Assignment 2

Jenkins Installation on Linux or Ubuntu VM

Step 1: Update System Packages

Ensure that your system packages are up to date by running the following commands:

For Ubuntu:

sudo apt update

sudo apt upgrade

For CentOS/RHEL

sudo yum update

Step 2: Install Java

Jenkins requires Java to be installed on the system. Install Java Development Kit (JDK) using the package manager:

For Ubuntu**: sudo apt install openjdk-11-jdkr**

CentOS/RHEL: **sudo yum install java-11-openjdk-devel**

```
bosko@pnap:~$ sudo apt install openjdk-11-jdk -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  ca-certificates-java fonts-dejavu-extra java-common libatk-wrapper-java
  libatk-wrapper-java-jni libice-dev libpthread-stubs0-dev libsm-dev
  libx11-dev libxau-dev libxcb1-dev libxdmcp-dev libxt-dev
  openjdk-11-jdk-headless openjdk-11-jre openjdk-11-jre-headless x11proto-dev
  xorg-sgml-doctools xtrans-dev
Suggested packages:
  default-jre libice-doc libsm-doc libx11-doc libxcb-doc libxt-doc
  openjdk-11-demo openjdk-11-source visualvm fonts-ipafont-gothic
  fonts-ipafont-mincho fonts-wqy-microhei | fonts-wqy-zenhei
The following NEW packages will be installed:
```

Step 3: Install Jenkins Add the Jenkins repository key to your system and then install Jenkins:

For Ubuntu:

wget -q -O - https://pkg.jenkins.io/debian/jenkins.io.key | sudo apt-key add -

sudo sh -c 'echo deb http://pkg.jenkins.io/debian-stable binary/ > /etc/apt/sources.list.d/jenkins.list'

sudo apt update

sudo apt install Jenkins

For CentOS/RHEL:

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.key

sudo yum update

sudo yum install Jenkins

```
bosko@pnap:~$ sudo apt install jenkins -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  net-tools
The following NEW packages will be installed:
  jenkins net-tools
0 upgraded, 2 newly installed, 0 to remove and 12 not upgraded.
Need to get 90.9 MB of archives.
After this operation, 94.4 MB of additional disk space will be used.
Get:2 http://us.archive.ubuntu.com/ubuntu jammy/main amd64 net-tools amd64 1.60+
git20181103.0eebece-1ubuntu5 [204 kB]
Get:1 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.361.2 [90.7 MB]
Fetched 90.9 MB in 6s (14.5 MB/s)
Selecting previously unselected package net-tools.
(Reading database ... 182222 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20181103.0eebece-1ubuntu5_amd64.deb ..
```

Step 4: Start Jenkins

After the installation is complete, start Jenkins and enable it to start on system boot:

For Ubuntu:

sudo systemctl start jenkins

sudo systemctl enable Jenkins

For CentOS/RHEL:

sudo systemctl start jenkins

sudo systemctl enable Jenkins
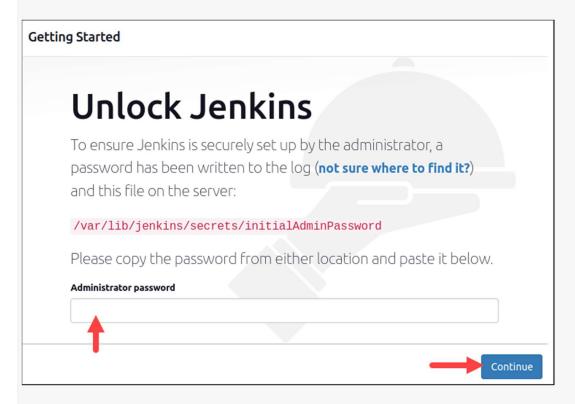
Step 5: Access Jenkins Web Interface

Jenkins runs on port 8080 by default. Open your web browser and navigate to http://localhost:8080/

You will be prompted to unlock Jenkins using the initial admin password.
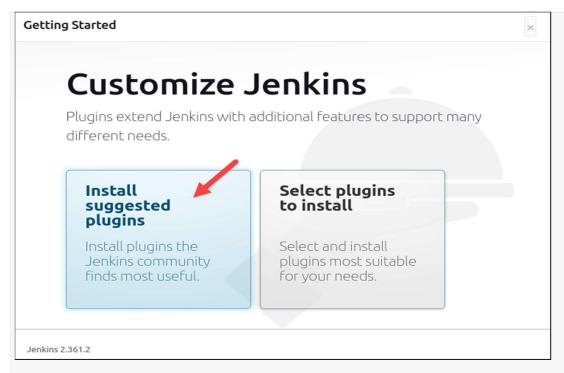
To obtain the initial admin password, use the following command:
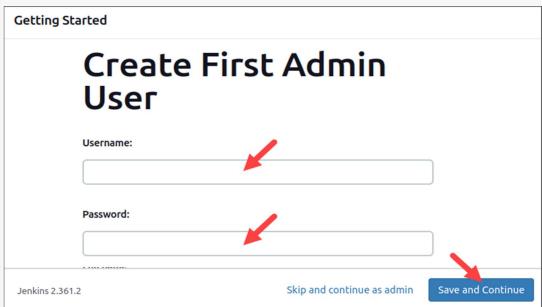
sudo cat /var/lib/jenkins/secrets/initialAdminPassword

Follow the on-screen instructions to set up your Jenkins instance.


```
bosko@pnap:~$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
c300dc1e842e40b89663c8a6b59fc19e
```

Customize Jenkins

Plugins extend Jenkins with additional features to support many different needs.

Install suggested plugins

Install plugins the Jenkins community finds most useful.

Select plugins to install

Select and install plugins most suitable for your needs.

Jenkins 2.361.2

Create First Admin User

Username:

Password:

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Skip and continue as admin

Save and Continue

Getting Started

Instance Configuration

Jenkins URL: http://localhost:8080/

The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the BUILD_URL environment variable provided to build steps. The proposed default value shown is **not saved yet** and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.

Jenkins 2.361.2   Not now   Save and Finish

Getting Started

Jenkins is ready!

Your Jenkins setup is complete.

Start using Jenkins

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