

# Jenkins Installation Document

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## Introduction

Jenkins is an open source automation server intended to automate repetitive technical tasks involved in the continuous integration and delivery of software. Jenkins is Java-based and can be installed from Ubuntu packages or by downloading and running its Web application. Here, In this point , we will install Jenkins by adding its Debian package repository, then using that repository to install the package using `apt-get`.

## Prerequisites

**Operating system** : One Ubuntu 16.04 server configured with a non-root `sudo` user

RAM : 1GB

## Step 1 — Installing Jenkins

First, we'll add the repository key to the system.

- `wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo apt-key add -`

When the key is added, the system will return OK. Next, we'll append the Debian package repository address to the server's `sources.list`:

- `echo deb https://pkg.jenkins.io/debian-stable binary/ | sudo tee /etc/apt/sources.list.d/jenkins.list`

When both of these are in place, we'll run `update` so that `apt-get` will use the new repository:

- `sudo apt-get update`

Finally, we'll install Jenkins and its dependencies, including Java:

```
Sudo apt-get install openjdk-8-jdk
```

- `sudo apt-get install jenkins`

Now that Jenkins and its dependencies are in place, we'll start the Jenkins server.

## Step 2 — Starting Jenkins

Using `systemctl` we'll start Jenkins:

```
sudo systemctl start jenkins
```

Since `systemctl` doesn't display output, we'll use its `status` command to verify that it started successfully:

- `sudo systemctl status jenkins`
- 

If everything went well, the beginning of the output should show that the service is active and configured to start at boot:

Output

- `jenkins.service - LSB: Start Jenkins at boot time`  
`Loaded: loaded (/etc/init.d/jenkins; bad; vendor preset: enabled)`  
`Active: active (exited) since Thu 2017-04-20 16:51:13 UTC; 2min 7s ago`  
`Docs: man:systemd-sysv-generator(8)`

Now that Jenkins is running, we'll adjust our firewall rules so that we can reach Jenkins from a web browser to complete the initial set up.

## Step 3 — Opening the Firewall

By default, Jenkins runs on port 8080, so we'll open that port using `ufw`:

- `sudo ufw allow 8080`

We can see the new rules by checking UFW's status.

- `sudo ufw status`

We should see that traffic is allowed to port 8080 from anywhere:

Output

Status: active

To	Action	From
--	-----	----
OpenSSH	ALLOW	Anywhere
8080	ALLOW	Anywhere
OpenSSH (v6)	ALLOW	Anywhere (v6)
8080 (v6)	ALLOW	Anywhere (v6)

**Note:** If the firewall is inactive, the following commands will make sure that OpenSSH is allowed and then enable it.

- `sudo ufw allow OpenSSH`
- `sudo ufw enable`

Now that Jenkins is installed and the firewall allows us to access it, we can complete the initial setup.

Note :- If you are doing from AWS, please add in security wizard

## Step 4 — Setting up Jenkins

To set up our installation, we'll visit Jenkins on its default port, 8080, using the server domain name or IP address: `http://ip_address_or_domain_name:8080`

We should see "Unlock Jenkins" screen, which displays the location of the initial password

## Getting Started

# Unlock Jenkins

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

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

Please copy the password from either location and paste it below

Administrator password

In the terminal window, we'll use the `cat` command to display the password:

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

We'll copy the 32-character alphanumeric password from the terminal and paste it into the "Administrator password" field, then click "Continue". The next screen presents the option of installing suggested plugins or selecting specific plugins.

## Getting Started

# Customize Jenkins

Plugins extend Jenkins with additional features to support many

### Install suggested plugins

Install plugins the Jenkins community finds most useful.

### Select plugins to install

Select and install plugins most suitable for your ne

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We'll click the "Install suggested plugins" option, which will immediately begin the installation process:

## Getting Started

# Getting Started

✓ Folders Plugin	✓ Workspace Cleanup Plugin	✓ Ant Plugin	✓ Gradle Plugin
✓ Timestamper	✓ Workspace Cleanup Plugin	✓ Ant Plugin	✓ Gradle Plugin
🔄 Pipeline	🔄 GitHub Organization Folder Plugin	🔄 Pipeline: Stage View Plugin	🔄 Git plugin
🔄 Subversion Plug-in	🔄 SSH Slaves plugin	✓ Matrix Authorization Strategy Plugin	✓ PAM Authentication plugin
✓ LDAP Plugin	🔄 Email Extension Plugin	✓ Mailer Plugin	

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When the installation is complete, we'll be prompted to set up the first administrative user. It's possible to skip this step and continue as `admin` using the initial password we used above, but we'll take a moment to create the user.

VSS

## Getting Started

# Create First Admin User

Username:

Password:

Confirm password:

Full name:

E-mail address:

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Once the first admin user is in place, you should see a "Jenkins is ready!" confirmation screen.

VSS

## Getting Started

# Jenkins is ready!

Your Jenkins setup is complete.


[Start using Jenkins](#)

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Click "Start using Jenkins" to visit the main Jenkins dashboard:

VSS








# Jenkins


search


Jenkins ▶


 New Item

 People

 Build History

 Manage Jenkins

 My Views

 Credentials

## Welcome to Jenkins!

Please **create new jobs** to get started.

Build Queue

No builds in the queue.

Build Executor Status

1 Idle

2 Idle

Page generate

At this point, Jenkins has been successfully installed.