What is an artifact:

* The files that contain both the compiled code and the resources that are used to compile them are known as artifacts. they are readily deployable files.
* In java an artifact would be a .jar, .war, .ear file
* In NPM the artifact file would be a .tar.gz file
* In .NET the artifact file would be a .dll file

What is an artifact repository?

* An artifact repository is a repository which can store multiple different versions of artifacts. Each time the war file or tar.gz file is created it is stored in a server dedicated for the artifacts.

What is JFrog Artifactory?

* JFrog Artifactory is a tool used in Devops methodology for multiple purposes.
* one of its main purpose is to store artifacts (readily deployable code) that have been created in the code pipeline.
* Another one of its purpose is to act as a sort of buffer for downloading dependencies for build tools and languages.

JFrog Artifactory responsibilities:

* Helps in storing readily-deployable code.
* Helps in downloading and managing dependencies.

JFrog Artifactory installation on Linux:

Pre-requisites

1. Open Jdk
2. At least 2 GB of RAM

Install JFrog Artifactory using Docker:

1. Step 1: Install Docker Engine.

---- yum install docker -y

--- systemctl start docker

1. Step 2: Download JFrog Artifactory Docker image. ...

---- docker pull docker.bintray.io/jfrog/artifactory-oss:latest

1. Step 3: Create Data Directory. ...

----- sudo mkdir -p /jfrog/artifactory

---- sudo chown -R 1030 /jfrog/

1. Step 4: Start JFrog Artifactory container. ...

--- docker run --name artifactory -d -p 8081:8081 -p 8082:8082 \

-v /jfrog/artifactory:/var/opt/jfrog/artifactory \

docker.bintray.io/jfrog/artifactory-oss:latest

1. Step 5: Running JFrog Artifactory container with Systemd. ...

--- sudo vim /etc/systemd/system/artifactory.service

Add: [Unit]

Description=Setup Systemd script for Artifactory Container

After=network.target

[Service]

Restart=always

ExecStartPre=-/usr/bin/docker kill artifactory

ExecStartPre=-/usr/bin/docker rm artifactory

ExecStart=/usr/bin/docker run --name artifactory -p 8081:8081 -p 8082:8082 \

-v /jfrog/artifactory:/var/opt/jfrog/artifactory \

docker.bintray.io/jfrog/artifactory-oss:latest

ExecStop=-/usr/bin/docker kill artifactory

ExecStop=-/usr/bin/docker rm artifactory

[Install]

WantedBy=multi-user.target

Reload: systemctl daemon-reload

systemctl start artifactory

systemctl enable artifactory

systemctl status artifactory

1. Step 6: Access Artifactory Web Interface.

Configure Jenkins with jfrog:

Manage Jenkins—configure system ----

\* **serverid : any name**

**\*url :** [**http://localhost:8082**](http://localhost:8082)

**\* credentials : username and password**

Job – post build action--- deploy artifacts to artifact – give url and repository name.