

그림으로 배우는 쿠버네티스 (Kubernetes)

조 훈 (Hoon Jo)

- CCIE DC, CKA&D, VCIX-NV6, RHCE, GCPx4

 <https://github.com/SysNet4Admin>

 <https://app.vagrantup.com/SysNet4Admin>



kubernetes

쿠버네티스 환경 구성하기



환경_구성(k8s_env_build.sh) - 줄번호: 1~21



```
1  #!/usr/bin/env bash
2
3  # vim configuration
4  echo 'alias vi=vim' >> /etc/profile
5
6  # swapoff -a to disable swapping
7  swapoff -a
8
9  # sed to comment the swap partition in /etc/fstab
10 sed -i.bak -r 's/(.+ swap .+)/#\1/' /etc/fstab
11
12 # kubernetes repo
13 gg_pkg="packages.cloud.google.com/yum/doc" # Due to shorten addr for key
14 cat <<EOF > /etc/yum.repos.d/kubernetes.repo
15 [kubernetes]
16 name=Kubernetes
17 baseurl=https://packages.cloud.google.com/yum/repos/kubernetes-el7-x86_64
18 enabled=1
19 gpgcheck=0
20 repo_gpgcheck=0
21 gpgkey=https://${gg_pkg}/yum-key.gpg https://${gg_pkg}/rpm-package-key.gpg
22 EOF
```

환경_구성(k8s_env_build.sh) - 줄번호: 23~46



```
23 # add docker-ce repo
24 yum install yum-utils -y
25 yum-config-manager --add-repo https://download.docker.com/linux/centos/docker-ce.repo
26
```

```
27 # Set SELinux in permissive mode (effectively disabling it)
28 setenforce 0
29 sed -i 's/^SELINUX=enforcing$/SELINUX=permissive/' /etc/selinux/config
30
```

```
31 # RHEL/CentOS 7 have reported traffic issues being routed incorrectly due to iptables bypassed
32 cat <<EOF > /etc/sysctl.d/k8s.conf
33 net.bridge.bridge-nf-call-ip6tables = 1
34 net.bridge.bridge-nf-call-iptables = 1
35 EOF
36 modprobe br_netfilter
37
```

```
38 # local small dns & vagrant cannot parse and delivery shell code.
39 echo "192.168.1.10 m-k8s" >> /etc/hosts
40 for (( i=1; i<=$1; i++ )); do echo "192.168.1.10$i w$i-k8s" >> /etc/hosts; done
41
```

```
42 # config DNS
43 cat <<EOF > /etc/resolv.conf
44 nameserver 1.1.1.1 #cloudflare DNS
45 nameserver 8.8.8.8 #Google DNS
46 EOF
```

```
1 # -*- mode: ruby -*-
2 # vi: set ft=ruby :
3
4 ## configuration variables ##
5 # max number of worker nodes
6 N = 3
7 # each of components to install
8 k8s_V = '1.20.2' # Kubernetes
9 docker_V = '19.03.14-3.el7' # Docker
10 ctrd_V = '1.3.9-3.1.el7' # Containerd
11 ## /configuration variables ##
```

```
cfg.vm.provision "shell", path: "k8s_env_build.sh", args: N
cfg.vm.provision "shell", path: "k8s_pkg_cfg.sh", args: [ k8s_V, docker_V, ctrd_V ]
#cfg.vm.provision "shell", path: "master_node.sh"
cfg.vm.provision "shell", path: "k_cfg_n_git_clone.sh" # add kubectl config & git clone source
```

다음 강좌에는...



1. 쿠버네티스_관련_패키지_설치(k8s_pkg_cfg.sh)
2. 실습 편의성 높이기(k_cfg_n_git_clone.sh)



kubernetes