Jenkins Installation on AWS EC2 (Amazon Linux 2)

Pre-requisites:

- An AWS EC2 instance running Amazon Linux 2.
- Security group configured to allow inbound TCP on port 8080.
- SSH key pair to connect to the instance.

Step-by-Step Installation Guide

Step 1: Connect to EC2 Instance

Use your terminal or Git Bash to SSH into the instance:

```
ssh -i "your-key.pem" ec2-user@<your-ec2-public-ip>
```

Step 2: Update the System

```
sudo yum update -y
```

Step 3: Install Java (Amazon Corretto 11)

```
sudo amazon-linux-extras enable corretto11

sudo yum install java-11-amazon-corretto -y
```

Verify Java installation:

```
java -version
```

Step 4: Add Jenkins Repository

```
sudo wget -O /etc/yum.repos.d/jenkins.repo \

https://pkg.jenkins.io/redhat-stable/jenkins.repo

sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key
```

Step 5: Install Jenkins

```
sudo yum install jenkins -y
```

Step 6: Start and Enable Jenkins

```
sudo systemctl start jenkins

sudo systemctl enable jenkins
```

Check status:

```
sudo systemctl status jenkins
```

Step 7: Configure Security Group (EC2 Dashboard)

- Make sure your EC2 instance's security group allows inbound traffic on port 8080:
- Go to EC2 Dashboard > Instances > Security > Security Groups
- Edit Inbound rules > Add Rule: `Custom TCP`, **Port:** `8080`, **Source:** `0.0.0.0/0`

Step 8: Get Initial Jenkins Admin Password

```
sudo cat /var/lib/jenkins/secrets/initialAdminPassword
```

Copy and save this password.

Step 9: Access Jenkins Web Interface

Open a browser and enter:

```
http://<your-ec2-public-ip>:8080
```

Paste the initial admin password when prompted.

Step 10: Finish Jenkins Setup

- Install suggested plugins.
- Create an admin user.
- Jenkins setup is complete and ready to use!