**Run Ansible Playbook with Docker**

Flowchart of scenario –

Ansible Playbook

Install jdk+tomcat+deploy

one sample war Dockerfile

Base image Ubuntu

Call Ansible playbook

Build image

Sample deployed app+tomcat

+Ubuntu as base image

1. **Install java and tomcat with Ansible playbook in Linux system**

* First need to install Java and set the java path.

To install java need to follow the steps given below–

1. Download the jdk zip file
2. Extract it to the desired location

Eg, tar xvzf jdk-8u20-linux-i586.tar.gz

* To install tomcat download the zip file of tomcat
* Below Ansible playbook can be used to install tomcat.

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- hosts: all

tasks:

- shell: echo JAVA\_HOME is $JAVA\_HOME

environment:

JAVA\_HOME: /usr/local/java/jdk1.8.0\_111

- name: Extract archive of tomcat

command: /bin/tar xvf /home/daksha/ansible\_demo/apache-tomcat- 7.0.61.tar.gz home/daksha/apache-tomcat-7.0.61

- name: Symlink install directory

file: src=/home/daksha/ansible\_demo/apache-tomcat-7.0.61 path=/usr/share/tomcat state=link

- name: Configure Tomcat server

template: src=/home/daksha/ansible\_demo/apache-tomcat-7.0.61/conf/server.xml dest=/usr/share/tomcat/conf/

notify: restart tomcat

- name: Configure Tomcat users

template: src=/home/daksha/ansible\_demo/apache-tomcat-7.0.61/conf/tomcat-users.xml dest=/usr/share/tomcat/conf/

notify: restart tomcat

- name: Install Tomcat init script

copy: src=/home/daksha/ansible\_demo/apache-tomcat-7.0.61/bin/setclasspath.sh dest=/etc/init.d/tomcat mode=0755

- name: deploy war file

copy: src=/home/daksha/ansible\_demo/benefits.war dest=/usr/share/tomcat/webapps/

- name: Start Tomcat

command: /usr/share/tomcat/bin/startup.sh

* To deploy sample web application to tomcat just copy the war file to webapps folder of tomcat
* Running this playbook -: ansible-playbook –i host –c local tomcat.yml

Browse the port and check whether tomcat is up.

### **To run the Ansible playbook using Dockerfile**

FROM 10.242.138.121:5000/library/ubuntu:14.04 (loads the Ubuntu image as abse image from internal repo)

# Add ansible configuration

RUN apt-get update && \

apt-get install -y python python-dev python-pip && \

RUN pip install ansible

#Add ansible configuration

ADD tomcat.yml /etc/ansible/tomcat.yml

ADD host /etc/ansible/hosts

WORKDIR /etc/ansible

#Run palybook

RUN ansible-playbook etc/ansible/tomcat.yml -c local

EXPOSE 8080

ENTRYPOINT ["ansible-playbook"]

* Links for reference-
* To install java in linux system

<http://www.wikihow.com/Install-Oracle-Java-on-Ubuntu-Linux>

* To Download the Jdk/Jre <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

### To run the ansible playbook using Dockerfile

<http://stackoverflow.com/questions/24738264/how-to-test-ansible-playbook-using-docker>

<http://everythingshouldbevirtual.com/docker-building-containers-using-ansible>

<http://blog.maestrano.com/baking-your-docker-images-with-ansible/>