Jenkins Installation Guide for Ubuntu

Step 1: Update System Packages

This command updates the list of available packages and their versions, ensuring you get the latest updates.

```
sudo apt update
```

Step 2: Install Java

Jenkins requires Java to run. This command installs OpenJDK 17.

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

Step 3: Add Jenkins Repository

This command adds the official Jenkins repository to your system.

```
get -O /usr/share/keyrings/jenkins-keyring.asc https://pkg.jenkins.io/debian-stable/jenk
deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] https://pkg.jenkins.io/debian-st
```

Step 4: Update Package Lists Again

After adding a new repository, this command updates the package list again.

```
sudo apt update
```

Step 5: Install Jenkins

This command installs Jenkins from the added repository.

```
sudo apt install jenkins -y
```

Step 6: Start and Enable Jenkins Service

Starts Jenkins immediately and enables it to start on boot.

```
sudo systemctl start jenkins
sudo systemctl enable jenkins
```

Step 7: Check Jenkins Status

Checks whether Jenkins is running properly.

```
sudo systemctl status jenkins
```

Step 8: Allow Firewall Access

Allows incoming connections on port 8080, which Jenkins uses.

```
sudo ufw allow 8080
sudo ufw enable
sudo ufw status
```

Step 9: Retrieve Initial Admin Password

This command retrieves the initial admin password required for the first login.

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

Step 10: Access Jenkins Web Interface

Open your browser and go to the following URL to access Jenkins.

```
http://<your-server-ip>:8080
```