RoseHosting
QUALITY VPS SINCE 2001

Menu

How to Install Jenkins on Ubuntu 24.04

5 minute read

July 8, 2024 by **Jeff Wilson**

In this blog, we will show you how to install Jenkins on Ubuntu 24.04 OS. Jenkins is an open-source automation server developed to automate software development procedures such as building, testing, and deploying the application. Jenkins is written in Java and it runs in servlet containers such as Apache Tomcat. There are many features and plugins offered by this software such as CI/CD, GIT, SSH Build Agents, email extensions, etc. All these plugins and many others are installed very easily in the installation process of Jenkins.

![RoseHosting logo] RoseHosting
QUALITY VPS SINCE 2001

Table of Contents

Prerequisites to Install Jenkins on Ubuntu 24.04

- A server running Ubuntu 24.04 OS
- User privileges: root or non-root user with sudo privileges
- A server with at least 2 GB of RAM (Our NVMe 2 VPS plan)

Step 1. Update the System

Every fresh install of Ubuntu 24.04 needs the packages to be updated to the latest versions available. To do that execute the following command:

```
sudo apt update -y && sudo apt upgrade -y
```

Step 2. Install Java

Since Jenkins is installed in Java we need to install it first so we can proceed with the Jenkins process of installation. Execute the command below to install Java:

```
sudo apt install openjdk-21-jdk -y
```

RoseHosting
QUALITY VPS SINCE 2001

```
java -version
```

You should receive the following output:

```
root@host:~# java -version
openjdk version "21.0.3" 2024-04-16
OpenJDK Runtime Environment (build 21.0.3+9-Ubuntu-1ubuntu1)
OpenJDK 64-Bit Server VM (build 21.0.3+9-Ubuntu-1ubuntu1, mixed mode,
sharing)
```

Step 3. Add Jenkins GPG key and Repository

Next step is to add the Jenkins GPG key with the following command:

```
sudo wget -O /usr/share/keyrings/jenkins-keyring.asc
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
```

Then add the Jenkins repository because it is not added by default in the Ubuntu 24.04
sources list:

```
echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]"
https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
/etc/apt/sources.list.d/jenkins.list > /dev/null
```

Once, the key and the repo are added update the system again and move to the next
step of the installation.

```
sudo apt update -y
```

Step 4. Install Jenkins on Ubuntu 24.04

To install Jenkins execute the following command:

Once installed, start and enable the Jenkins service:

```
sudo systemctl start jenkins && sudo systemctl enable jenkins
```

To check the status of the service:

```
sudo systemctl status jenkins
```

You should get the following output:

```
root@host:~# sudo systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
     Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled;
preset: enabled)
     Active: active (running) since Tue 2024-06-11 09:39:02 CDT; 15s ago
   Main PID: 11666 (java)
      Tasks: 52 (limit: 4613)
     Memory: 1.1G (peak: 1.2G)
        CPU: 1min 24.854s
     CGroup: /system.slice/jenkins.service
             └─11666 /usr/bin/java -Djava.awt.headless=true -jar
/usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080
```

Step 5. Install Apache And Create Apache Configuration

The Apache web server is required, so we can create a reverse proxy in the next step. To install the Apache web server execute the following command:

```
sudo apt install apache2 -y
```

Once installed start and enable the service:

Check if the service is up and running:

```
sudo systemctl status apache2
```

You should receive the following output:

```
root@host:~# sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled;
preset: enabled)
     Active: active (running) since Tue 2024-06-11 09:56:04 CDT; 4s ago
       Docs: https://httpd.apache.org/docs/2.4/
    Process: 12142 ExecStart=/usr/sbin/apachectl start (code=exited,
status=0/SUCCESS)
   Main PID: 12145 (apache2)
      Tasks: 6 (limit: 4613)
     Memory: 10.5M (peak: 10.8M)
        CPU: 139ms
     CGroup: /system.slice/apache2.service
```

We need to create an Apache virtual host file and set it up with the reverse proxy directive in order can access the Jenkins via domain name.

Create an Apache configuration file with the following command:

```
touch /etc/apache2/sites-available/jenkins.conf
```

Open it with your favorite text editor and paste the following lines of code:

```
<Virtualhost *:80>
    ServerName        yourdomain.com
    ProxyRequests     Off
    ProxyPreserveHost On
    AllowEncodedSlashes NoDecode

    Order deny,allow
```

```
ProxyPass            /    http://localhost:8080/   nocanon
    ProxyPassReverse  /    http://localhost:8080/
    ProxyPassReverse  /    http://yourdomain.com/
</Virtualhost>
```

Save and close the file. Then you need to execute the following commands to enable the Jenkins configuration and some Apache modules:

```
sudo a2ensite jenkins
sudo a2enmod headers
sudo a2enmod rewrite
sudo a2enmod proxy
sudo a2enmod proxy_http
sudo systemctl restart apache2
```

After these commands, if everything is OK, you will be able to access Jenkins via your domain at **http://YourDomain.com**

Step 6. Finalize Install Jenkins on Ubuntu 24.04

On the first screen, you will be asked for the password to unlock Jenkins. The password can be found by executing the following command on the server:

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

You should receive the password as shown below:

```
root@host:~# cat /var/lib/jenkins/secrets/initialAdminPassword
24598462a23846c58060fd15ceeb6abe
```

Enter the password and click on the continue button.

✓ Unlimited Managed Support

✓ Supports Your Software

✓ 2 CPU Cores

✓ 2 GB RAM

✓ 50 GB PCIe4 NVMe Disk

✓ 1854 GeekBench Score

✓ Unmetered Data Transfer

NVME 2 VPS

Now just $43.⁹⁹/mo

GET YOUR VPS

QUALITY VPS SINCE 2001

The installation of Jenkins along with suggested plugins will start.

![RoseHosting logo - QUALITY VPS SINCE 2001]

Once the installation is complete, you will be asked to enter your username, password, full name, and the email.

After saving these credentials the next window will be for the URL of your application. This window is to confirm if the domain is correct in the Apache configuration. Click on the "Save and Finish" button.

RoseHosting
QUALITY VPS SINCE 2001

After this, there will be a button for "Start using Jenkins". Click on that button and you will be redirected to the Administrator website of Jenkins.

That's it. You learned how to successfully install Jenkins on Ubuntu 24.04. Of course, you do not have to do this on your own. You only need to sign up for one of our NVMe **Ubuntu hosting** plans and submit a support ticket. Our admins will help you with any aspect of the Jenkins installation and configuration on your server.

If you liked this post on installing Jenkins on Ubuntu 24.04, please share it with your friends and leave a comment below.

🏷️ **how to install**, **install Jenkins**, **jenkins**, **ubuntu**, **ubuntu24.04**

< **How to Install Node on Ubuntu 24.04**

5 minute read

> **How to Manage MySQL Databases and Users from the Command Line**

5 minute read

3 thoughts on "How to Install Jenkins on Ubuntu 24.04"

Yang Liu

September 17, 2024 at 10:49 pm

The following piece of code has something wrong.

====================

ProxyPreserveHost On
AllowEncodedSlashes NoDecode

Order deny,allow
Allow from all

ProxyPass / http://localhost:8080/ nocanon
ProxyPassReverse / http://localhost:8080/
ProxyPassReverse / http://yourdomain.com/

====================

Could you please send me a right copy of the configuration?

Thanks,
Yang

Reply

admin

September 18, 2024 at 12:26 am

Nothing is wrong here, make sure to replace yourdomain.com with your own domain name pointing to your server.

Reply

anshul tiwari

October 3, 2024 at 1:29 am

replace

Order deny,allow
Allow from all

with

Require all granted

and restart server
New apache2 versions have different settings

Reply

Leave a Comment

Name *

Email *

☐ Save my name, email, and website in this browser for the next time I comment.

☐ Yes, add me to your new blog post notifications list

RoseHosting
QUALITY VPS SINCE 2001

Post Comment

RoseHosting
QUALITY VPS SINCE 2001

About Us

Our Company

Our Policies

Contact Us

Why RoseHosting

Compare Us

Customer Reviews

Awards & Recognition

Content Hub

Fastest Web Hosting

Fully-Managed Hosting

Business Website Guide

NVMe vs. SSD

Linux VPS Hosting

AlmaLinux Hosting

Ubuntu Hosting

Debian Hosting

Docker Hosting

WHM Hosting

cPanel Hosting

DirectAdmin Hosting

Support

24/7 Managed Support

Managed Migration

Systems Status

Other Services

Domain Registration

Domain Transfer

SSL Certificates

Apps Hosting

Magento Hosting

Odoo Hosting

Joomla Hosting

Drupal Hosting

Laravel Hosting

Nextcloud Hosting

PrestaShop Hosting

Ghost Hosting

MediaWiki Hosting

Java Hosting

Managed Hosting

Linux VPS Hosting

Dedicated Servers

WordPress Hosting

Custom VPS

Hosting Solutions

Affiliate Program

Contact Us

(888) ROSE-HOST

(888) 767-3467

(314) 275-0414

Email us

Connect

Facebook

Twitter

LinkedIn

© 2001-2024 Rose Web Services LLC.