



Jenkins

INSTALLATION

❖ JENKINS INSTALLATION ON AMAZON / RHEL 9:

PREREQUISITES:

- Jenkins installers are available for several Linux distributions.
 - Debian/Ubuntu, Fedora, Red Hat / Centos
 - **Running Port:** Tomcat-8080

MINIMUM HARDWARE REQUIREMENTS:

- 256 MB of RAM
- 1 GB of drive space (10 GB is a recommended minimum if running Jenkins as a Docker container)

RECOMMENDED HARDWARE CONFIGURATION FOR A SMALL TEAM:

- 4 GB+ of RAM
- 50 GB+ of drive space

SOFTWARE REQUIREMENTS:

- Java 8 /11 /17 runtime environments are supported both 32 / 64-bit versions.

STEP 1: SETTING SYSTEM HOSTNAME

```
#hostname Jenkins-Server
```

```
#vim /etc/hostname
```

```
    Jenkins-Server
```

```
#bash
```

STEP2: UPDATE SYSTEM PENDING PACKAGES

```
#yum update -y
```

STEP 3: INSTALLING VIM, NET-TOOLS, WGET PACKAGES:

```
#yum install vim wget net-tools -y
```

STEP 3: INSTALLING JAVA PACKAGE:

```
#yum install java-17 -y  
#java --version
```

STEP 4: ADDING JENKINS REPOSITORY AND IMPORT THE REPOSITORY GPG KEY

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

STEP 5: INSTALLING JENKINS

```
#yum install jenkins -y  
#systemctl daemon-reload
```

STEP 6: TO START & ENABLE JENKINS SERVER

```
#systemctl start jenkins  
#systemctl enable jenkins  
#systemctl status jenkins  
#netstat -pantl
```

STEP 7: TESTING THROUGH WEB USER INTERFACE

Open a Web browser

Type: http://IP-Address:8080

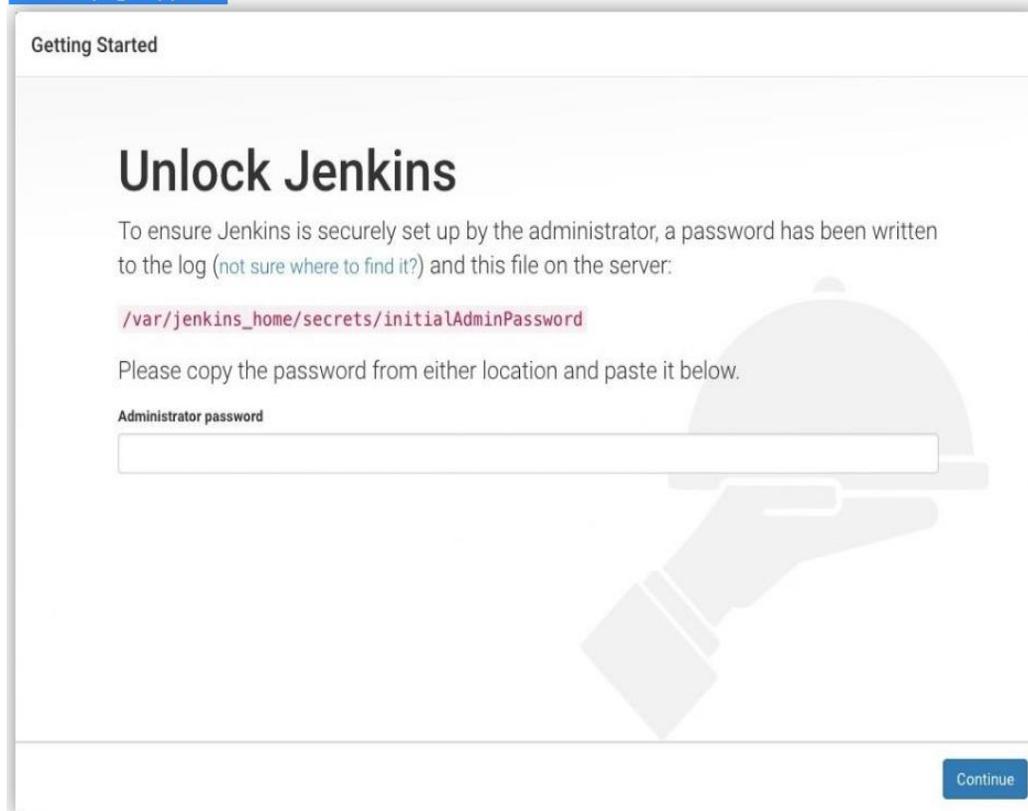
POST-INSTALLATION SETUP WIZARD:

- After downloading, installing and running Jenkins using one of the procedures above (except for installation with Jenkins Operator), the post-installation setup wizard begins.
- This setup wizard takes you through a few quick "one-off" steps to unlock Jenkins, customize it with plugins and create the first administrator user through which you can continue accessing Jenkins.

UNLOCKING JENKINS:

- Browse to <http://IP-Address:8080> and wait until the Unlock Jenkins page appears.

Jenkins page appears.



Getting Started

Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log (not sure where to find it?) and this file on the server:

```
/var/jenkins_home/secrets/initialAdminPassword
```

Please copy the password from either location and paste it below.

Administrator password

Continue

COLLECT AUTOMATIC PASSWORD FROM JENKINS SERVER:

2. From the Jenkins console log output, copy the automatically-generated alphanumeric password (between the 2 sets of asterisks).

```
INFO: Pre-instantiating singletons in org.springframework.beans.factory.support.DefaultListableBeanFactory@24cf7404: defining b
beans [filter,legacy], root of factory hierarchy
Sep 30, 2017 7:18:39 AM jenkins.install.SetupWizard init
INFO:
*****
*****
*****

Jenkins initial setup is required. An admin user has been created and a password generated.
Please use the following password to proceed to installation:

2f064d36638148379e4b632946571567

This may also be found at: /var/jenkins_home/secrets/initialAdminPassword

*****
*****
*****

--> setting agent port for jnlp
--> setting agent port for jnlp... done
Sep 30, 2017 7:18:51 AM hudson.model.UpdateSite updateData
INFO: Obtained the latest update center data file for UpdateSource default
Sep 30, 2017 7:18:52 AM hudson.model.UpdateSite updateData
INFO: Obtained the latest update center data file for UpdateSource default
Sep 30, 2017 7:18:52 AM hudson.WebAppMain$3 run
INFO: Jenkins is fully up and running.
Sep 30, 2017 7:18:52 AM hudson.model.DownloadService$Downloadable load
INFO: Obtained the updated data file for hudson.tasks.Maven.MavenInstaller
Sep 30, 2017 7:18:58 AM hudson.model.DownloadService$Downloadable load
INFO: Obtained the updated data file for hudson.tools.JDKInstaller
Sep 30, 2017 7:18:59 AM hudson.model.AsyncPeriodicWork$1 run
INFO: Finished Download metadata. 25,543 ms
```

Note:

- The command: `sudo cat /var/lib/jenkins/secrets/initialAdminPassword` will print the password at console.
- If you are running Jenkins in Docker using the official `jenkins/jenkins` image you can use `sudo docker exec ${CONTAINER_ID or CONTAINER_NAME} cat /var/jenkins_home/secrets/initialAdminPassword` to print the password in the console without having to exec into the container.

3. On the **Unlock Jenkins** page, paste this password into the **Administrator password** field and click **Continue**.

CREATING THE FIRST ADMINISTRATOR USER:

Finally, after [customizing Jenkins with plugins](#), Jenkins asks you to create your first administrator user.

1. When the **Create First Admin User** page appears, specify the details for your administrator user in the respective fields and click **Save and Finish**.
2. When the **Jenkins is ready** page appears, click **Start using Jenkins**.

Notes:

- This page may indicate **Jenkins is almost ready!** instead and if so, click **Restart**.
 - If the page does not automatically refresh after a minute, use your web browser to refresh the page manually.
3. If required, log in to Jenkins with the credentials of the user you just created and you are ready to start using Jenkins!

JENKINS IS READY:

