Certified Jenkins Engineer

Source Control

Source Code Manager (SCM)

A Source Code Manager (SCM) is software that is used to track changes in code.

Changes in code, revisions, are timestamped and include the identity of the person that made the change.

Changes can be tracked or rolled back as needed. Versions of the code can be compared, stored, and merged with other versions.

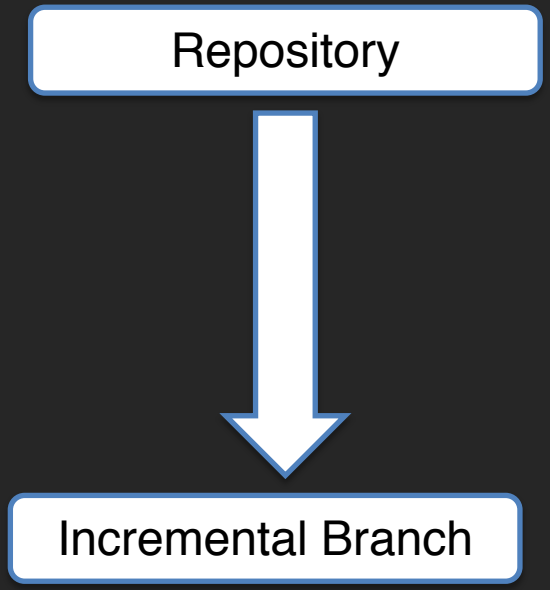
Some examples are Git, Subversion, Mercurial, and Perforce.

Cloud based SCM's such as Git-hub or Gitlab can be leveraged as offsite repositories for code.

Jenkins Changelogs are used for tracking changes in builds.

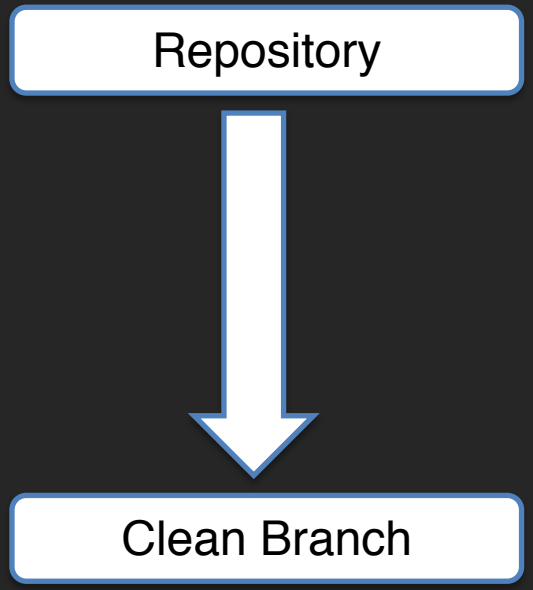
Handling Code from Source Control

Incremental update



Pull changes into local branch

Clean checkout



Delete local and clone

Checking in Code to Source Control

Checking in code is the process of pushing changes to a repository.

Checking in code is the same as a code commit.

As part of the CI methodology, code should be checked in often.

All code commits should have a descriptive message that indicates what changes the commit includes.

Infrastructure As Code

This is the process of managing and provisioning resources via configuration files.

It allows machine configurations to be maintained in source control. Those configurations can then be rolled back or versioned.

User Interface

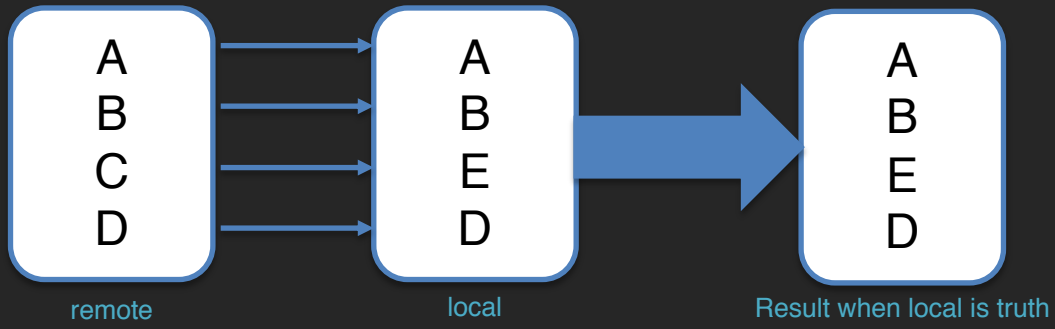
Backend

Data Services

Network

Branching and Merging Strategies

These are the methods of checking out and checking in code to source control in such a way that a source of truth is determined.



One repository is determined to be the source of truth. Conflicting changes are resolved in favor of that source.

End of Section