## **SCM (Source Code Management)**

- Storage (Any code)
  - Developers (Code)
  - Testing team (Test)
  - DevOps (Scripts)
- Different people from different teams can store simultaneously (Save all changes separately)
- Pipeline b/w off shore & on shore teams
- Helps in achieving team work.
- Track changes (Minute level)

## **SCM Tools**

- Git (Most advanced tool)
- SVN
- Perforce
- Clearcase

# **Important Terminology**

- Repository/Depot
- Server
- Work space/Work dir/Work tree
- Branch/Trunk/Code line

- Commit/Check-in
- Version/Version-ID/Commit-ID
- Tag

#### **Repository:**

- Storage (Folder)
- Server (EC2 Instance)
- Stores all repos

#### **Branch:**

- Product is same, so one repo. But different tasks/ideas.
- Each task/idea has one separate branch
- Finally merge(code) all branches
- For Parallel development/implement new ideas.
- Can create any no of branches
- Changes are personal to that particular branch
- Can put files only in branches (not in repo directly)
- Default branch is "Master"
- Files created in workspace will be visible in any of the branch workspace until you commit. Once you commit, then that file belongs to that particular branch.

#### **Work space/Working Directory:**

• Where you work

• Where you see files physically & do modifications

### **Version/Version-ID/Commit-ID:**

• Reference to identify each change and who did that change

### Tag:

• Meaningful name (we cannot remember Commit-ID)