Hosted repository on a shared server

Local Repository: Local copy of the remote repository

Index: Pointer to Git Tree which has been generated due to some addition/modification in file

Head: Pointer to current branch

Master: Default branch we get on local machine post cloning a repo from remote

Commit: Commit object contains hash of git tree

Branch: Pointer to commit along with metadata attached to it.

Log: List of all commits along with message and author name sorted by timestamps

Object: Directed Acyclic Graph of commits

Hooks: Scripts that run whenever any particular event occurs in git repo

Ignore: List of all the files which we do not want being tracked inside git repo

Commit: List of files being tracked

Blob: Object which stores the SHA-1 hash of content of a file in repo

Git tree: Each commit points to a Hash tree (Merkle tree) for repository, which is hierarchical representation of file content versioning. A new merkle tree gets indexed everytime we make changes in any existing file or add a new file to stage.

Thanks

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