**JENKINS INTERVIEW QUESTIONS**

**1. Mention what is Jenkins?**

Jenkins is an open source tool with plugin built for continuous integration purpose.  The principle functionality of Jenkins is to keep a track of version control system and to initiate and monitor a build system if changes occur. It monitors the whole process and provides reports and notifications to alert.

**2. Explain what is continuous integration?**

In software development, when multiple developers or teams are working on different segments of same web application, we need to perform integration test by integrating all modules.  In order to do that an automated process for each piece of code is performed on daily bases so that all your code get tested.

**3. What is the requirement for using Jenkins?**

To use Jenkins you require

A source code repository which is accessible, for instance, a Git repository

A working build script, e.g., a Maven script, checked into the repository

**4. Mention what are the advantages of Jenkins?**

Advantage of Jenkins include

At integration stage, build failures are cached

For each code commit changes an automatic build report notification generates

To notify developers about build report success or failure, it is integrated with LDAP mail server

Achieves continuous integration agile development and test driven development

With simple steps, maven release project is automated

Easy tracking of bugs at early stage in development environment than production

**5. Explain how you can move or copy Jenkins from one server to another?**

Slide a job from one installation of Jenkins to another by copying the related job directory

Make a copy of an already existing job by making clone of a job directory by a different name

Renaming an existing job by renaming a directory.

**6. Mention what are the commands you can use to start Jenkins manually?**

To start Jenkins manually, you can use either of the following

(Jenkins\_url)/restart: Forces a restart without waiting for builds to complete

(Jenkin\_url)/safeRestart: Allows all running builds to complete

**7. Mention some of the useful plugins in Jenkin?**

Some of the important plugins in Jenkin includes

Maven 2 project

Amazon EC2

HTML publisher

Copy artifact

Join

Green Balls

**8. Explain how you can deploy a custom build of a core plugin?**

To deploy a custom field of a core plugin, you have to do following things

Stop Jenkins

Copy the custom HPI to $Jenkins\_Home/plugins

Delete the previously expanded plugin directory

Make an empty file called <plugin>.hpi.pinned

Start Jenkins

**9. Explain how can create a backup and copy files in Jenkins?**

Jenkins saves all the setting, build artifacts and logs in its home directory, to create a back-up of your Jenkins setup, just copy this directory. You can also copy a job directory to clone or replicate a job or rename the directory.

**10. Explain how you can clone a Git repository via Jenkins?**

To clone a Git repository via Jenkins, you have to enter the e-mail and user name for your Jenkins system.  For that, you have to switch into your job directory and execute the “git config” command.

**11. Explain how you can set up Jenkins job?**

To create a project that is handled via jobs in Jenkins.  Select New item from the menu, once this done enter a name for the job and select free-style job. Then click OK to create new job in Jenkins.  The next page enables you to configure your job.

**12. Mention what are the two components Jenkins is mainly integrated with?**

Jenkin is mainly integrated with two components

Version Control system like GIT, SVN

And build tools like Apache Maven.

**13. What is Jenkins ?**

It is a continuous integration tool written in Java.

**14. What is the difference between Maven, Ant and Jenkins ?**

Maven and Ant are Build Technologies whereas Jenkins is a continuous integration tool.

**15. Which SCM tools Jenkins supports ?**

AccuRev, CVS, Subversion, Git, Mercurial, Perforce, Clearcase and RTC

**16. What are the various ways in which build can be scheduled in Jenkins ?**

Builds can be triggered by source code management  commits.

Can be triggered after completion of other builds.

Can be scheduled to run at specified time ( crons )

Manual Build Requests

**17. What is the relation between hudson and Jenkins ?**

Hudson was the earlier name and version of current Jenkins. After some issue , the project name was changed from Hudson to Jenkins.

**18. What you do to make sure that your project build doesn’t break in Jenkins ?**

I make sure that I perform successful clean install on my local machine with all unit tests.

Then I make sure that I check in all code changes.

Then I do a Synchronize with repository to make sure that all required config and POM changes and any difference is checked into the repository.

**19. What you do when you see a broken build for your project in Jenkins ?**

I will open the console output for the build and will try to see if any file changes were missed.

If not able to find the issue that way, Will clean and update my local workspace to replicate the problem on my local and will try to solve it.

**20. Tell us a bit about what your service and plugin do. Who is it for? What are the highlights of your plugin?**

[**LOADER.IO**](http://loader.io/) is a simple-to-use cloud-based load testing service. The service is designed for developers and people who need to ensure applications are performing as they should. It allows developers to perform large-scale load tests on demand, which lets them understand the scalability and performance of their applications. We realize Jenkins is the preferred build service for a lot of our users, and we know providing a way for them to implement, measure and improve application performance during the continuous build cycle is important. So we wrote a Jenkins plugin that allows load testing to be brought into the continuous build and deployment process with ease.

**21. Which SCM tools does Jenkins support?**

Jenkins supports the following SCM tools:

* AccuRev
* CVS
* Subversion
* Git
* Mercurial
* Perforce
* Clearcase
* RTC

**22. What is continuous integration in Jenkins?**

In software development, multiple developers or teams work on different segments of same web application so you have to perform integration test by integrating all modules. In order to do that an automated process for each piece of code is performed on daily bases so that all your codes get tested. This process is known as continuous integration.

**23. What are the most useful plugins in Jenkins?**

Some most useful plugins in Jenkins:

* Maven 2 project
* Amazon EC2
* HTML publisher
* Copy artifact
* Join
* Green Balls

**24. How can you setup Jenkins jobs?**

Follow these steps:

Select new item from the menu.

After that enter a name for the job and select free-style job.

Then click OK to create new job in Jenkins.

The next page enables you to configure your job.

**25. What are the two most important components jenkins is integrated with?**

Jenkins is integrated with these two components main:

1. Version Control System like SVN, GIT
2. Build tools like Maven

**26. What are the commands to start jenkins manually?**

<jenkins\_url>/restart : Force restart (will not wait for ongoing build to complete)

<jenkins\_url>/safeRestart : Wait for all builds to complete before restarting.

**Mention Jenkins?**

Jenkins is an open source tool with plugin built for continuous integration purpose.  The principle functionality of Jenkins is to keep a track of version control system and to initiate and monitor a build system if changes occur. It monitors the whole process and provides reports and notifications to alert.

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**What is the requirement for using Jenkins?**

For using Jenkins, you have to need a source code repository which is accessible. For example, a Git repository and a working build script, e.g., a Maven script, checked into the repository.

**How to create a backup and copy files in Jenkins?**

If you want to create a back-up of your Jenkins setup, just copy the directory that saves all the setting, build artifacts and logs of Jenkins in its home directory. You can also copy a job directory to clone or replicate a job or rename the directory.

**How can you clone a Git repository via Jenkins?**

If you want to clone a Git repository via Jenkins, you have to enter the e-mail and user name for your Jenkins system. Switch into your job directory and execute the “git config” command for that.

**How can you setup Jenkins jobs?**

Follow these steps:

Select new item from the menu.

After that enter a name for the job and select free-style job.

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Jenkins is integrated with these two components:

Version Control system like GIT,SVN

And build tools like Apache Maven.

**How can you move or copy Jenkins from one server to another?**

Follow these steps to move or copy Jenkins from one server to another:

First, copy the related job directory and slide a job from one installation of Jenkins to another.

Make a copy of an already existing job by making clone of a job directory by a different name.

Renaming an existing job by rename a directory