



HOW TO INSTALL JFROG ARTIFACTORY ON UBUNTU 22.04

What is JFrog Artifactory?

Artifactory is a universal DevOps solution for hosting, managing, and distributing binaries and artifacts. Any type of software in binary form – such as application installers, container images, libraries, configuration files, etc. – can be curated, secured, stored, and delivered using Artifactory.

The name “Artifactory” reflects the fact that it can host any type of “artifact” needed in your software development “factory.” In software development, an artifact is any object produced during the software development and delivery process. Artifacts include the files used to install and run applications, as well as any complementary information necessary to configure or manage software.

Artifactory serves as the central hub for your DevOps processes. All artifacts, dependencies, packages, etc. ultimately get put into and pulled from Artifactory.

INSTALLATION

To launch an **Ubuntu instance** with a **t2.medium** instance type on AWS, follow these condensed steps:

1. **Login to AWS Management Console** and navigate to the **EC2 Dashboard**.
2. Click **“Launch Instance”**, then select an **Ubuntu Server AMI** from the list.



3. Choose **“t2.medium”** as the instance type and click “Next: Configure Instance Details”.
4. Configure instance details as needed, then click through **“Add Storage”**, **“Add Tags”**, and **“Configure Security Group”** with your desired settings or defaults.
5. Review your settings and click **“Launch”** to create your Ubuntu instance.

INSTALL JAVA

Connect to Your server using MobaXterm or Terminal

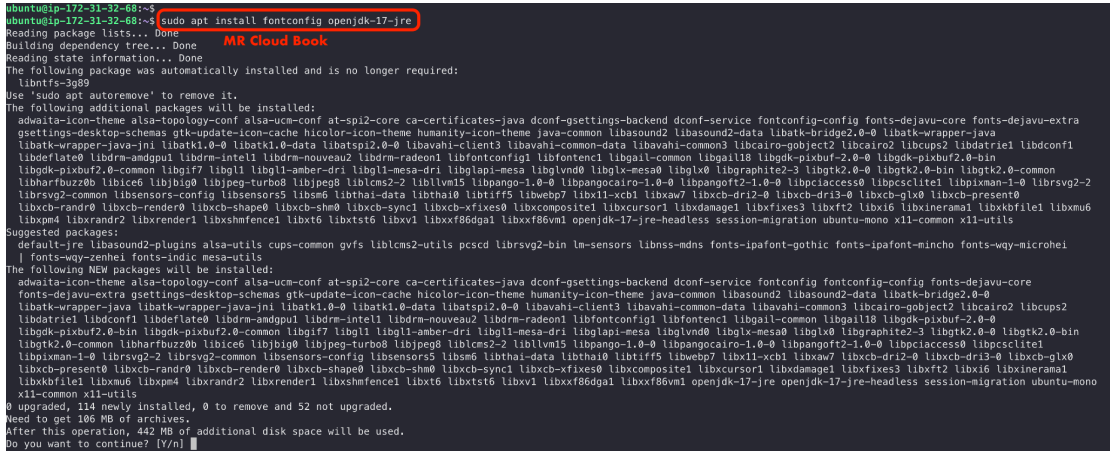
```
sudo apt-get update
```

```
ubuntu@ip-172-31-32-68:~$ sudo apt update
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1608 kB]
Get:5 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [303 kB]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [1826 kB]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [310 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1388 kB]
Get:10 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [243 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [1762 kB]
Get:12 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [299 kB]
Fetched 7967 kB in 5s (1619 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
52 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-32-68:~$
```

Install java on the server

```
sudo apt install fontconfig openjdk-17-jre -y
```

```
java --version
```



```
wget -qO - https://releases.jfrog.io/artifactory/api/gpg/key/public | sudo  
apt-key add -
```

```
DISTRO=$(lsb_release -cs)
```

```
echo "deb https://releases.jfrog.io/artifactory/artifactory-debs ${DISTRO}
main" | sudo tee -a /etc/apt/sources.list
```



Update package lists

```
sudo apt-get update
```

```
ubuntu@ip-172-31-32-68:~$  
ubuntu@ip-172-31-32-68:~$ DISTRO=$(lsb_release -cs)  
ubuntu@ip-172-31-32-68:~$  
ubuntu@ip-172-31-32-68:~$ echo "deb https://releases.jfrog.io/artifactory/artifactory-debs ${DISTRO} main" | sudo tee -a /etc/apt/sources.list  
deb https://releases.jfrog.io/artifactory/artifactory-debs jammy main  
ubuntu@ip-172-31-32-68:~$  
ubuntu@ip-172-31-32-68:~$ sudo apt-get update  
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease  
Hit:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease  
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease  
Hit:4 http://security.ubuntu.com/ubuntu jammy-security InRelease  
Get:5 https://releases.jfrog.io/artifactory/artifactory-debs jammy InRelease [2024 B]  
Get:6 https://releases.jfrog.io/artifactory/artifactory-debs jammy/main amd64 Packages [32.8 KB]  
Fetched 35.8 KB in 1s (25.3 KB/s)  
Reading package lists... Done  
W: https://releases.jfrog.io/artifactory/artifactory-debs/dists/jammy/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.  
ubuntu@ip-172-31-32-68:~$
```

Install JFrog Artifactory C++ CE

```
sudo apt-get install jfrog-artifactory-cpp-ce
```

```
ubuntu@ip-172-31-32-68:~$  
ubuntu@ip-172-31-32-68:~$ sudo apt-get install jfrog-artifactory-cpp-ce  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following package was automatically installed and is no longer required:  
  libntfs-3g99  
Use 'sudo apt autoremove' to remove it.  
The following additional packages will be installed:  
  net-tools  
The following NEW packages will be installed:  
  jfrog-artifactory-cpp-ce net-tools  
0 upgraded, 2 newly installed, 0 to remove and 52 not upgraded.  
Need to get 1413 MB of archives.  
After this operation, 2382 MB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 net-tools amd64 1.60+git20181103.0eebece-lubuntu5 [284 KB]  
Get:2 https://releases.jfrog.io/artifactory/artifactory-debs jammy/main amd64 jfrog-artifactory-cpp-ce amd64 7.77.9 [1413 MB]  
Fetched 1413 MB in 2min 56s (8813 KB/s)  
Selecting previously unselected package net-tools.  
(Reading database ... 65584 files and directories currently installed.)  
Preparing to unpack .../net-tools_1.60+git20181103.0eebece-lubuntu5_amd64.deb ...  
Unpacking net-tools (1.60+git20181103.0eebece-lubuntu5) ...  
Selecting previously unselected package jfrog-artifactory-cpp-ce.  
Preparing to unpack .../jfrog-artifactory-cpp-ce_7.77.9_amd64.deb ...  
dpkg-query: no packages found matching artifactory  
Checking if group artifactory exists...  
Group artifactory doesn't exist. Creating ...  
Checking if user artifactory exists...  
User artifactory doesn't exist. Creating ...  
Checking if artifactory data directory exists  
Removing tomcat work directory  
Unpacking jfrog-artifactory-cpp-ce (7.77.9) ...  
Setting up net-tools (1.60+git20181103.0eebece-lubuntu5) ...  
Setting up jfrog-artifactory-cpp-ce (7.77.9) ...  
Adding the artifactory service to auto-start... DONE  
  
***** SUCCESS *****  
The Installation of Artifactory has completed successfully.  
  
NOTE: It is highly recommended to use Artifactory with an external database (MySQL, Oracle, Microsoft SQL Server, PostgreSQL, MariaDB).  
For details about how to configure the database, refer to https://service.jfrog.org/installer/Configuring-the-Database  
  
Start Artifactory with:  
> systemctl start artifactory.service  
  
Check Artifactory status with:  
> systemctl status artifactory.service  
  
Installation directory was set to /opt/jfrog/artifactory  
You can find more information in the log directory /opt/jfrog/artifactory/var/log  
system configuration templates can be found under /opt/jfrog/artifactory/var/etc  
Copy any configuration you want to modify from the template to /opt/jfrog/artifactory/var/etc/system.yaml  
  
Triggering migration script, this will migrate if needed ...  
Processing triggers for man-db (2.10.2-1) ...  
Scanning processes...  
Scanning linux images...  
  
Running kernel seems to be up-to-date.  
  
No services need to be restarted.  
  
No containers need to be restarted.  
  
No user sessions are running outdated binaries.  
  
No VM guests are running outdated hypervisor (qemu) binaries on this host.  
ubuntu@ip-172-31-32-68:~$
```



Clear Explanation of above Script/ Complete script

```
#!/bin/bash
sudo apt update
# Fetch and add the JFrog public GPG key
wget -qO - https://releases.jfrog.io/artifactory/api/gpg/key/public | sudo
apt-key add -

# Determine your distribution

# Add JFrog Artifactory repository to sources.list
echo "deb https://releases.jfrog.io/artifactory/artifactory-debs ${DISTRO}
main" | sudo tee -a /etc/apt/sources.list

# Update package lists
sudo apt-get update

# Install JFrog Artifactory C++ CE
sudo apt-get install jfrog-artifactory-cpp-ce -y
```

Sure, let's break down the script and explain each command:

```
1. `wget -qO - https://releases.jfrog.io/artifactory/api/gpg/key/public |
sudo apt-key add -`
```

- `wget` is a free utility for non-interactive download of files from the Web. It supports HTTP, HTTPS, and FTP protocols.
- `-q` turns off wget's output, making the operation "quiet".
- `O -` directs wget to write the downloaded file to standard output.
- `https://releases.jfrog.io/artifactory/api/gpg/key/public` is the URL from which the JFrog GPG (GNU Privacy Guard) public key is downloaded. GPG keys are used to ensure the integrity and authenticity of downloaded packages.
- `|` is a pipe. It takes the output of the command on its left and uses it as the input for the command on its right.
- `sudo apt-key add -` adds the GPG key retrieved from the previous command to the list of trusted keys. This allows your system to verify the



integrity and authenticity of the JFrog packages.

2. ``DISTRO=$(lsb_release -cs)``

- This command assigns the output of ``lsb_release -cs`` to the variable ``DISTRO``.
- ``lsb_release`` is a utility that provides certain LSB (Linux Standard Base) and distribution-specific information.
- ``-cs`` option prints the codename of your operating system (e.g., xenial, bionic, focal).
- ``DISTRO`` now holds the codename of your Linux distribution, which will be used to specify the correct version of the repository for your system.

3. ``echo "deb https://releases.jfrog.io/artifactory/artifactory-debs ${DISTRO} main" | sudo tee -a /etc/apt/sources.list``

- ``echo`` is used to display a line of text/string that is passed as an argument.
- This command constructs a repository source line for JFrog Artifactory.
- ``${DISTRO}`` is where the distribution codename variable is expanded to its value.
- ``| sudo tee -a /etc/apt/sources.list`` appends the echoed line to ``/etc/apt/sources.list`` file. ``tee`` reads from standard input and writes to standard output and files. ``-a`` ensures it appends to the file without overwriting existing content. This command needs ``sudo`` because ``/etc/apt/sources.list`` is owned by root.

4. ``sudo apt-get update``

- This command updates the list of available packages and their versions, but it does not install or upgrade any packages. It's essential to run this after adding new repositories to ensure your package lists are up to date.

5. ``sudo apt-get install jfrog-artifactory-cpp-ce``

- Finally, this command installs the JFrog Artifactory C++ CE (Community Edition) package. ``apt-get install`` is used to install packages. ``jfrog-artifactory-cpp-ce`` is the name of the package to be installed.



Overall, this script sets up your system to install JFrog Artifactory for C++ by adding the JFrog repository to your system's software sources, ensuring the system recognizes it as a trusted source, and then proceeds to install the software.

Access in WebBrowser

1. Copy the public Ip of server and open port 8081 and 8082

```
<public-ip:8081>
```

```
Username : admin  
Password : password
```

WELCOME TO JFROG

* Username
admin

* Password
.....

☐ Remember me

Login

Click on Login



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Get Started

RESET ADMIN PASSWORD

Reset the admin password.
Once you reset your admin password, you will be able to proceed with onboarding.

Change Password

* New Password

Password Strength



* Retype Password

Password Must Include:

- ✓ At least 1 upper case letter
- ✓ At least 1 lower case letter
- ✓ At least 1 digits
- ✓ At least 8 characters long

Next → skip → skip →

