

4. How many types of version control systems are there?

- There are three types of version control systems. They are local version control system, centralized version control system and distributed version control system.

Local version control system maintains track of files within the local system. This approach is very common and simple. This type is also prone to errors which means the chances of accidentally writing to the wrong file is higher.

In a centralized version system, there is a single central copy of the project on a server and all the changes are committed to that central copy. In this approach, all the changes in the files are tracked under the centralized server. The centralized server includes all the information of versioned files, and list of clients that check out files from that central place. The required files can be pulled from the server but there will never be a full copy or clone of the project on the local machine.

In a distributed version system, a clone can be made of the repository on a local machine which gives the full history of the project. Distributed version control systems came into picture to overcome the drawback of centralized version control system. The clients can completely clone the repository including its full history. If any server dies, any of the client repositories can be copied on to the server which help restore the server.