

## How to Install Jenkins on CentOS 7 or RHEL 7

Jenkins is a service that runs on Java.

### Step 1

Check whether you have java installed in your Centos 7.

Run the command `# java -version`

### Results

```
[root@josh josh]# java -version
openjdk version "1.8.0_302"
OpenJDK Runtime Environment (build 1.8.0_302-b08)
OpenJDK 64-Bit Server VM (build 25.302-b08, mixed mode)
[root@josh josh]#
```

If not run the following command

Centos 7

`# yum install java-1.8.0-openjdk-devel`

### Step 2

Install Jenkins repository

Source: <https://www.jenkins.io/doc/book/installing/linux/>

Command #1 -repository

`wget -O /etc/yum.repos.d/jenkins.repo\`  
<https://pkg.jenkins.io/redhat-stable/jenkins.repo>

Command #2 – Import the Key

`rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key`

Command #3 - Verify yum repository

```
#cat /etc/yum.repos.d/jenkins.repo
```

## Results

```
[root@centos ~]# cat /etc/yum.repos.d/jenkins.repo
```

```
[jenkins]
```

```
name=Jenkins-stable
```

```
baseurl=http://pkg.jenkins.io/redhat-stable
```

```
gpgcheck=1
```

```
[root@centos ~]#
```

## Step 3: Install stable Jenkins on CentOS 7

```
#yum install Jenkins
```

Issues students are facing after running the 

```
#yum install Jenkins
```

```
Loaded plugins: fastestmirror, langpacks
Determining fastest mirrors
 * base: atl.mirrors.clouvider.net
 * extras: mirror.es.its.nyu.edu
 * updates: nc-centos-mirror.iwebfusion.net
base
extras
jenkins
updates
(1/5): extras/7/x86_64/primary_db
(2/5): updates/7/x86_64/primary_db
(3/5): base/7/x86_64/group_gz
(4/5): base/7/x86_64/primary_db
(5/5): jenkins/primary_db
Resolving Dependencies
--> Running transaction check
--> Package jenkins.noarch 0:2.312-1.1 will be installed
--> Processing Dependency: daemonize for package: jenkins-2.312-1.1.noarch
--> Finished Dependency Resolution
Error: Package: jenkins-2.312-1.1.noarch (jenkins)
       Requires: daemonize
You could try using --skip-broken to work around the problem
You could try running: rpm -Va --nofiles --nodigest
Start jenkins services
Redirecting to /bin/systemctl start jenkins.service
Failed to start jenkins.service: Unit not found.
Installation FAILED..
[root@DESKTOP-9DHK3Q2 ~]#
```

# amazon-linux-extras install epel -y – when using amazon instance

However, in Centos 7,

this problem is occurring because you did not create and configure your YumRepo File

To do that, follow the steps below

Step1. Create the YumRepo File.

```
#vim /etc/yum.repos.d/epelfordaeomonize.repo
```

Put the following information in the file

```
[daemonize]
```

```
baseurl=https://download-
```

```
ib01.fedoraproject.org/pub/epel/7/x86_64/
```

gpgcheck=no

enabled=yes

Save and go back to the terminal

Run the following commands

Step 2

```
# yum install daemonize -y
```

Step 3.

```
# yum install jenkins java-1.8.0-openjdk-devel -y
```

Step 4: Install stable Jenkins on CentOS 7

```
#yum install Jenkins
```

Step 4: Start the Jenkins service and auto start on boot

```
# systemctl start Jenkins
```

```
# systemctl enable Jenkins
```

Step 5: Verify the status of Jenkins

```
# systemctl status Jenkins
```

```
[root@centos ~]# systemctl status jenkins
● jenkins.service - LSB: Jenkins Automation Server
   Loaded: loaded (/etc/rc.d/init.d/jenkins; bad; vendor preset: disabled)
   Active: active (exited) since Sun 2021-03-14 11:22:13 EDT; 1min 2s ago
     Docs: man:systemd-sysv-generator(8)

Mar 14 11:22:11 centos systemd[1]: Starting LSB: Jenkins Automation Server...
Mar 14 11:22:11 centos runuser[3051]: pam_unix(runuser:session): session opened for user jenkins by (uid=0)
Mar 14 11:22:13 centos jenkins[3045]: Starting Jenkins [ OK ]
Mar 14 11:22:13 centos systemd[1]: Started LSB: Jenkins Automation Server.
[root@centos ~]#
```

Step 6: Configure the firewall and allow 8080 port

```
#firewall-cmd --permanent --zone=public --add-port=8080/tcp
```

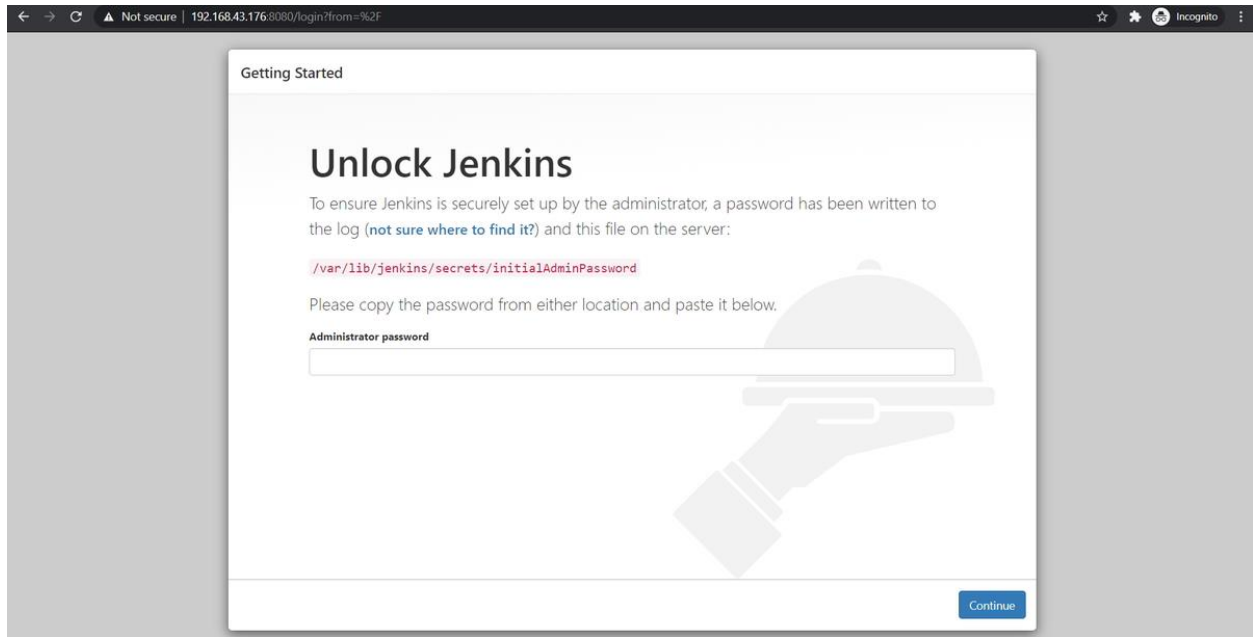
```
#firewall-cmd --reload
```

Step 7: Configure Jenkins on CentOS or RHEL

To configure Jenkins, you need to access it on any web browser with domain/host IP address.

[http://your\\_ip\\_or\\_domain:8080](http://your_ip_or_domain:8080)

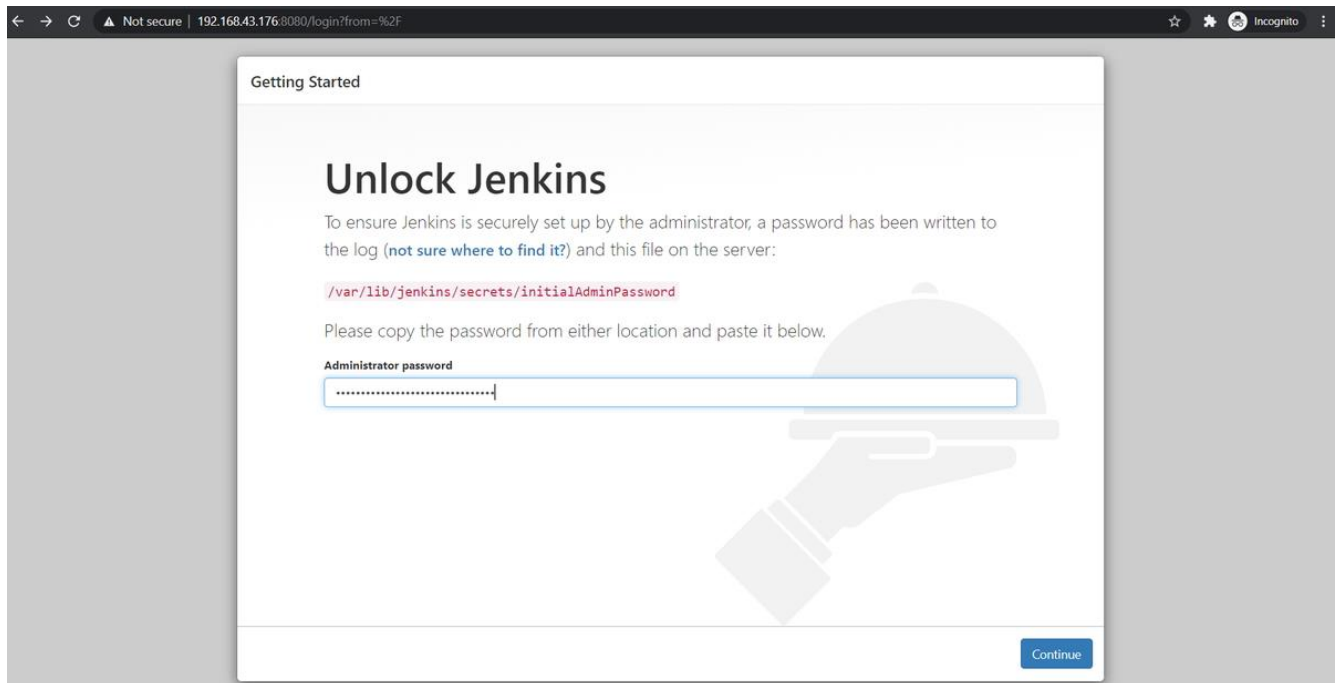
## 7.1: Unlock Jenkins



When you access Jenkins for the first time (after installation) it will ask you the password. And to know the password run the below command, and you will see a 32-character alphanumeric password.

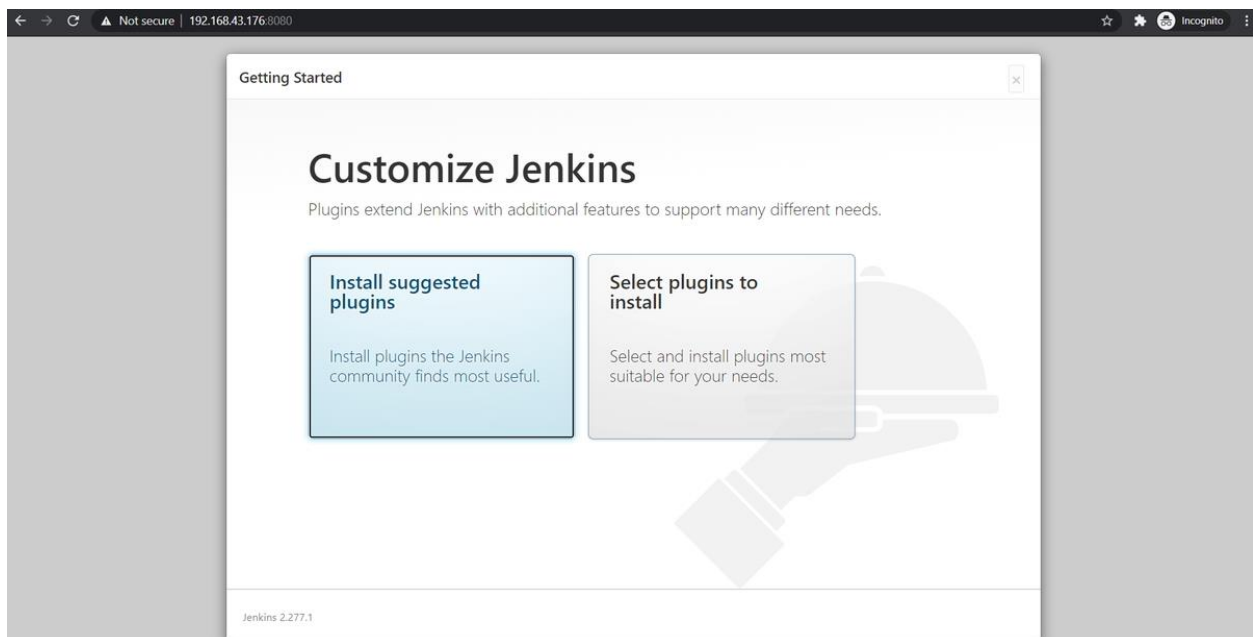
```
cat /var/lib/jenkins/secrets/initialAdminPassword
```

Copy the password and paste it into the Jenkins Administrator section.



On the Next page, Jenkins will ask you to choose/install the suggested plugins or the select most suitable/specific plugins.

## 7.2: Customize Jenkins



## 7.3: Getting Started

Getting Started			
<div>Getting Started</div> <div></div>			
✓ Folders	✓ OWASP Markup Formatter	✓ Build Timeout	✓ Credentials Binding
✓ Timestamper	⌚ Workspace Cleanup	⌚ Ant	⌚ Gradle
⌚ Pipeline	⌚ GitHub Branch Source	⌚ Pipeline: GitHub Groovy Libraries	⌚ Pipeline: Stage View
⌚ Git	⌚ Subversion	⌚ SSH Slaves	⌚ Matrix Authorization Strategy
⌚ PAM Authentication	⌚ LDAP	⌚ Email Extension	⌚ Mailer
** JUnit			
OWASP Markup Formatter			
** Token Macro			
Build Timeout			
** Credentials			
** SSH Credentials			
** Plain Credentials			
Credentials Binding			
Timestamper			
** Pipeline: Supporting APIs			
** Durable Task			
** Pipeline: Nodes and Processes			
** Matrix Project			
** - required dependency			

## 7.4: Create First Admin User



Getting Started

## Create First Admin User

Username:

sysadminxpert

Password:

.....

Confirm password:

.....

Full name:

SysAdminXpert

E-mail address:

id@sysadminxpert.com

Jenkins 2.277.1

[Skip and continue as admin](#)

Save and Continue

## 7.5: Instance Configuration

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.

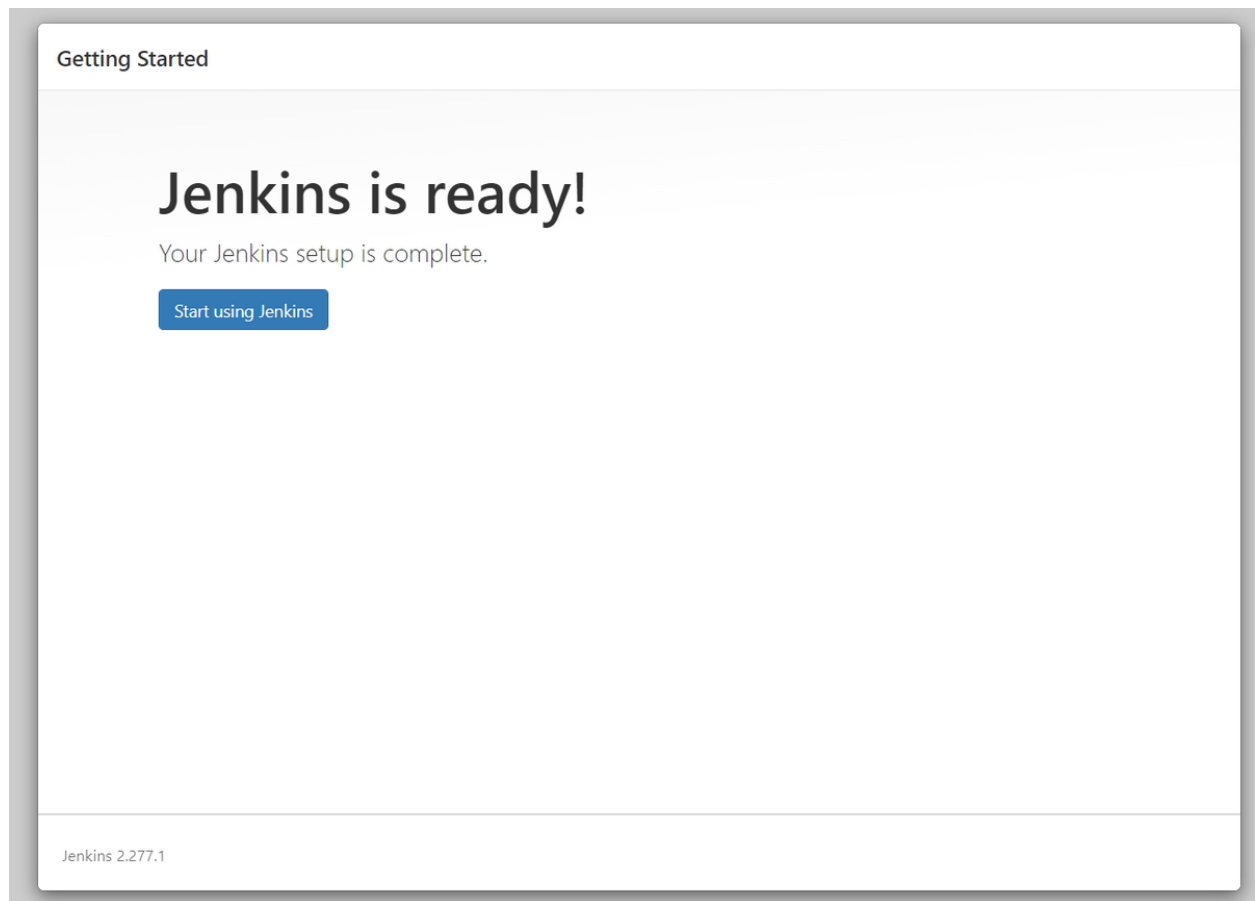
The proposed default value shown is **not saved yet** and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.

Jenkins 2.277.1

Not now

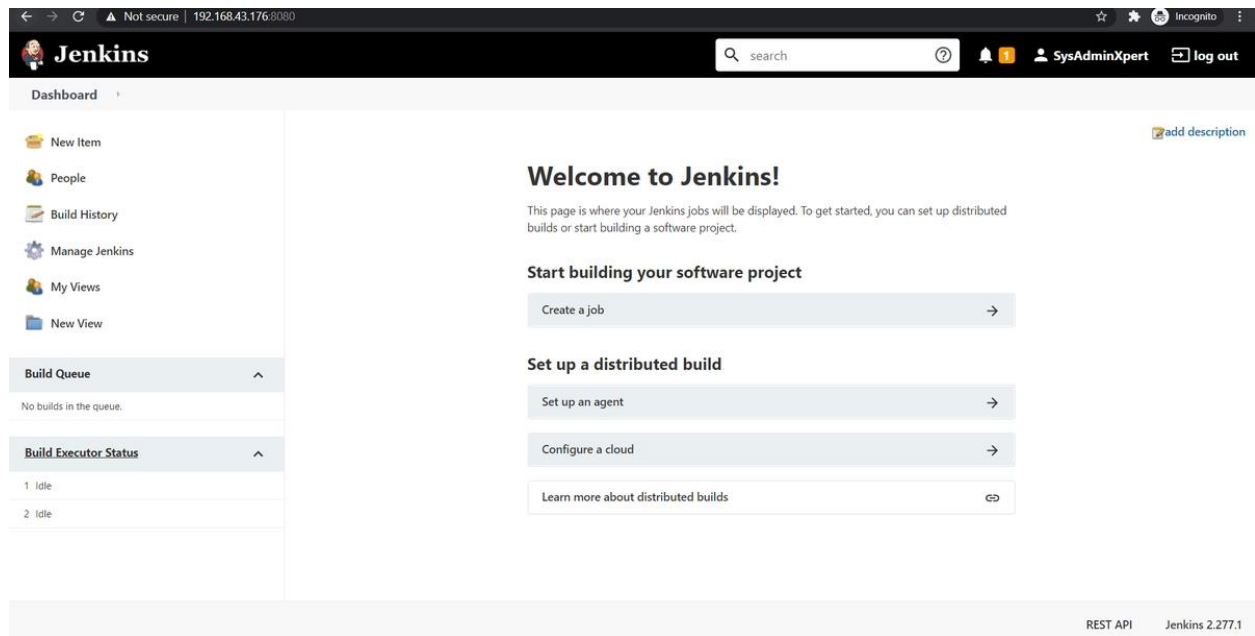
Save and Finish

Next step to click on **‘start using Jenkins’**.



## 7.6: Jenkins Dashboard

It will redirect to the Jenkins dashboard.



## You now have Jenkins services