Install k8s cluster via kubespray

# Refer

<http://wiselyman.iteye.com/blog/2382375>

# Layout

使用3个vm 作为baremetal server

# Requirements

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\* \*\*Ansible v2.3 (or newer) and python-netaddr is installed on the machine

that will run Ansible commands\*\*

\* \*\*Jinja 2.9 (or newer) is required to run the Ansible Playbooks\*\*

\* The target servers must have \*\*access to the Internet\*\* in order to pull docker images.

\* The target servers are configured to allow \*\*IPv4 forwarding\*\*.

\* \*\*Your ssh key must be copied\*\* to all the servers part of your inventory.

\* The \*\*firewalls are not managed\*\*, you'll need to implement your own rules the way you used to.

in order to avoid any issue during deployment you should disable your firewall.

# Preparation

[root@server120 kubespray]# cat inventory/inventory.cfg

[all]

k8s0 ansible\_host=192.168.122.24 ansible\_user=root ip=192.168.122.24

k8s1 ansible\_host=192.168.122.25 ansible\_user=root ip=192.168.122.25

k8s2 ansible\_host=192.168.122.26 ansible\_user=root ip=192.168.122.26

[kube-master]

k8s0

k8s1

[kube-node]

k8s0

k8s1

k8s2

[etcd]

k8s0

k8s1

k8s2

[k8s-cluster:children]

kube-node

kube-master

# Deploy

[root@server120 kubespray]# cat run.sh

#!/usr/bin/env bash

ansible-playbook -u centos -b -i inventory/inventory.cfg cluster.yml

# Verify

[root@k8s0 ~]# kubectl get node

NAME STATUS AGE VERSION

k8s0 Ready 7m v1.6.4+coreos.0

k8s1 Ready 7m v1.6.4+coreos.0

k8s2 Ready 7m v1.6.4+coreos.0

[root@k8s0 ~]#

[root@k8s0 ~]#

[root@k8s0 ~]# kubectl get pod --all-namespaces

NAMESPACE NAME READY STATUS RESTARTS AGE

kube-system kube-apiserver-k8s0 1/1 Running 0 6m

kube-system kube-apiserver-k8s1 1/1 Running 0 7m

kube-system kube-controller-manager-k8s0 1/1 Running 0 7m

kube-system kube-controller-manager-k8s1 1/1 Running 0 7m

kube-system kube-dns-3841192733-t8v37 3/3 Running 0 7m

kube-system kube-dns-3841192733-xr59s 3/3 Running 0 7m

kube-system kube-proxy-k8s0 1/1 Running 0 7m

kube-system kube-proxy-k8s1 1/1 Running 0 7m

kube-system kube-proxy-k8s2 1/1 Running 0 7m

kube-system kube-scheduler-k8s0 1/1 Running 0 7m

kube-system kube-scheduler-k8s1 1/1 Running 0 7m

kube-system kubedns-autoscaler-1833630871-z30fc 1/1 Running 0 7m

kube-system nginx-proxy-k8s2 1/1 Running 0 6m

# Install Dashboard

<http://www.wisely.top/2017/07/04/kubespray-kubernetes-dashboard/>

curl [https://raw.githubusercontent.com/kubernetes/dashboard/master/src/deploy/kubernetes-dashboard.yaml -o kubernetes-dashboard.yaml](https://raw.githubusercontent.com/kubernetes/dashboard/master/src/deploy/kubernetes-dashboard.yaml%20-o%20kubernetes-dashboard.yaml)

 执行:kubectl create -f kubernetes-dashboard.yaml

 查看执行结果

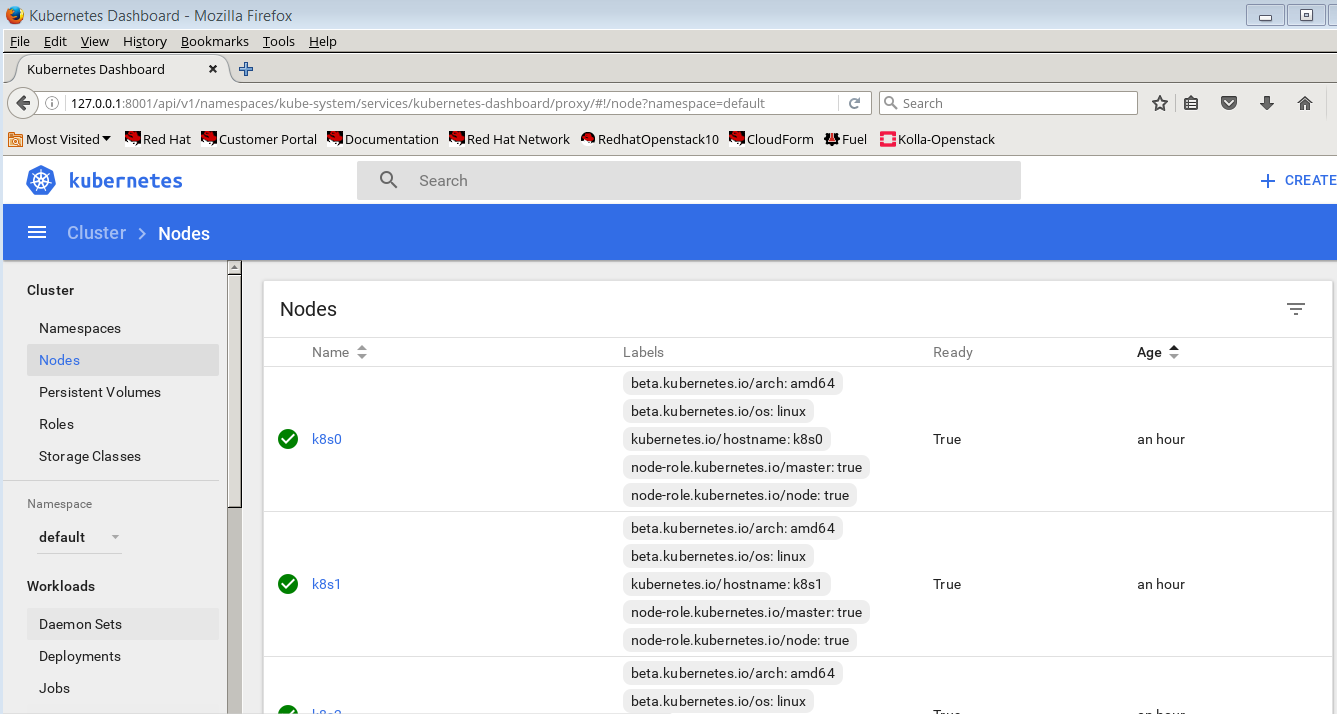
wangyunfeideMBP:kubespray wangyunfei$ kubectl get pod

NAME READY STATUS RESTARTS

查看页面，执行kubectl proxy，



访问http://127.0.0.1:8001/ui



# Adding nodes

You may want to add worker nodes to your existing cluster. This can be done by re-running the cluster.yml playbook, or you can target the bare minimum needed to get kubelet installed on the worker and talking to your masters. This is especially helpful when doing something like autoscaling your clusters.

* Add the new worker node to your inventory under kube-node (or utilize a [dynamic inventory](https://docs.ansible.com/ansible/intro_dynamic_inventory.html)).
* Run the ansible-playbook command, substituting scale.yml for cluster.yml:

ansible-playbook -i my\_inventory/inventory.cfg scale.yml -b -v \

--private-key=~/.ssh/private\_key