

# [Container Runtime] CRI-O

가

## CRI-O 가

### CRI-O ?

# CRI-O OCI (CRI) .  
가 Docker Kubernetes 1.24  
Docker CRI( ) shim  
( Docker Engine ) CRI-O 가 .

( VM )

Controller Server : 1EA

Worker Server : 1EA

OS

Ubuntu 20.04 Server Minimal

:  
<https://github.com/cri-o/cri-o/blob/main/install.md#supported-versions>

: <https://tech.hostway.co.kr/2022/02/06/418/>

## Traffic Setup

# .conf

# Controller / Worker

```
cat <<EOF | sudo tee /etc/modules-load.d/crio.conf
overlay
br_netfilter
EOF
```

```
sudo modprobe overlay
```

```
sudo modprobe br_netfilter
```

```
# sysctl , .
```

```
# Controller / Worker
```

```
cat <<EOF | sudo tee /etc/sysctl.d/99-kubernetes-cri.conf
net.bridge.bridge-nf-call-iptables = 1
net.ipv4.ip_forward = 1
net.bridge.bridge-nf-call-ip6tables = 1
EOF
```

```
sudo sysctl --system
```

## cgroup driver

```
# CRI-O systemd cgroup .
```

```
cgroupfs cgroup , /etc/crio/crio.conf
/etc/crio/crio.conf.d/02-cgroup-manager.conf -
(drop-in) .
```

```
[crio.runtime]
common_cgroup = "pod"
cgroup_manager = "cgroupfs"
```

## CRI-O

```
# Controller / Worker
```

```
sudo -i
export OS=xUbuntu_20.04 # OS
export VERSION=1.19 # cri-o
```

```
echo "deb
https://download.opensuse.org/repositories/devel:/kubic:/libco
ntainers:/stable/$OS/ /" >
/etc/apt/sources.list.d/devel:kubic:libcontainers:stable.list
echo "deb
http://download.opensuse.org/repositories/devel:/kubic:/libcon
```

```
tainers:/stable:/cri-o:/$VERSION/$OS/      /"      >
/etc/apt/sources.list.d/devel:kubic:libcontainers:stable:cri-
o:$VERSION.list
```

```
curl                                          -L
https://download.opensuse.org/repositories/devel:kubic:libcont
ainers:stable:cri-o:$VERSION/$OS/Release.key | apt-key add -
curl                                          -L
https://download.opensuse.org/repositories/devel:/kubic:/libco
ntainers:/stable/$OS/Release.key | apt-key add -
```

```
sudo apt-get update
```

```
sudo apt-get install cri-o cri-o-runc
```

```
sudo systemctl daemon-reload
sudo systemctl enable crio --now
sudo systemctl status crio
```

## Controller Node Initialize

```
# docker                                1                                CRI-
0
```

```
# Controller
```

```
kubeadm init --cri-socket=/var/run/crio/crio.sock --ignore-
preflight-errors=all --pod-network-cidr=192.168.0.0/16 --
apiserver-advertise-address=203.248.23.192
```

```
# Worker
```

```
kubeadm      join      203.248.23.192:6443      --token
9oy7rn.qtw04nfd8ga417p4      --discovery-token-ca-cert-hash
sha256:26218e0c80320b7c23735916c130fc48f644b26314212d917969553
ec0651256
```