Sonartype Nexus Installaton on AWS

Requirements

- 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-requisite 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 artefacts in the nexus server. We copy this

url and keep as shown below to configure our maven server

➢ **snapshot url ==**
➢ **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 artefact to the nexus server.