NEXUS DEMO

Pre-requisite

- AWS Acccount.
- Create Redhat EC2 t2.medium Instance with 4GB RAM.
- Create Security Group and open Required ports. 8081 and 22,
- Attach Security Group to EC2 Instance.
- Install java openJDK 1.8+ for Nexus version 3.15

1. Creating Nexus User for Nexus Server Management:

Security Measure: Nexus service should not run as the root user for enhanced security.

Steps:

sudo hostnamectl set-hostname nexus → Sets hostname to 'nexus'.

sudo useradd nexus → Creates a new 'nexus' user.

sudo echo "nexus ALL=(ALL) NOPASSWD:ALL" | sudo tee /etc/sudoers.d/nexus → Grants 'nexus' user sudo access.

sudo su – nexus → Switches to the 'nexus' user profile.

2. Install Java as a pre-requisit for nexus and other softwares

cd /opt

sudo yum install wget git nano unzip -y

sudo yum install java-11-openjdk-devel java-1.8.0-openjdk-devel -y

3. Download nexus software and extract it (unzip).

sudo wget http://download.sonatype.com/nexus/3/nexus-3.15.2-01-unix.tar.gz

sudo tar -zxvf nexus-3.15.2-01-unix.tar.gz

sudo mv /opt/nexus-3.15.2-01 /opt/nexus

sudo rm -rf nexus-3.15.2-01-unix.tar.gz

4. Granting Nexus User Permissions for Service Management:

Adjusting Ownership and Permissions:

sudo chown -R nexus:nexus /opt/nexus: Changes owner and group to 'nexus' for the '/opt/nexus' directory.

sudo chown -R nexus:nexus /opt/sonatype-work: Alters ownership and group to 'nexus' for '/opt/sonatype-work'.

sudo chmod -R 775 /opt/nexus: Sets permissions to allow 'nexus' user to read, write, and execute for '/opt/nexus'.

sudo chmod -R 775 /opt/sonatype-work: Adjusts permissions to read, write, and execute for 'nexus' user in '/opt/sonatype-work'.

5. Updating Nexus Configuration to Run as Nexus User:

Edit Configuration File:

echo 'run_as_user="nexus" ' > /opt/nexus/bin/nexus.rc: Modifies the configuration in '/opt/nexus/bin/nexus.rc' to change the run_as_user to 'nexus'.

6. Configuring Nexus as a Service:

Create Service Link:

sudo ln -s /opt/nexus/bin/nexus /etc/init.d/nexus: Establishes a symbolic link for Nexus service.

7.Enabling and Starting Nexus Services:

sudo systemctl enable nexus: Enables the Nexus service.

sudo systemctl start nexus: Starts the Nexus service.

sudo systemctl status nexus: Checks the status of the Nexus service.

Completion of Nexus Installation:

echo "end of nexus installation": Indicates the completion of the Nexus installation process.

Maven - Nexus Integration

We create a Maven Hosted Repository to host our artifacts in the nexus server. We copy this url and keep as shown below to configure our maven server

1 - snapshot url ==

2 - release url ==

For maven, nexus integration, we

Add the maven artifactories we created above in the distributionMGT tag in pom.xml

vi /opt/nexus/etc/nexus-default.properties

Configure the nexus login credentials in settings.xml (server tag) in the conf directory

vi /conf/settings.xml

e.g.

```
<server>
    <id>nexus</id>
    <username>admin</username>
    <password>admin123</password>
  </server>
```

we run mvn package and mvn deploy to deploy this artifacts to the nexus server.