

AWS Devops

GIT

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 Git is a DevOps tool used for source code management. It is a free and open-source version control system used to handle small to very large projects efficiently. Git is used to tracking changes in the source code, enabling multiple developers to work together.

Features of GIT

- Tracks history
- Free and open source
- Creates backups
- Scalable
- Branching is easier
- Mistakes are easy to undo

- Types of Version Controlling
- Centralized Version Controlling
- Distributed Version Controlling

Sr. No.	Key	Centralized Version Control	Distributed Version Control
1	Working	In CVS, a client need to get local copy of source from server, do the changes and commit those changes to centeral source on server.	In DVS, each client can have a local branch as well and have a complete history on it. Client need to push the changes to branch which will then be pushed to server repository.
2	Learning Curve	CVS systems are easy to learn and set up.	DVS systems are difficult for beginners. Multiple commands needs to be remembered.
3	Branches	Working on branches in difficult in CVS. Developer often faces merge conflicts.	Working on branches in easier in DVS. Developer faces lesser conflicts.
4	Offline Access	CVS system do not provide offline access.	DVD systems are workable offline as a client copies the entire repository on their local machine.
5	Speed	CVS is slower as every command need to communicate with server.	DVS is faster as mostly user deals with local copy without hitting server everytime.
6	Backup	If CVS Server is down, developers cannot work.	If DVS server is down, developer can work using their local copies.

- Terminologies Used in GIT
- Working Directory: It is the location where developer saved the source code is saved.
- **Branch**: A branch is a version of the repository that diverges from the main working project.
- Master/Main: Master/Main is a naming convention for Git branch. It's a default branch of Git.
- Merge: Merging is a process to put a forked history back together.
- Pull: The term Pull is used to receive data from GitHub.
- Push: The push term refers to upload local repository content to a remote repository.
- Repository: Repositories in Git is considered as your project folder.

Create a folder in your machine

Create some files in the same folder

Put some code in the file

Code: Click Here

 Convert folder into working directory git init

Open GIT Bash in the Devops folder

• Enter the command git init

How to see hidden folder in Windows Machine: <u>Click</u>
 <u>Here</u>

Configure User name & Email ID

Configure User Name

git config --global user.name "ankitnarula1991"

Configure Email ID

git config --global user.email ankitnarula1991@gmail.com

To check the configurations

git config --global --list



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