

# Lab 3.1: Install and Configure Jenkins

This section will guide you to:

Install and run Jenkins

This lab has 4 subsections:

- 3.2.1 Add a key to use Debian repository.
- 3.2.2 Make changes to `/etc/opt/sources.list`.
- 3.2.3 Update local package index.
- 3.2.4 Run Jenkins in browser.

Go to <https://pkg.jenkins.io/debian-stable/> to understand how to install Jenkins on a Ubuntu/Debian machine.

**Step 3.2.1 :** To use the Debian repository of Jenkins to automate installation and upgrade, first add the key to your system using the following command:

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

**Step 3.2.2 :** Then, add the following entry in your `/etc/apt/sources.list`:

```
sudo
vi /etc/apt/sources.list
```

Now add the following command:

```
deb
https://pkg.jenkins.io/debian-stable binary/
```

Save and exit using `:wq!`

**Step 3.2.3 :** Update your local package index.

```
sudo
```

apt-get update

Make sure you have jdk installed. If not, install it using the following command:

```
sudo
```

apt-get install openjdk-8-jdk

Then install Jenkins.

sudo apt-get install jenkins

**Step 3.2.4 :** Once Jenkins is installed, open a browser on your local machine and enter the

URL: x.x.x.x:8080

replacing x.x.x.x with the external IP address of your virtual machine.

You will need to enter the admin password.

To find the password, type the following command:

```
sudo
```

cat /var/lib/jenkins/secrets/initialAdminPassword

Use the string of numbers as password. Once you are logged in, you will be redirected to the page below:

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.

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Select **Install suggested plugins**. You will be redirected to the page below:

Getting Started

# Getting Started

✓ Folders	✓ OWASP Markup	Build Timeout	Credentials Binding	Folders
Timestampers	Workspace Cleanup	Ant	Gradle	Script Security
Pipeline	GitHub Branch Source	Pipeline: GitHub Groovy Libraries	Pipeline: Stage View	** Command Agent Launcher
Git	Subversion	SSH Slaves	Matrix Authorization Strategy	** Structs
PAM Authentication	LDAP	Email Extension	Mailer	** bouncycastle API
				** Pipeline: Step API
				** SCM API
				** Pipeline: API
				** JUnit
				OWASP Markup Formatter
				** Token Macro
				** - required dependency

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After installing recommended plugins, you can create “First Admin User” or continue as Admin by filling the required details as shown in the screenshot.

Getting Started

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## Create First Admin User

Username:

Password:

Confirm password:

Full name:

E-mail address:

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[Continue as admin](#)

[Save and Continue](#)

Once that is done, start using Jenkins.