Plugin: Plugin are UI control; they are extension to Jenkin application.

Can we install product through Jenkins? Yes, Maven and Java.

Plugin Types in Jenkins- 1) Hudson plugin interface, 2) Jenkins plugin interface.

Can we change Jenkins home directory? -> Yes, by changing environment variable.

Managing Jenkins in master slave infrastructure:

Suppose, you have large infrastructure then, we can manage in 2 ways: 1) By Enhancing server capacity, 2) By Master slave configuration.

In Enterprise system, we are advised to used master slave configuration because. 1) No, single point of failure, 2) High Performance. 3) let say, you have 3 technology support(Windows, Linux and Redhat), Easily we can support these infra with master slave configuration.

LDAP Integration: for using LDAP id to sign-in to Jenkins.

Federation: Adding Jenkin slave to master.

Casestudy: Suppose, you have 30+ developer, who is doing 2commits per/day, can we build 60 builds per day.

Answer: it is not advisable, better we go for day, and night build.

Unit/function testing: it’s for code, where we are performing automatic test-cases.

Day build and Night build:

A daily build or nightly build is the practice of completing a [software build](https://en.wikipedia.org/wiki/Software_build) of the latest version of a program, on a daily basis. This is so it can first be [compiled](https://en.wikipedia.org/wiki/Compiler) to ensure that all required dependencies are present, and possibly tested to show no [bugs](https://en.wikipedia.org/wiki/Computer_bug) have been introduced. The daily build is also often publicly available allowing access to the latest features for feedback. In this context a *build* is the result of [compiling](https://en.wikipedia.org/wiki/Compiler) and [linking](https://en.wikipedia.org/wiki/Linker_(computing)) all the files that make up a [program](https://en.wikipedia.org/wiki/Computer_program). The use of such disciplined procedures as daily builds is particularly necessary in large organizations where many programmers are working on a single piece of software. Performing daily builds helps ensure that [developers](https://en.wikipedia.org/wiki/Software_developer) can work knowing with reasonable certainty that any new bugs that show up are a result of their own work done within the last day.

Daily builds typically include a set of tests, sometimes called a "[smoke test](https://en.wikipedia.org/wiki/Smoke_testing_(software))." These tests are included to assist in determining what may have been broken by the changes included in the latest build. The critical piece of this process is to include new and revised tests as the project progresses.

Day build: for Developer, Night build for release.