node节点添加说明

1、 安装依赖软件

```
$ sudo yum install ebtables ethtool iproute iptables socat util-linux wget
vim -y
# NFS
$ yum install -y nfs-utils rpcbind
```

2、 安装docker 17.03.0-ce

```
$ sudo wget -O -
https://raw.githubusercontent.com/cherryleo/scripts/master/centos7-install
-docker.sh | sudo sh
```

3、关闭swap

```
$ swapoff -a
```

4、关闭防火墙

```
$ systemctl stop firewalld
```

5、配置host文件

```
$ cat /etc/hosts
127.0.0.1   localhost localhost.localdomain localhost4
localhost4.localdomain4
::1         localhost localhost.localdomain localhost6
localhost6.localdomain6
10.22.60.25  ODCBSCHAR01
10.22.60.26  ODCBSCK8S01
10.22.60.170 ODCK8SNO101
10.22.60.171 ODCK8SNO102
10.22.60.172 ODCK8SNO103
10.22.60.173 ODCK8SNO104
10.22.60.174 ODCK8SNO105
10.22.60.175 ODCK8SNO106
10.22.60.176 ODCK8SNO107
```

6、修改主机名

```
$ hostnamectl set-hostname ODCBSCHAR01
```

7、修改配置文件

```
$ vim /etc/systemd/system/kubelet.service.d/10-kubeadm.conf
[Service]
Environment="KUBELET_KUBECONFIG_ARGS=--bootstrap-kubeconfig=/etc/kubernete
s/bootstrap-kubelet.conf --kubeconfig=/etc/kubernetes/kubelet.conf"
Environment="KUBELET_SYSTEM_PODS_ARGS=--pod-manifest-path=/etc/kubernetes/
manifests --allow-privileged=true"
Environment="KUBELET_NETWORK_ARGS=--network-plugin=cni
--cni-conf-dir=/etc/cni/net.d --cni-bin-dir=/opt/cni/bin"
Environment="KUBELET_DNS_ARGS=--cluster-dns=10.96.0.10
--cluster-domain=cluster.local"
Environment="KUBELET_AUTHZ_ARGS=--authorization-mode=Webhook
--client-ca-file=/etc/kubernetes/pki/ca.crt"
# Value should match Docker daemon settings.
# Defaults are "cgroupfs" for Debian/Ubuntu/OpenSUSE and "systemd" for
Fedora/CentOS/RHEL
Environment="KUBELET_CGROUP_ARGS=--cgroup-driver=cgroupfs"
Environment="KUBELET_CADVISOR_ARGS=--cadvisor-port=0"
Environment="KUBELET_CERTIFICATE_ARGS=--rotate-certificates=true"
Environment="KUBE_PAUSE=--pod-infra-container-image=10.22.60.25/kubernetes
/pause-amd64:3.0"
ExecStart=
ExecStart=/usr/bin/kubelet $KUBELET_KUBECONFIG_ARGS
$KUBELET_SYSTEM_PODS_ARGS $KUBELET_NETWORK_ARGS $KUBELET_DNS_ARGS
$KUBELET_AUTHZ_ARGS $KUBELET_CGROUP_ARGS $KUBELET_CADVISOR_ARGS
$KUBELET_CERTIFICATE_ARGS $KUBE_PAUSE $KUBELET_EXTRA_ARGS
```

8、创建/挂载分区

```
$ fdisk  /dev/sd
sda   sda1  sda2  sdb   sdb1
$ fdisk  /dev/sdb
Welcome to fdisk (util-linux 2.23.2).

Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.


Command (m for help): m   # m
Command action
   a   toggle a bootable flag
   b   edit bsd disklabel
   c   toggle the dos compatibility flag
   d   delete a partition
   g   create a new empty GPT partition table
   G   create an IRIX (SGI) partition table
   l   list known partition types
   m   print this menu
   n   add a new partition
   o   create a new empty DOS partition table
   p   print the partition table
   q   quit without saving changes
   s   create a new empty Sun disklabel
   t   change a partition's system id
   u   change display/entry units
   v   verify the partition table
   w   write table to disk and exit
   x   extra functionality (experts only)

Command (m for help):
 n
Partition type:
   p   primary (1 primary, 0 extended, 3 free)
   e   extended
Select (default p): p
......
......


$ mkfs.ext4 /dev/sdb1
$ mkdir /data
$ mount /dev/sdb1 /data
$ cat /etc/fstab      ##
#
# /etc/fstab
# Created by anaconda on Wed Aug 29 17:54:01 2018
#
# Accessible filesystems, by reference, are maintained under '/dev/disk'
```

```
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info
#
/dev/mapper/centos-root       /                       xfs     defaults
0 0
UUID=96520783-a56d-487e-b2db-61a8ee0f2479  /boot                   xfs
defaults        0 0
#/dev/mapper/centos-swap      swap                    swap    defaults
0 0   ## swap
/dev/sdb1          /data                   ext4    defaults        0 0
##
```

```
docker
1docker
$ mkdir /data/docker
$ cd /data/docker

2docker
$ vi /etc/docker/daemon.json
{
"graph": "/data/docker"
}

3docker
$ mkdir /data/docker/
$ cp -rf /var/lib/docker/* /data/docker/

4docker
```

```
$ systemctl  restart docker
```

9、添加CA证书

```
$ cd /etc/pki/ca-trust/source/anchors/
$ scp 10.22.60.25:/data/cert/ca.crt .
$ update-ca-trust
$ systemctl  restart docker
$ docker login -u admin -p Harbor12345 10.22.60.25  ##
Login Succeeded
```

10、添加节点

```
$ kubeadm join 10.22.60.26:6443 --token 9oe865.2mhtpyfb0nvlrjx7
--discovery-token-ca-cert-hash
sha256:6d24f1d0423a766dc959663b0dd1abae8762278cc164d52ce586b0f3fa22fc48
```