Installing OpenShift Enterprise on a VirtualBox for demos

Gabriel Bechara

Principal Solution Architect @ Red Hat

Prerequisites

- Virtual Box (tested on Version 5.0.20 r106931)
- Vagrant (tested on 1.8.1)
- a valid RHEL7 and OpenShift Entreprise Subscription
- a Vagrant Box with a valid RHEL7 & OpenShift Entreprise Subscription
 - Create a VirtualBox with RHEL7 "Server"
 - Add to this VirtualBox your valid Subs
 - Convert this Box into a Vagrant Base Box located on your local disk Instruction are here https://www.vagrantup.com/docs/boxes/base.html name this base box rhel72-server-base.box (or change the name in the Vagrantfile) do not share this box: it contains your subscriptions

Usage

- Get the souce code
 - > git clone https://github.com/gbechara/osedevops.git
- Launch
 - > Change the passwords in the file Vagrantfile to match the root password of your box

This password is needed to copy the generated ssh key to all OpenShift nodes

- > cd osedevops
- > vagrant plugin install vagrant-cachier // optional, this might generate an issue
- > vagrant up
- configure your host to add a dnsserver

on linux add in /etc/resolv.conf search example.com 10.100.192.201

on osx create 2 files named 'example.com' and 'router.default.svc.cluster.local' in /etc/resolver add to those files nameserver 10.100.192.201

• The openshift console is here

https://ose-master.example.com:8443/console/

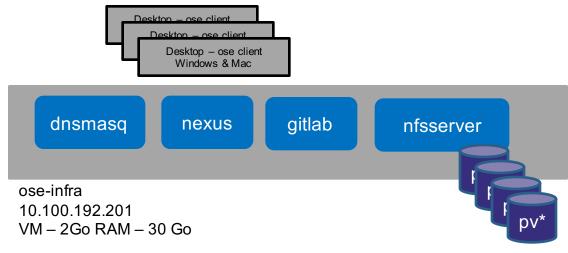
Target architecture

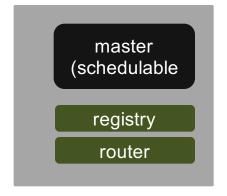
DNS entry for each VM

ose-master.example.com ose-infra.example.com ose-node1.example.com

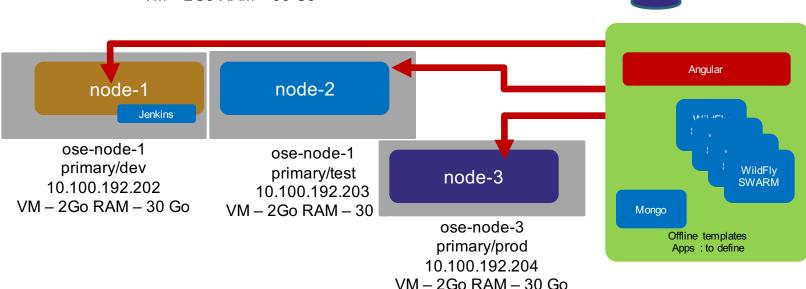
Wildcards

*.router.default.svc.cluster.local





ose-master primary/master 10.100.192.200 VM – 4Go RAM – 30 Go



Limitations/Issues/Workaround

- Works only when connected to internet
 - OOTB Templates use github and maven repos

Sometimes (not sure when & not related to host script)

"For an unknown reason "The SSH command responded with a non-zero exit status. Vagrant assumes that this means the command failed. The output for this command should be in the log above. Please read the output to determine what went wrong."

> vagrant plugin uninstall vagrant-cachier

Roadmap

- ✓ Add NFS for persistent Volumes
- ✓ Add a git server
- ✓ Add a nexus
- Add templates for offline demos using the git server and the nexus
- Add samples
 - Deploying WildFly SWARM microservices on OpenShift
 - Covering the entire DevOps lifecycle
 - Other ideas ?
 - ...