

Present By Amit Ganvir



Jenkins

What is Jenkins

- Jenkins is open source tool
- It is integration tool so we can integrate many of tools with Jenkins like git, maven, ansible, docker, AWS, kubernetes, Sonarqube, JFROG and etc..
- Jenkins is java based web application
- Default port of Jenkins is 8080
- Jenkins is an open source Continuous Integration(CI)(and Continuous Delivery(CD) Tool

Advantages of Jenkins

- Open source and platform independent
- Extended plugins so there are more the Lac plugin so we can just download plugin and integrate with Jenkins.
- Increase Efficiency
- Reduce Time
- We can achieve CI/CD with help of Jenkins
- Jenkins also used master slave architecture so when there are high load on server it will automatically redirect to slave

How can we install Jenkins

1. WAR/JAR and deploy
2. You can use packaging
3. Jenkins Installer
4. Docker Container

Similar Tools like Jenkins in Market

1. Bamboo
2. TeamCity
3. Aws Code Deploy
4. Azure Code Deploy
5. Circle CI
6. GITLAB

Continuous Integration Tools



Jenkins



Buddy



Bamboo



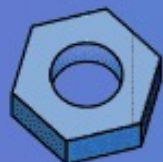
circleci



TeamCity



Travis CI



Buildbot

The Continuous Integration Framework



GitLab



go



cruisecontrol

Prerequisite of Install Jenkins

1. Windows 7 or Upper / Windows server 2008 or later
2. Recommended 2 GB of RAM
3. JAVA installation required before we configure Jenkins

Go to Jenkins official site

Link: <https://www.jenkins.io/download/#downloading-jenkins>

Installation of Jenkins on Ubuntu

Step1: Install Required packages

```
# sudo apt install default-jre -y  
# java --version  
# sudo apt install default-jdk -y  
# javac -version  
# which java
```

```
# vim /etc/environment  
  
JAVA_HOME="/usr/lib/jvm/java-11-openjdk-amd64"  
  
# source /etc/environment  
# echo $JAVA_HOME  
# java --version
```


Step2: Install Jenkins package

```
# wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo apt-key add -
```

```
# sh -c 'echo deb https://pkg.jenkins.io/debian-stable binary/ >  
/etc/apt/sources.list.d/jenkins.list'
```

```
# apt-get update -y
```

```
# apt-get install Jenkins -y
```

```
# apt install git -y
```

```
# apt install git -y
```

Step3: To Start your docker service

```
# systemctl start jenkins
```

Step4: To Enable your docker service

```
# systemctl enable jenkins
```

Step5: To Check service status

```
# systemctl status jenkins
```

Data Availabe in Github Repository

<https://github.com/amitganvir23/devops-session>



Thank
You!