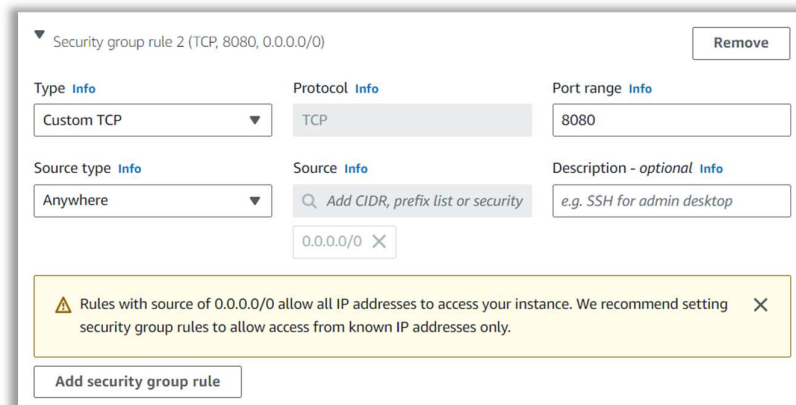


# JENKINS CLASS -1

**Jenkins** is the CI/CD tool to make a word as sooner. It will automate the things to do recurring task and reduced our work. CI stands for Continuous integration and CD stands for Continuous Delivery/ Deployment.

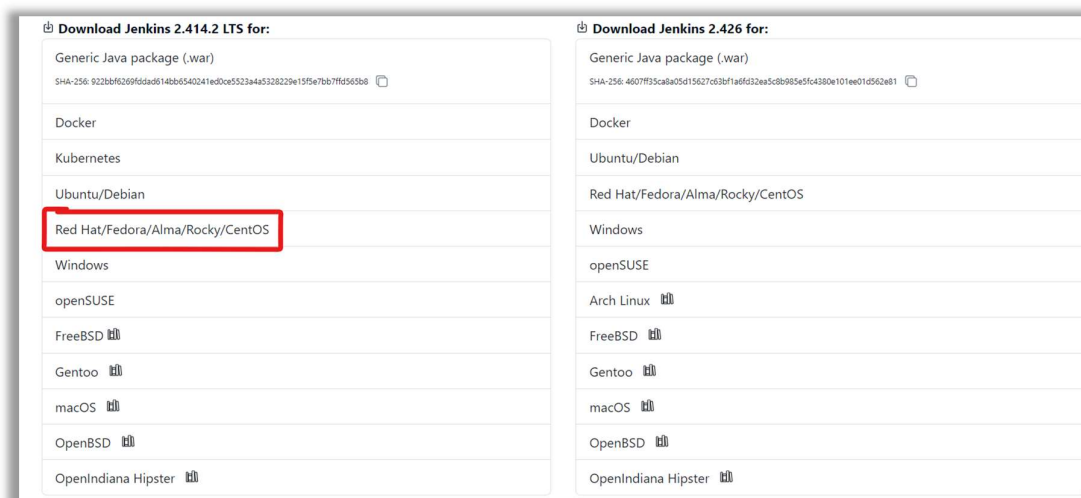
## Steps to start Jenkins in EC2 Instance.

Create the EC2 instance with Custom TCP along with port 8080. Because 8080 is the default Jenkins port.



The screenshot shows the configuration for a security group rule in AWS. The rule is named "Security group rule 2 (TCP, 8080, 0.0.0.0/0)". The "Type" is set to "Custom TCP", the "Protocol" is "TCP", and the "Port range" is "8080". The "Source type" is "Anywhere", and the "Source" is "0.0.0.0/0". A warning message states: "Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only." There is a "Remove" button in the top right and an "Add security group rule" button at the bottom.

Go to the link : <https://www.jenkins.io/download/> and select the Jenkins which type of Jenkins file do you want. There were two type of Jenkins versions there are LTS and standard version. You can go with LTS (Long Term Support).



The screenshot shows the Jenkins download page for version 2.414.2 LTS. The page is divided into two columns: "Download Jenkins 2.414.2 LTS for:" and "Download Jenkins 2.426 for:". The left column lists various operating systems: Generic Java package (.war), Docker, Kubernetes, Ubuntu/Debian, Red Hat/Fedora/Alma/Rocky/CentOS (highlighted with a red box), Windows, openSUSE, Arch Linux, FreeBSD, Gentoo, macOS, OpenBSD, and OpenIndiana Hipster. The right column lists: Generic Java package (.war), Docker, Ubuntu/Debian, Red Hat/Fedora/Alma/Rocky/CentOS, Windows, openSUSE, Arch Linux, FreeBSD, Gentoo, macOS, OpenBSD, and OpenIndiana Hipster.

Currently we have to install the Jenkins in aws EC2 instance. So, we can choose the **Red Hat/Fedora/Alma/Rocky/CentOS** because AWS EC2 instance based on Red Hat OS.

Two lines of commands are there. Just copy paste the two commands into the EC2 instance.

```
sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo  
sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key
```

The first command is used to download the Jenkins file second one is to get the password. Now install the downloaded Jenkins by using below command.

```
amazon-linux-extras install java-openjdk11 -y (To install java 11. Because java 11 only can support the Jenkins without lack of dependencies)
```

```
yum install Jenkins -y (To install jenkins)
```

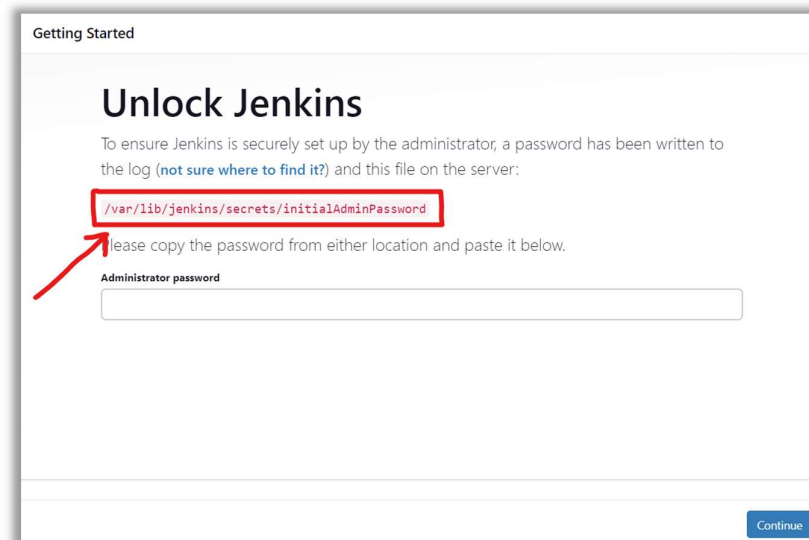
```
yum install git -y (To install git)
```

```
systemctl start jenkins (To start the jenkins)
```

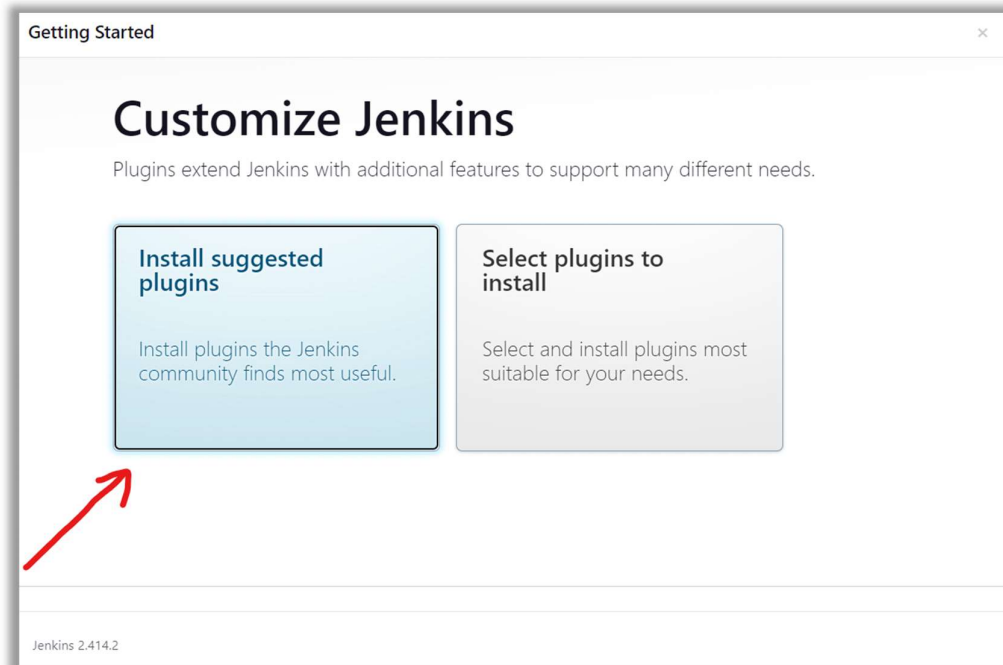
```
systemctl status Jenkins (To check the Jenkins running status)
```

Open new browser tab search on url **<public IP of the AWS instance>:8080**

you will get the page as below

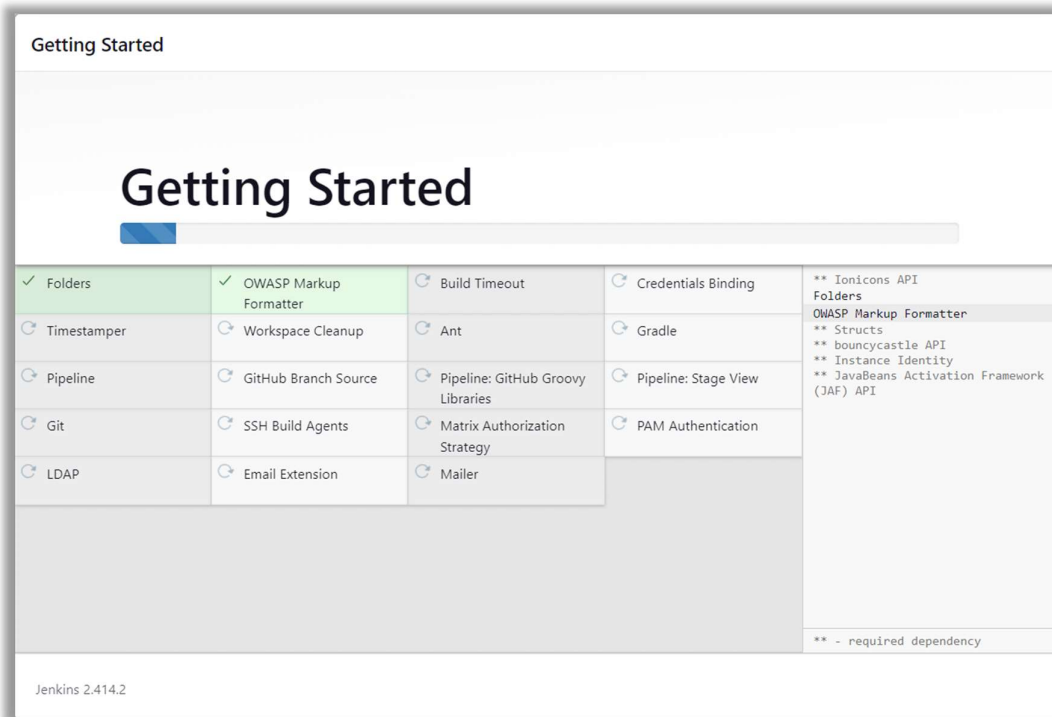


Here enters the authentication password that where we download the Jenkins password which is second link in Jenkins page. Now go to the instance type path which is mentioned in the login page. Use cat command to view the authentication password. Then enter it over there and click Continue.

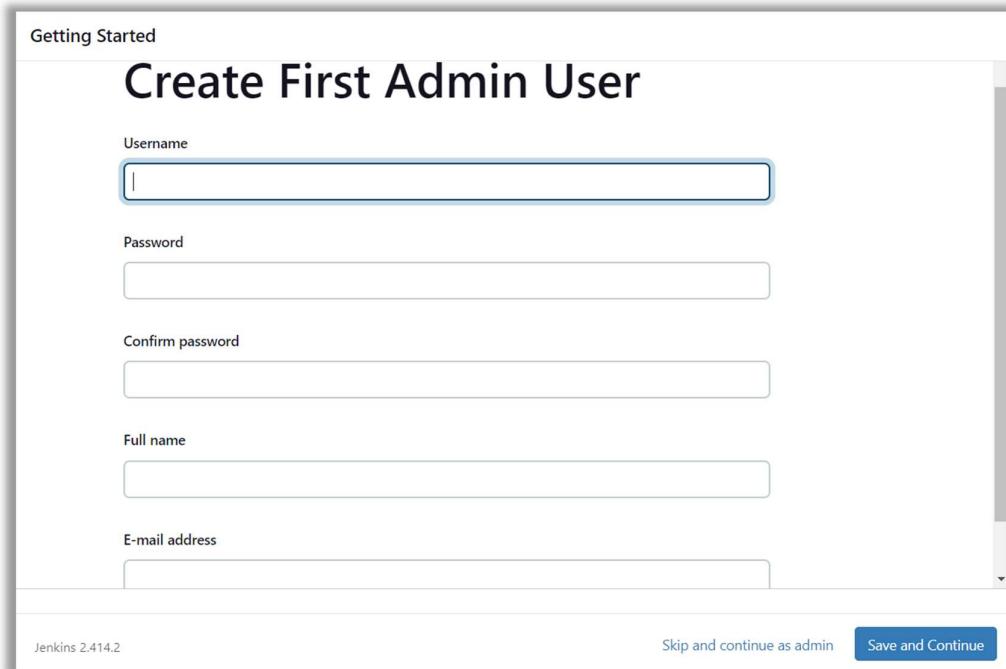


Select the Install suggested plugins. If you want to customize your plugins you can selected plugins to install. But recemented first option only.

It'll load the default plugins as shown below.



Initially you need to signup with Jenkins.



The screenshot shows the 'Getting Started' section of the Jenkins installation wizard. The main heading is 'Create First Admin User'. Below the heading are five input fields: 'Username', 'Password', 'Confirm password', 'Full name', and 'E-mail address'. At the bottom left, it says 'Jenkins 2.414.2'. At the bottom right, there are two buttons: 'Skip and continue as admin' and 'Save and Continue'.

Getting Started

## Create First Admin User

Username

Password

Confirm password

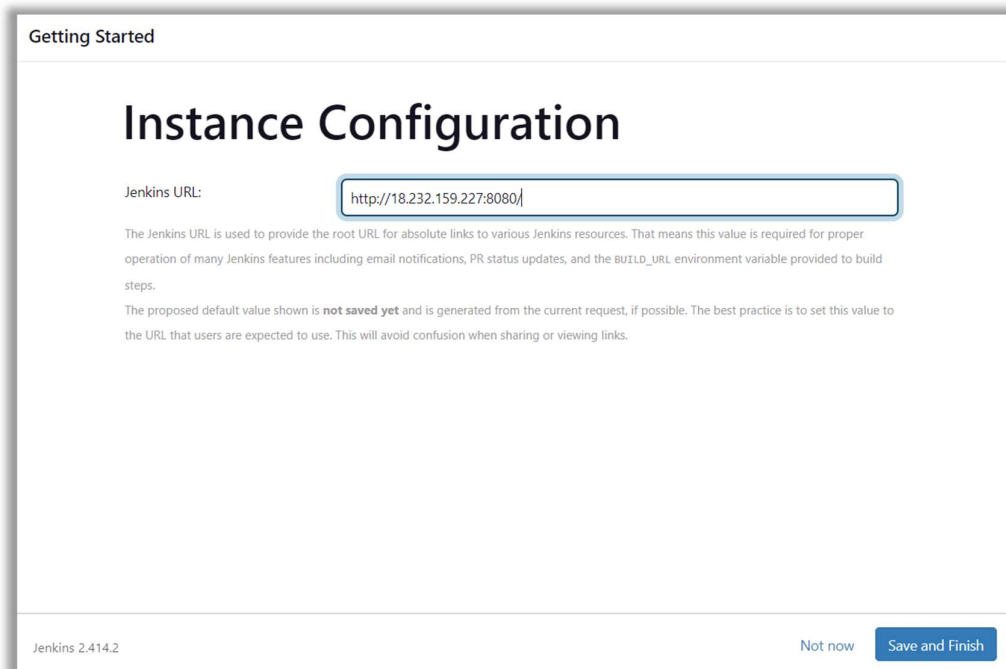
Full name

E-mail address

Jenkins 2.414.2

[Skip and continue as admin](#) [Save and Continue](#)

Just click on save and continue to go with next step.



The screenshot shows the 'Getting Started' section of the Jenkins installation wizard. The main heading is 'Instance Configuration'. Below the heading is a 'Jenkins URL:' label followed by a text input field containing 'http://18.232.159.227:8080/'. Below the input field is a paragraph of text explaining the Jenkins URL. At the bottom left, it says 'Jenkins 2.414.2'. At the bottom right, there are two buttons: 'Not now' and 'Save and Finish'.

Getting Started

## Instance Configuration

Jenkins URL:

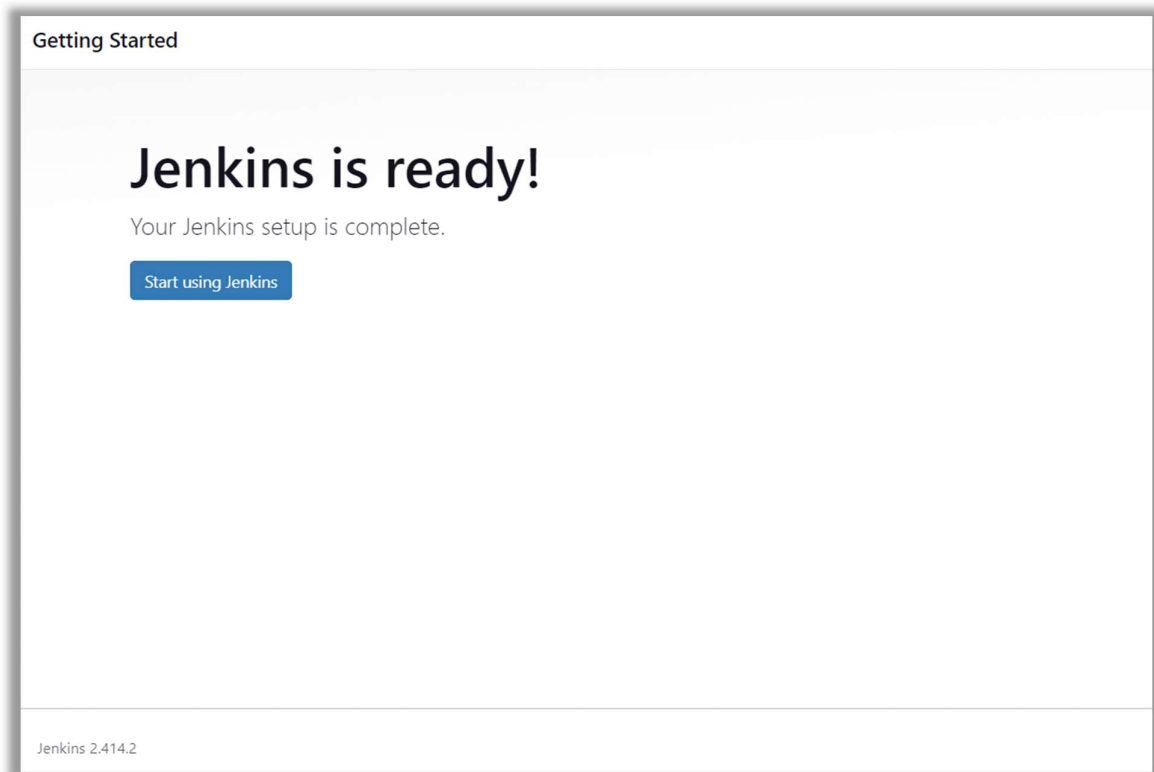
The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the `BUILD_URL` environment variable provided to build steps.

The proposed default value shown is **not saved yet** and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.

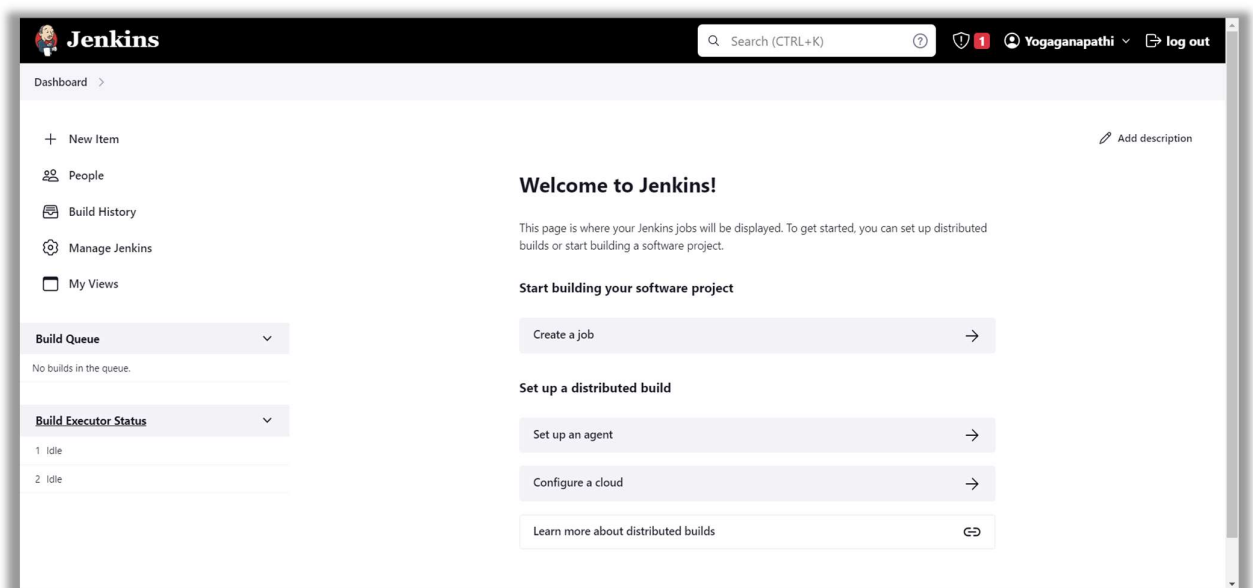
Jenkins 2.414.2

[Not now](#) [Save and Finish](#)

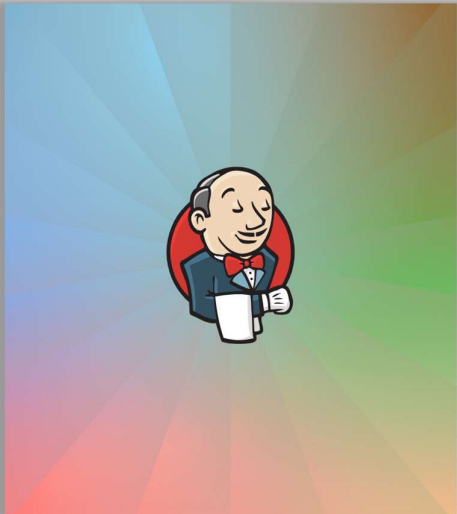
Now the Jenkins is ready to play....



The Jenkins Dashboard looks like this.



Sometimes you'll get logged out due to session expiry. Then you can login via your credentials.



**Sign in to Jenkins**

Username

Password

☐ Keep me signed in

Sign in