



## Etech Consulting LLC JENKINS SERIES

### Definations:

Jenkins is a powerful tool truly built and friendly for developers. Here are some of the most significant advantages of using Jenkins:

### Advantages of Using Jenkins

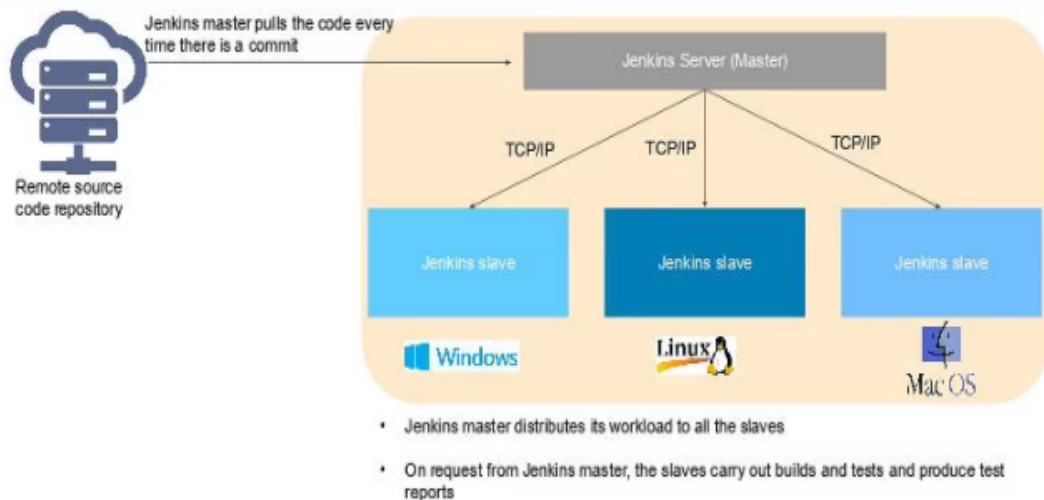
1. Jenkins is a powerful tool truly built and friendly for developers. Here are some of the most significant advantages of using Jenkins:
2. Free to Use
3. Jenkins is fully open-source and free to use. Since its development in 2011, it is the most preferred **CI/CD tool** used by developers in both early-stage startups and big organizations.
4. Rich Plugin Ecosystem
5. There are over a **thousand different plugins** that can be used to enhance the functionality of a Jenkins environment and suit the specific needs of an organization.
6. Easy Integration
7. Jenkins can be easily integrated with a number of popular cloud platforms such as Google Cloud, Digital Ocean, Amazon EC2 and more.

### Disadvantages of Jenkins

8. Jenkins also has its own share of disadvantages. Here are some of the most common ones:
9. Developer Centric
10. Jenkins is more developer-centric and feature-driven. A person may need to have some sort of developer experience to use Jenkins.
11. Setting Change Issues
12. There are some issues (such as Jenkins not starting up) that you may face when you change the settings in Jenkins. These issues can come up when you install some plugins as well. Fortunately, Jenkins has a large user base so you can search online for a solution whenever you are faced with these issues.

## Jenkins Master-Slave Architecture

### Jenkins Master-Slave Architecture



**Note: Jenkins** communicates with other slave servers using TCP/IP protocol

**How does jenkins helps in Building your Applications?**

**What is continues integration?**

**Continuous Integration** is a software development practice in which developers are required to frequently commit changes to the source code in a shared repository. Each commit is then continuously pulled & built. Jenkins is an open source, Continuous Integration (CI) tool, written in **Java**. It continuously pulls, builds and tests any code commits made by a developer with the help of plugins.

**Plugins:**

**what is a plugin? A plugin is a piece of program or software that can extend the functionalities of another system**

**Jenkins plugins are small program code that when install enables jenkins to extend its functionalities beyond its initial configurations.**

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