

# INSTALACIÓN JENKINS

Jenkins es un servidor de automatización multiplataforma, es decir, puede utilizarse en diversos entornos o sistemas operativos.

Se puede descargar desde su página oficial en el siguiente enlace: [descargar Jenkins](#)

Como está basado en Java el requisito previo es tenerlo instalado en nuestra máquina. Jenkins recomienda las siguientes características de hardware para su instalación:

Minimum hardware requirements:

256 MB of RAM

1 GB of drive space (although 10 GB is a recommended minimum if running Jenkins as a Docker

Recommended hardware configuration for a small team:

1 GB+ of RAM

50 GB+ of drive space

Comprehensive hardware recommendations:

Hardware: see the [Hardware Recommendations page](#)

Software requirements:

Java: see the [Java Requirements page](#)

Web browser: see the [Web Browser Compatibility page](#)

A continuación vamos a indicar los pasos para la instalación en sistemas operativos basados en Red Hat/Fedora/CentOS y en Ubuntu/Debian.

## RED HAT/FEDORA/CENTOS

Primero empezaremos con Red Hat/Fedora/CentOS, ya que es mi elección para este proyecto. Mi instalación será realizada en una instancia AWS de Amazon con Fedora 29:

- Nos conectamos por *SSH* a nuestra máquina en Amazon desde el directorio `~/.ssh/`:  
`ssh -i jenkins-keys.pem fedora@18.209.188.35`

```

fedora@ip-172-31-92-65:~
[isx46410800@miguel .ssh]$ ssh -i jenkins-keys.pem fedora@18.209.188.35
[fedora@ip-172-31-92-65 ~]$ ll
total 0
[fedora@ip-172-31-92-65 ~]$ █

```

- Actualizar repositorios:  
sudo dnf update -y

- Instalar *Java*:  
sudo dnf install -y java

```

fedora@ip-172-31-92-65:~
[fedora@ip-172-31-92-65 ~]$ sudo dnf install -y java
Fedora Modular 29 - x86_64 - Updates          9.7 MB/s | 2.1 MB    00:00
Fedora 29 - x86_64 - Updates                 31 MB/s | 30 MB     00:00
Dependencies resolved.
=====
Package                                Architecture Version      Repository Size
=====
Installing:
java-11-openjdk                        x86_64      1:11.0.ea.28-2.fc29 fedora      193 k
Installing dependencies:
adwaita-cursor-theme                  noarch      3.30.1-1.fc29 updates    644 k
adwaita-icon-theme                    noarch      3.30.1-1.fc29 updates     11 M
alsa-lib                              x86_64      1.1.9-1.fc29 updates     402 k
cairo                                  x86_64      1.16.0-3.fc29 updates     676 k
cairo-gobject                         x86_64      1.16.0-3.fc29 updates      18 k
color-libs                            x86_64      1.4.4-1.fc29 updates     208 k
cups-libs                             x86_64      1:2.2.8-12.fc29 updates     323 k
fontconfig                             x86_64      2.13.1-9.fc29 updates     236 k
=====

```

- Agregar repositorios de *Jenkins*:  
sudo wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins.io/redhat/jenkins.repo  
sudo rpm --import http://pkg.jenkins.io/redhat/jenkins.io.key  
sudo rpm --import http://pkg.jenkins.io/redhat-stable/jenkins.io.key

```

fedora@ip-172-31-92-65:~
[fedora@ip-172-31-92-65 ~]$ sudo wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins.io/redhat/jenkins.repo
--2020-04-30 18:08:24-- http://pkg.jenkins.io/redhat/jenkins.repo
Resolving pkg.jenkins.io (pkg.jenkins.io)... 151.101.250.133, 2a04:4e42:3b::645
Connecting to pkg.jenkins.io (pkg.jenkins.io)|151.101.250.133|:80... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://pkg.jenkins.io/redhat/jenkins.repo [following]
--2020-04-30 18:08:24-- https://pkg.jenkins.io/redhat/jenkins.repo
Connecting to pkg.jenkins.io (pkg.jenkins.io)|151.101.250.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 71
Saving to: '/etc/yum.repos.d/jenkins.repo'

/etc/yum.repos.d/jenkins.r 100%[=====] 71 --.-KB/s in 0s

2020-04-30 18:08:24 (50.8 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [71/71]

[fedora@ip-172-31-92-65 ~]$ █

fedora@ip-172-31-92-65:~
[fedora@ip-172-31-92-65 ~]$ sudo rpm --import http://pkg.jenkins.io/redhat/jenkins.io.key
[fedora@ip-172-31-92-65 ~]$ █
[fedora@ip-172-31-92-65 ~]$ █

```

```
fedora@ip-172-31-92-65:~  
[fedora@ip-172-31-92-65 ~]$ sudo rpm --import http://pkg.jenkins.io/redhat-stable/jenkins.io.key  
[fedora@ip-172-31-92-65 ~]$
```

- Instalar Jenkins:  
`sudo dnf install -y jenkins`

```
isx46410800@miguel:~/Documents/HISX2/M14/M14_Jenkins  
fedora@ip-172-31-92-65:~ 105x38  
[fedora@ip-172-31-92-65 ~]$ sudo dnf install -y jenkins  
Jenkins 550 kB/s | 82 kB 00:00  
Last metadata expiration check: 0:00:01 ago on Thu 30 Apr 2020 06:10:18 PM UTC.  
Dependencies resolved.  
=====
```

Package	Architecture	Version	Repository	Size
Installing: jenkins	noarch	2.234-1.1	jenkins	63 M

```
=====
```

Transaction Summary

Install 1 Package

Total download size: 63 M  
Installed size: 63 M  
Downloading Packages:  
jenkins-2.234-1.1.noarch.rpm 15 MB/s | 63 MB 00:04

Total 15 MB/s | 63 MB 00:04

Running transaction check  
Transaction check succeeded.  
Running transaction test  
Transaction test succeeded.  
Running transaction  
Preparing : 1/1  
Running scriptlet: jenkins-2.234-1.1.noarch 1/1  
Installing : jenkins-2.234-1.1.noarch 1/1  
Running scriptlet: jenkins-2.234-1.1.noarch 1/1  
Verifying : jenkins-2.234-1.1.noarch 1/1

Installed:  
jenkins-2.234-1.1.noarch

Complete!  
[fedora@ip-172-31-92-65 ~]\$

- Encender el servicio *Jenkins*:  
`sudo systemctl start jenkins`  
`sudo systemctl status jenkins`

```
fedora@ip-172-31-92-65:~  
[fedora@ip-172-31-92-65 ~]$ sudo systemctl start jenkins  
[fedora@ip-172-31-92-65 ~]$ sudo systemctl status jenkins  
● jenkins.service - LSB: Jenkins Automation Server  
   Loaded: loaded (/etc/rc.d/init.d/jenkins; generated)  
   Active: active (running) since Thu 2020-04-30 18:18:41 UTC; 41s ago  
     Docs: man:systemd-sysv-generator(8)  
  Process: 20963 ExecStart=/etc/rc.d/init.d/jenkins start (code=exited, status=0/SUCCESS)  
    Tasks: 42 (limit: 1142)  
   Memory: 310.7M  
   CGroup: /system.slice/jenkins.service  
           └─20986 /etc/alternatives/java -Dcom.sun.akuma.Daemon=daemonized -Djava.awt.headless=true -DJENKINS_HOME=/var/lib/jenkins
```

```
Apr 30 18:18:40 ip-172-31-92-65.ec2.internal systemd[1]: Starting LSB: Jenkins Automation Server...  
Apr 30 18:18:41 ip-172-31-92-65.ec2.internal runuser[20970]: pam_unix(runuser:session): session opened for user jenkins by (uid=0)  
Apr 30 18:18:41 ip-172-31-92-65.ec2.internal runuser[20970]: pam_unix(runuser:session): session closed for user jenkins  
Apr 30 18:18:41 ip-172-31-92-65.ec2.internal jenkins[20963]: [300 blob data]  
Apr 30 18:18:41 ip-172-31-92-65.ec2.internal systemd[1]: Started LSB: Jenkins Automation Server.  
lines 1-15/15 (END)
```

## UBUNTU/DEBIAN

Para los sistemas Ubuntu/Debian seguiremos los siguientes pasos:

- Actualizar repositorios:  
`sudo apt update`
- Instalar *Java*:  
`sudo apt install openjdk-8-jdk`
- Agregar repositorios de *Jenkins*:  
`wget -q -O - https://pkg.jenkins.io/debian/jenkins.io.key | sudo apt-key  
add - sudo sh -c 'echo deb http://pkg.jenkins.io/debian-stable binary/ >  
/etc/apt/sources.list.d/jenkins.list'`
- Instalar **Jenkins**:  
`sudo apt update sudo apt install jenkins`
- Encender el servicio *Jenkins*:  
`sudo systemctl start jenkins sudo systemctl start jenkins`

## NOTAS A TENER EN CUENTA

- Al instalar se crea el usuario y grupo **Jenkins**
- Jenkins trabaja en el directorio `/var/lib/jenkins`
- Los archivos de log están en `/var/log/jenkins/jenkins.log`
- Los parámetros de configuración se encuentran en `/etc/sysconfig/jenkins`
- Por defecto, el puerto donde trabaja Jenkins es el 8080