

Link: <https://www.jenkins.io/doc/book/installing/linux/#red-hat-centos>

Install Jenkins

```
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
sudo yum upgrade -y
```

```
[ronslim@ansiblec jenkins]$ sudo wget -O /etc/yum.repos.d/jenkins.repo \
    https://pkg.jenkins.io/redhat-stable/jenkins.repo
--2025-05-18 23:20:33-- https://pkg.jenkins.io/redhat-stable/jenkins.repo
Resolving pkg.jenkins.io (pkg.jenkins.io)... 146.75.22.133, 2a04:4e42:75::645
Connecting to pkg.jenkins.io (pkg.jenkins.io)|146.75.22.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 85
Saving to: '/etc/yum.repos.d/jenkins.repo'

/etc/yum.repos.d/jenkins.repo      100%[=====]

2025-05-18 23:20:34 (3.25 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [85/85]

[ronslim@ansiblec jenkins]$ ls -rlt
total 0
[ronslim@ansiblec jenkins]$ ls -la
total 4
drwxr-xr-x. 2 ronslim ronslim  6 May 18 23:20 .
drwx----- 19 ronslim ronslim 4096 May 18 23:20 ..
[ronslim@ansiblec jenkins]$ cat /etc/yum.repos.d/jenkins.repo
[jenkins]
name=Jenkins-stable
baseurl=http://pkg.jenkins.io/redhat-stable
gpgcheck=1
[ronslim@ansiblec jenkins]$ sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key
[ronslim@ansiblec jenkins]$ sudo yum upgrade
Updating Subscription Management repositories.
Jenkins-stable
```

```
sudo yum install fontconfig java-21-openjdk -y
```

```
[ronslim@ansiblec jenkins]$ sudo yum install fontconfig java-21-openjdk -y
Updating Subscription Management repositories.
Last metadata expiration check: 0:15:24 ago on Sunday, 18 May, 2025 11:21:33 PM.
Package fontconfig-2.14.0-2.el9_1.x86_64 is already installed.
Dependencies resolved.
=====
Package                                Architecture                               Versi
=====
Installing:
java-21-openjdk                        x86_64                                    1:21.
Installing dependencies:
copy-jdk-configs                       noarch                                    4.0-3
java-21-openjdk-headless               x86_64                                    1:21.
javapackages-filesystem                noarch                                    6.4.0
lksctp-tools                           x86_64                                    1.0.1
lua                                      x86_64                                    5.4.4
lua-posix                               x86_64                                    35.0-
ttmkfdir                               x86_64                                    3.0.9
tzdata-java                            noarch                                    2025b
xorg-x11-fonts-Type1                   noarch                                    7.5-3
=====
Transaction Summary
=====
Install 10 Packages
```

```
sudo yum install jenkins -y
```

```
[ronslim@ansiblec jenkins]$ sudo yum install jenkins -y
Updating Subscription Management repositories.
Last metadata expiration check: 0:16:19 ago on Sunday, 18 May, 2025 11:21:33 PM.
Dependencies resolved.
=====
Package                                Architecture                          Version
=====
Installing:
jenkins                                noarch                                2.504.1-1.1
Transaction Summary
=====
Install 1 Package

Total download size: 90 M
Installed size: 90 M
Downloading Packages:
jenkins-2.504.1-1.1.noarch.rpm
-----
Total
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing      :
  Running scriptlet: jenkins-2.504.1-1.1.noarch
  Installing      : jenkins-2.504.1-1.1.noarch
  Running scriptlet: jenkins-2.504.1-1.1.noarch
  Verifying      : jenkins-2.504.1-1.1.noarch
Installed products updated.

Installed:
jenkins-2.504.1-1.1.noarch

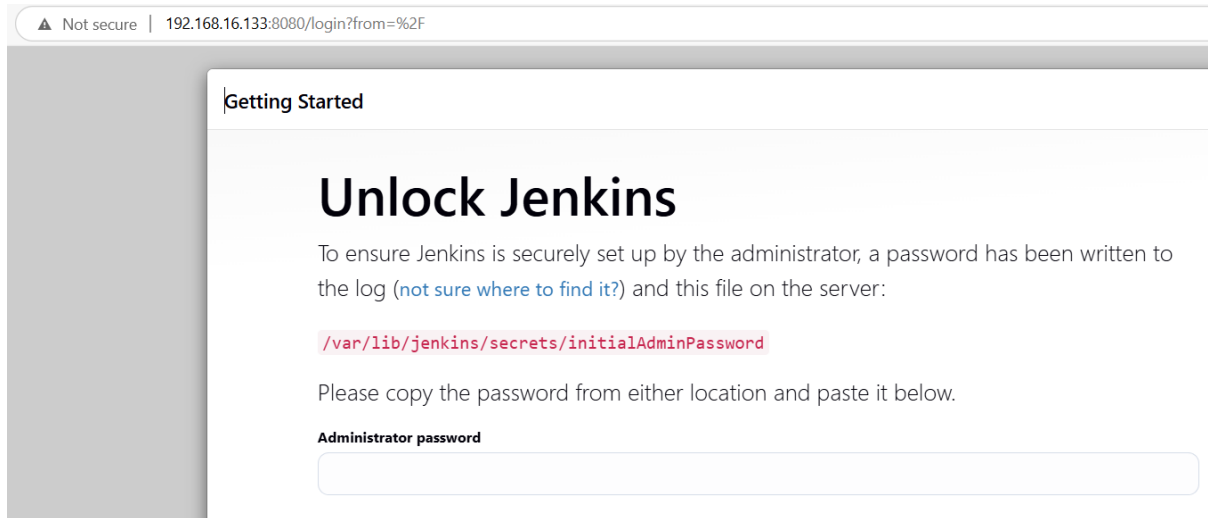
Complete!
```

```
sudo systemctl daemon-reload
sudo systemctl enable jenkins
sudo systemctl start jenkins
sudo systemctl status jenkins
```

```
[ronslim@ansiblec jenkins]$ sudo systemctl daemon-reload
[ronslim@ansiblec jenkins]$ sudo systemctl enable jenkins
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service → /usr/lib/systemd/system/jenkins.service.
[ronslim@ansiblec jenkins]$ sudo systemctl start jenkins
[ronslim@ansiblec jenkins]$ sudo systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; preset: disabled)
   Active: active (running) since Sun 2025-05-18 23:39:12 CST; 10s ago
     Main PID: 106552 (java)
       Tasks: 49 (limit: 22935)
      Memory: 550.8M
         CPU: 14.993s
    CGroup: /system.slice/jenkins.service
            └─106552 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

May 18 23:39:05 ansiblec jenkins[106552]: 930b738af6a54ebd99329c83144c1cd1
May 18 23:39:05 ansiblec jenkins[106552]: This may also be found at: /var/lib/jenkins/secrets/initialAdminPassword
May 18 23:39:05 ansiblec jenkins[106552]: *****
May 18 23:39:05 ansiblec jenkins[106552]: *****
May 18 23:39:05 ansiblec jenkins[106552]: *****
May 18 23:39:12 ansiblec jenkins[106552]: 2025-05-18 15:39:12.781+0000 [id=37] INFO jenkins.InitReactorRunner$1#onAttained: Comp
May 18 23:39:12 ansiblec jenkins[106552]: 2025-05-18 15:39:12.808+0000 [id=30] INFO hudson.lifecycle.Lifecycle#onReady: Jenkins t
May 18 23:39:12 ansiblec systemd[1]: Started Jenkins Continuous Integration Server.
May 18 23:39:15 ansiblec jenkins[106552]: 2025-05-18 15:39:15.491+0000 [id=56] INFO h.m.DownloadService$Downloadable#load: Obtain
May 18 23:39:15 ansiblec jenkins[106552]: 2025-05-18 15:39:15.492+0000 [id=56] INFO hudson.util.Retrier#start: Performed the act
[ronslim@ansiblec jenkins]$
```

Browse to `http://localhost:8080` (or whichever port you configured for Jenkins when installing it) and wait until the Unlock Jenkins page appears.



```
Get the initial password at /var/lib/jenkins/secrets/initialAdminPassword
[ronslim@ansibleec jenkins]$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
930b7?
[ronslim@ansibleec jenkins]$ |
```

Depending on need, either choose Installed suggested plugins and Select plugins to install. For this document, we will choose Installed suggested plugins.

Getting Started

Customize Jenkins

Plugins extend Jenkins with additional features to support many different needs.

Install suggested plugins

Install plugins the Jenkins community finds most useful.

Select plugins to install

Select and install plugins most suitable for your needs.

Getting Started

Getting Started

<input type="radio"/> Folders	<input type="radio"/> OWASP Markup Formatter	<input type="radio"/> Build Timeout	<input type="radio"/> Credentials Binding	
<input type="radio"/> Timestampers	<input type="radio"/> Workspace Cleanup	<input type="radio"/> Ant	<input type="radio"/> Gradle	
<input type="radio"/> Pipeline	<input type="radio"/> GitHub Branch Source	<input type="radio"/> Pipeline: GitHub Groovy Libraries	<input type="radio"/> Pipeline Graph View	
<input type="radio"/> Git	<input type="radio"/> SSH Build Agents	<input type="radio"/> Matrix Authorization Strategy	<input type="radio"/> PAM Authentication	
<input type="radio"/> LDAP	<input type="radio"/> Email Extension	<input type="radio"/> Mailer	<input type="radio"/> Dark Theme	
				** - required dependency

Getting Started

<input type="radio"/> Folders	<input type="radio"/> OWASP Markup Formatter	<input type="radio"/> Build Timeout	<input type="radio"/> Credentials Binding
<input type="radio"/> Timestampers	<input checked="" type="radio"/> Workspace Cleanup	<input type="radio"/> Ant	<input checked="" type="radio"/> Gradle
<input type="radio"/> Pipeline	<input checked="" type="radio"/> GitHub Branch Source	<input checked="" type="radio"/> Pipeline: GitHub Groovy Libraries	<input checked="" type="radio"/> Pipeline Graph View
<input type="radio"/> Git	<input type="radio"/> SSH Build Agents	<input checked="" type="radio"/> Matrix Authorization Strategy	<input type="radio"/> PAM Authentication
<input type="radio"/> LDAP	<input checked="" type="radio"/> Email Extension	<input type="radio"/> Mailer	<input type="radio"/> Dark Theme

Getting Started

<input checked="" type="radio"/> Folders	<input checked="" type="radio"/> OWASP Markup Formatter	<input checked="" type="radio"/> Build Timeout	<input checked="" type="radio"/> Credentials Binding	** Ionicons API Folders OWASP Markup Formatter ** ASM API ** JSON Path API ** Structs ** Pipeline: Step API ** Token Macro
<input checked="" type="radio"/> Timestampers	<input checked="" type="radio"/> Workspace Cleanup	<input checked="" type="radio"/> Ant	<input checked="" type="radio"/> Gradle	
<input checked="" type="radio"/> Pipeline	<input checked="" type="radio"/> GitHub Branch Source	<input checked="" type="radio"/> Pipeline: GitHub Groovy Libraries	<input checked="" type="radio"/> Pipeline Graph View	
<input checked="" type="radio"/> Git	<input checked="" type="radio"/> SSH Build Agents	<input checked="" type="radio"/> Matrix Authorization Strategy	<input type="radio"/> PAM Authentication	
<input type="radio"/> LDAP	<input checked="" type="radio"/> Email Extension	<input type="radio"/> Mailer	<input type="radio"/> Dark Theme	

Just in case stuck. Restart Jenkins service and resume with installation
After that, setup a user. Then login with the user setup.

Username

Password

Confirm password

Full name

E-mail address

Secure | 192.168.16.133:8080/login?from=%2F



After login, you can see the dashboard.


Sign in to Jenkins

Username

Password


☐ Keep me signed in


Sign in


 **Jenkins**

Dashboard >

+ New Item

 Build History

 Manage Jenkins

 My Views

Build Queue

No builds in the queue


Welcome to Jenkins!

This page is where your Jenkins jobs will be displayed. To get : builds or start building a software project.

Start building your software project


Create a job


Setup Agent


 **Jenkins**

Dashboard >

+ New Item

 Build History

 Manage Jenkins

 My Views

Build Queue

No builds in the queue.

Build Executor Status

0/2

Welcome to Jenkins!

This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.

Start building your software project

Create a job

Set up a distributed build

Set up an agent

New node

Node name

jenkinsnode

Type



Permanent Agent

Adds a plain, permanent agent to Jenkins. This is called "permanent" because Jenkins doesn't provide higher level of integration with these agents, such as dynamic provisioning. Select this type if no other agent types apply — for example such as when you are adding a physical computer, virtual machines managed outside Jenkins, etc.

Create

Name ?

jenkinsnode

Description ?

Plain text [Preview](#)

Number of executors ?

1

Remote root directory ?

/var/jenkins

An agent needs to have a directory dedicated to Jenkins. Specify the path to this directory, a path local to the agent machine. There is no need for this path to be visible from the con

Save

Nodes

[+ New Node](#)[Configure Monitors](#)

S	Name	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
	Built-In Node	Linux (amd64)	In sync	2.57 GiB	1008.00 MiB	2.57 GiB	0ms
	jenkinsnode		N/A	N/A	N/A	N/A	N/A
Data obtained		22 min	22 min	22 min	22 min	22 min	22 min

Agent jenkinsnode

[Add description](#)[Mark this node temporarily offline](#)

Run from agent command line: (Unix)



```
curl -sO http://192.168.16.133:8080/jnlpJars/agent.jar
java -jar agent.jar -url http://192.168.16.133:8080/ -secret 8d015bfc2adfb93b5100ea922e0e5a07545547136ed560fa772183a6fd48955f -name jenkinsnode -webSocket -workDir "/var/jenkins"
```

```
[ronslim@ansibleec jenkins]$ curl -sO http://192.168.16.133:8080/jnlpJars/agent.jar
```

Create Directory

```
[ronslim@ansibleec jenkins]$ sudo mkdir /var/jenkins
```

Change Permission

```
[ronslim@ansibleec jenkins]$ sudo chmod +x /var/jenkins
```

Execute java

```
[ronslim@ansibleec jenkins]$ sudo java -jar agent.jar -url http://192.168.16.133:8080/ -secret "
May 19, 2025 2:28:15 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /var/jenkins/remoting as a remoting work directory
May 19, 2025 2:28:15 AM org.jenkinsci.remoting.engine.WorkDirManager setupLogging
INFO: Both error and output logs will be printed to /var/jenkins/remoting
May 19, 2025 2:28:15 AM hudson.remoting.Launcher createEngine
INFO: Setting up agent: jenkinsnode
May 19, 2025 2:28:15 AM hudson.remoting.Engine startEngine
INFO: Using Remoting version: 3301.v4363ddcca_4e7
May 19, 2025 2:28:15 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /var/jenkins/remoting as a remoting work directory
May 19, 2025 2:28:15 AM hudson.remoting.Launcher$CuiListener status
INFO: WebSocket connection open
May 19, 2025 2:28:15 AM hudson.remoting.Launcher$CuiListener status
INFO: Connected
```

After that, jenkins agent is connected

Nodes

S	Name ↓	Architecture	Difference
	Built-In Node	Linux (amd64)	
	jenkinsnode	Linux (amd64)	
Data obtained		32 sec	

