Module 02 - Getting Started with Jenkins

Workshop DevOps

Module Summary

Installing Jenkins

What is Jenkins ?

Jenkins is an open source automation server

Jenkins is one of the most popular Continuous Integration (CI) server

Jenkins is written in Java and runs on any operating system

https://jenkins.io

What is Jenkins used for ?

Run tests and builds

Trigger jobs automatically

Continuous Integration (CI)

Continuous Delivery (CD) and Continuous Deployment

Installing Jenkins

https://jenkins.io/download/

1 GB of RAM

10 GB of disk space

Java 8 (JRE or JDK)

Linux, MacOS, Docker or Windows

Installing Jenkins on Linux - Prerequisites - Java 8

Add PPA repo

```
sudo add-apt-repository ppa:openjdk-r/ppa
```

Install OpenJDK

```
sudo apt-get update
sudo apt-get install openjdk-8-jdk
```

Switch to Java 8

```
sudo update-alternatives --config java
```

Check Java installation

```
java -version
```

Install Jenkins on RedHat/CentOS/RPM

Add yum repo and install Jenkins

```
sudo wget -O /etc/yum.repos.d/jenkins.repo
→ http://pkg.jenkins-ci.org/redhat-stable/jenkins.repo
sudo rpm --import
→ http://pkg.jenkins-ci.org/redhat-stable/jenkins-
ci.org.key
sudo yum install jenkins
```

Start Jenkins at boot time

```
sudo systemctl start jenkins.service
sudo systemctl enable jenkins.service
```

Install Jenkins on Ubuntu

Add PPA repo for Jenkins stable LTS

```
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-get update
```

Install Jenkins

```
sudo apt-get install jenkins
```

Start Jenkins at boot time

```
sudo systemctl start jenkins.service
sudo systemctl enable jenkins.service
```

Installation options on MacOS

Prerequisites - Java 8

Install Jenkins using brew

```
brew install jenkins-lts
```

Default installation via OS X stable installer

- Download the OS X stable installer of the latest Long Term Support (LTS) from https://jenkins.io/download/thank-you-downloading-osx-installer-stable
- Open the installer and follow the instructions on screen

Install Jenkins with Docker

Pull official Docker image for Jenkins LTS

```
docker pull jenkins/jenkins:lts
```

Start Docker container

```
docker run -p 8080 :8080 -p 50000 :50000 -v jenkins_home:/var/jenkins
→ jenkins/jenkins:lts
```

Start Docker container in detached mode

```
docker run -p 8080 :8080 -p 50000 :50000 -v jenkins_home:/var/jenkins
→ -d jenkins/jenkins:lts
```

Installation options on Windows

Windows Subsystem for Linux

https://docs.microsoft.com/en-gb/windows/wsl/about

Docker

Default installation

- ~~Prerequisites - Java 8 (included)~~
- Download the zip file of the latest Long Term Support (LTS) from https://jenkins.io/download/thank-you-downloading-windows-installer-stable/
- Open the installer and follow the instructions on screen

Unlock Jenkins

Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log (not sure where to find it?) and this file on the server:

`C:\Program Files (x86)\Jenkins\secrets\initialAdminPassword`

Please copy the password from either location and paste it below.

Administrator password

[   ]

Continue

Getting Started – Customize Jenkins

Getting Started - Create First Admin User

Getting Started

Create First Admin User

Username:	
Password:	
Confirm password:	
Full name:	
E-mail address:	

Jenkins 2.190.3

Continue as admin   **Save and Continue**

Labs

02 - Getting Started with Jenkins