Recommended PC configuration	
Windows: Windows 10 or Higher Minimum 8 GB RAM Available 40 GB Hard Disk Space	**Mac**: Latest Mac OS Minimum 8 GB RAM Available 40 GB Hard Disk Space

1. Download and install Mac/Windows versions of the following software:

   VirtualBox (The software that creates virtual machines)
   Vagrant (The software that deploys virtual machines into VirtualBox)

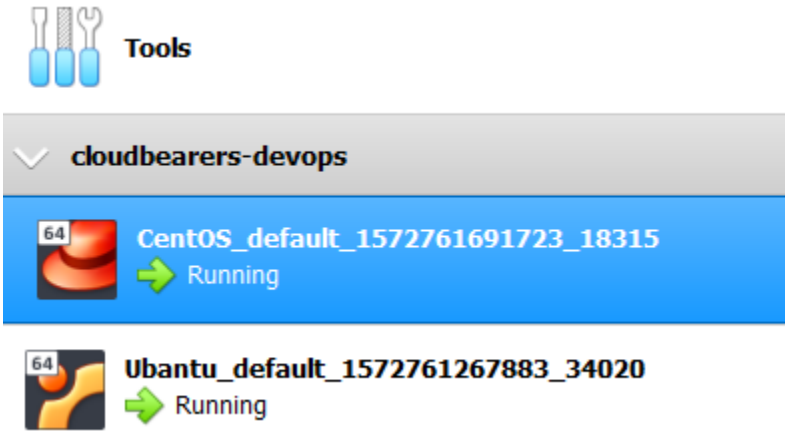
2. Setup Ubuntu Guest machines (Virtual machines) using Vagrant

   - Create a folder DevOps/vagrant/ubuntu under preferred drive in your Mac/Windows PC
   - Create a 'Vagranfile' file under ubuntu folder, past the sample vagrant file content from github links
     https://github.com/prkatta/dotraining/tree/master/installs/varant-vms/ubuntu/Vagrantfile

   - Open command prompts, cd to "DevOps\Vagrant\Ubuntu"
   - (for MAC only) Go to VM folder where you created Vagrantfile and run "**vagrant init hashicorp/bionic64**"

     ```
     C:\DevOps\Vagrant\Ubuntu>vagrant init hashicorp/bionic64
     A `Vagrantfile` has been placed in this directory. You are now
     ready to `vagrant up` your first virtual environment! Please read
     the comments in the Vagrantfile as well as documentation on
     `vagrantup.com` for more information on using Vagrant.
     ```

   - (For MAC and Windows) Now from the same location, run "**vagrant up --provision**" for Ubuntu
   - Let it complete the ubuntu machines up and running



Login for Vagrant: vagrant / vagrant

3. Now double click Ubuntu from Virtual Box and login to the Ubuntu with vagrant/vagrant

Ubuntu
GIT sudo apt-get install git -y
JDK sudo apt-get install openjdk-8-jdk -y sudo apt-get install openjdk-11-jdk -y
Ngnix sudo apt-get install nginx -y
Tomcat sudo apt-get install tomcat -y
Maven & Gradle sudo apt-get install maven -y sudo apt-get install gradle -y
My SQL sudo apt-get install mysql-server -y
Postgress https://tecadmin.net/install-postgresql-server-on-ubuntu/ sudo apt-get install wget ca-certificates wget --quiet -O - https://www.postgresql.org/media/keys/ACCC4CF8.asc | sudo apt-key add - sudo sh -c 'echo "deb http://apt.postgresql.org/pub/repos/apt/ `lsb_release -cs`-pgdg main" >> /etc/apt/sources.list.d/pgdg.list' sudo apt-get update sudo apt-get install postgresql postgresql-contrib
NodeJS & NPM sudo apt-get install nodejs -y sudo apt-get install npm -y
Docker sudo apt-get install docker -y
Groovy sudo apt-get install groovy -y
Python **Python 2.7.16** https://tecadmin.net/install-python-2-7-on-ubuntu-and-linuxmint/ sudo apt-get update sudo apt-get install build-essential checkinstall sudo apt-get install libreadline-gplv2-dev libncursesw5-dev libssl-dev libsqlite3-dev tk-dev libgdbm-dev libc6-dev libbz2-dev cd /usr/src

sudo wget https://www.python.org/ftp/python/2.7.16/Python-2.7.16.tgz
cd Python-2.7.16
sudo tar xzf Python-2.7.16.tgz
cd Python-2.7.16
sudo ./configure --enable-optimizations
sudo make altinstall
python2.7 -V

Python 3.7:
wget https://www.python.org/ftp/python/3.7.1/Python-3.7.1.tgz
tar -xvf Python-3.7.1.tgz
sudo apt-get install gcc
sudo apt-get install libffi-dev
cd Python-3.7.1
./configure --enable-optimizations
sudo make
sudo make install
python3.7 -V
sudo apt-get upgrade python3

Jenkins 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
sudo apt-get install jenkins

Grafana
sudo apt-get install -y gnupg2 curl
curl https://packages.grafana.com/gpg.key | sudo apt-key add -
sudo add-apt-repository "deb https://packages.grafana.com/oss/deb stable main"
sudo apt-get update
sudo apt-get -y install grafana
sudo systemctl start grafana-server
sudo systemctl status grafana-server

Ansible
sudo apt-add-repository ppa:ansible/ansible
sudo apt-get update
sudo apt-get install ansible -y

JQuery
sudo apt-get install jq

CheckMK
sudo apt-get install checkmk

ELK
https://www.digitalocean.com/community/tutorials/how-to-install-elasticsearch-logstash-and-kibana-elastic-stack-on-ubuntu-18-04

How to switch between JAVAs
sudo alternatives --config java
set java 11

Puppet Environment:
Foreman: https://www.theforeman.org/manuals/1.23/index.html#2.1Installation

Ansible:
Ansible Environment: https://www.theforeman.org/manuals/1.23/index.html#2.1Installation

Jq : https://stedolan.github.io/jq/

Reference Links:

Git- > https://www.digitalocean.com/community/tutorials/how-to-install-git-on-centos-7
Maven-> https://www.tecmint.com/install-apache-maven-on-centos-7/
Mysql -> https://www.digitalocean.com/community/tutorials/how-to-install-mysql-on-centos-7
Tomcat -> https://www.digitalocean.com/community/tutorials/how-to-install-apache-tomcat-7-on-centos-7-via-yum

Python -> https://www.digitalocean.com/community/tutorials/how-to-set-up-python-2-7-6-and-3-3-3-on-centos-6-4

Docker-> https://www.digitalocean.com/community/tutorials/how-to-install-and-use-docker-on-centos-7
Postgres -> https://www.digitalocean.com/community/tutorials/how-to-install-and-use-postgresql-on-centos-7
ELK- https://www.digitalocean.com/community/tutorials/how-to-install-elasticsearch-logstash-and-kibana-elastic-stack-on-centos-7

CheckMK: https://www.fosslinux.com/8424/install-and-configure-check_mk-server-on-centos-7.htm

Linux Sheet Cheat : https://www.linuxtrainingacademy.com/linux-commands-cheat-sheet/#12_8211_SSH_LOGINS

IDE:

Intellij: https://www.jetbrains.com/idea/download/#section=windows
PyCharm: https://www.jetbrains.com/pycharm/
Atom: https://atom.io

Java Build Tools

- Maven: https://maven.apache.org/guides/getting-started/maven-in-five-minutes.html
- Gradle: https://gradle.org/install/

Example projects:
Jenkins: https://github.com/jenkinsci/jenkins
SonarQube: https://github.com/SonarSource/sonarqube
Spring pet-clinic: https://github.com/spring-petclinic/spring-framework-petclinic
Misc samples : https://github.com/jfrog/project-examples/tree/master/python-example

Sample Programs for All languages

- Python: https://github.com/jfrog/project-examples/tree/master/python-example