

## 1) Install RKE cluster

- run rke config

```
$ rke config
```

```
[+] Cluster Level SSH Private Key Path [~/.ssh/id_rsa]:  
[+] Number of Hosts [1]:
```

### [+] SSH Address of host (1) [none]: vm01

```
[+] SSH Port of host (1) [22]:  
[+] SSH Private Key Path of host () [none]:  
[-] You have entered empty SSH key path, trying fetch from SSH key  
parameter  
[+] SSH Private Key of host () [none]:  
[-] You have entered empty SSH key, defaulting to cluster level SSH key:  
~/.ssh/id_rsa
```

### [+] SSH User of host () [ubuntu]: k8sadm

### [+] Is host () a Control Plane host (y/n)? [y]: y

### [+] Is host () a Worker host (y/n)? [n]: y

### [+] Is host () an etcd host (y/n)? [n]: y

```
[+] Override Hostname of host () [none]:
```

### [+] Internal IP of host () [none]: %YOUR\_INTERNAL\_IP%

```
[+] Docker socket path on host () [/var/run/docker.sock]:  
[+] Network Plugin Type (flannel, calico, weave, canal, aci) [canal]:  
[+] Authentication Strategy [x509]:  
[+] Authorization Mode (rbac, none) [rbac]:  
[+] Kubernetes Docker image [rancher/hyperkube:v1.20.15-rancher2]:  
[+] Cluster domain [cluster.local]:  
[+] Service Cluster IP Range [10.43.0.0/16]:  
[+] Enable PodSecurityPolicy [n]:  
[+] Cluster Network CIDR [10.42.0.0/16]:  
[+] Cluster DNS Service IP [10.43.0.10]:  
[+] Add addon manifest URLs or YAML files [no]:
```

- rke up

- copy config
- add dns entry to coredns "YOUR\_INTERNAL\_IP vm01"

```
$ rke up

$ cp kube_config_cluster.yml ~/.kube/config-rke-vm01
$ sed -i 's/local/rke-vm01/g' ~/.kube/config-rke-vm01
$ export KUBECONFIG=$HOME/.kube/config-rke-vm01:$HOME/.kube/config

$ kcg
$ kc rke-vm01

$ k get pods -A

$ k edit cm coredns -n kube-system

data:
  Corefile: |
    .:53 {
      errors
      health {
        lameduck 5s
      }
      hosts {
        10.136.0.3 vm01 # REPLACE WITH YOUR INTERNAL IP
        fallthrough
      }
    }
- save & quit
```

## 2) Import RKE cluster to Rancher

- login rancher
- Menu > Cluster Management > Import Existing
- Generic > Cluster Name : rke-vm01 > Create
- Copy 2nd Command from registration : bypass certificate verification
- Paste and run at vm01

## 3) Add worker node vm02 to RKE cluster

- edit cluster.yml
- add node vm02 config
- rke up

```
$ vi cluster.yml

nodes:
- address: vm01
  port: "22"
  internal_address: 10.136.0.3
  role:
```

```
- controlplane
- worker
- etcd
hostname_override: ""
user: k8sadm
docker_socket: /var/run/docker.sock
ssh_key: ""
ssh_key_path: ~/.ssh/id_rsa
ssh_cert: ""
ssh_cert_path: ""
labels: {}
taints: []
- address: vm02
port: "22"
internal_address: 10.136.0.2
role:
- worker
hostname_override: ""
user: k8sadm
docker_socket: /var/run/docker.sock
ssh_key: ""
ssh_key_path: ~/.ssh/id_rsa
ssh_cert: ""
ssh_cert_path: ""
labels: {}
taints: []

$ rke up
```