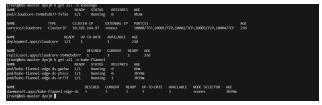
# 实验过程图片记录

集群



```
[root@k8s-master dyx]# k get nodes -o wide
NAME          STATUS   ROLES                  AGE   VERSION              INTERNAL-IP      EXTERNAL-IP   OS-IMAGE                 KERNEL-VERSION                CONTAINER-RUNTIME
k8s-master    Ready    control-plane,master   23d   v1.21.8              192.168.0.229    <none>        CentOS Linux 8           4.18.0-240.10.1.el8_3.x86_64  docker://19.3.15
k8s-node1     Ready    <none>                 23d   v1.21.8              192.168.0.71     <none>        CentOS Linux 8 (Core)    4.18.0-240.1.1.el8_3.x86_64   docker://19.3.15
k8s-node2     Ready    <none>                 23d   v1.21.8              192.168.0.243    <none>        Ubuntu 20.04.4 LTS       5.4.0-100-generic             docker://20.10.18
ke-edge1      Ready    agent,edge,edge1       62m   v1.22.6-kubeedge-v1.12.1  192.168.5.231    <none>        CentOS Linux 8 (Core)    4.18.0-147.5.1.el8_1.x86_64   docker://19.3.13
ke-edge2      Ready    agent,edge,edge1       4h4m  v1.22.6-kubeedge-v1.12.1  192.168.5.121    <none>        Ubuntu 18.04.5 LTS       4.15.0-136-generic            docker://20.10.11
ke-edge3      Ready    agent,edge,edge2       4h3m  v1.22.6-kubeedge-v1.12.1  10.60.106.49     <none>        Ubuntu 22.04.1 LTS       5.15.0-43-generic             docker://23.0.5
```

```
5: flannel.1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1402 qdisc noqueue state UNKNOWN group default
    link/ether 9e:f7:4f:9d:21:f7 brd ff:ff:ff:ff:ff:ff
    inet 10.244.12.0/32 scope global flannel.1
       valid_lft forever preferred_lft forever
    inet6 fe80::9cf7:4fff:fe9d:21f7/64 scope link
       valid_lft forever preferred_lft forever
23: vethc28e912@if22: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1450 qdisc noqueue master docker0 state UP group default
    link/ether 02:d1:32:f1:f2:9d brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet6 fe80::d1:32ff:fef1:f29d/64 scope link
       valid_lft forever preferred_lft forever
[root@ke-edge3:ubuntu]# ip route show
default via 10.60.0.1 dev eth0 proto static
10.60.0.0/16 dev eth0 proto kernel scope link src 10.60.106.49
10.244.11.0/24 via 10.244.11.0 dev flannel.1 onlink
10.244.12.0/24 dev docker0 proto kernel scope link src 10.244.12.1
```

```
    valid_lft forever preferred_lft forever
32: eth0@if33: <BROADCAST,MULTICAST,UP,LOWER_UP,M-DOWN> mtu 1450 qdisc noqueue state UP
    link/ether 02:42:0a:f4:0c:04 brd ff:ff:ff:ff:ff:ff
    inet 10.244.12.4/24 brd 10.244.12.255 scope global eth0
       valid_lft forever preferred_lft forever
/ # ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
32: eth0@if33: <BROADCAST,MULTICAST,UP,LOWER_UP,M-DOWN> mtu 1450 qdisc noqueue state UP
    link/ether 02:42:0a:f4:0c:04 brd ff:ff:ff:ff:ff:ff
    inet 10.244.12.4/24 brd 10.244.12.255 scope global eth0
       valid_lft forever preferred_lft forever
/ # ping 10.244.12.5 -c 4
PING 10.244.12.5 (10.244.12.5): 56 data bytes
64 bytes from 10.244.12.5: seq=0 ttl=64 time=0.096 ms
64 bytes from 10.244.12.5: seq=1 ttl=64 time=0.154 ms
64 bytes from 10.244.12.5: seq=2 ttl=64 time=0.134 ms
64 bytes from 10.244.12.5: seq=3 ttl=64 time=0.157 ms

--- 10.244.12.5 ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 0.096/0.135/0.157 ms
/ # ping 10.244.12.3 -c 4
PING 10.244.12.3 (10.244.12.3): 56 data bytes
64 bytes from 10.244.12.3: seq=0 ttl=64 time=0.103 ms
64 bytes from 10.244.12.3: seq=1 ttl=64 time=0.103 ms
64 bytes from 10.244.12.3: seq=2 ttl=64 time=0.095 ms
64 bytes from 10.244.12.3: seq=3 ttl=64 time=0.119 ms

--- 10.244.12.3 ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 0.095/0.105/0.119 ms
/ # exit
[root@ke-edge3:ubuntu]# docker exec -it b3171b7c13da /bin/sh
/ # ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
34: eth0@if35: <BROADCAST,MULTICAST,UP,LOWER_UP,M-DOWN> mtu 1450 qdisc noqueue state UP
    link/ether 02:42:0a:f4:0c:05 brd ff:ff:ff:ff:ff:ff
    inet 10.244.12.5/24 brd 10.244.12.255 scope global eth0
       valid_lft forever preferred_lft forever
/ # ping 10.244.12.4 -c 4
PING 10.244.12.4 (10.244.12.4): 56 data bytes
64 bytes from 10.244.12.4: seq=0 ttl=64 time=0.128 ms
64 bytes from 10.244.12.4: seq=1 ttl=64 time=0.150 ms
64 bytes from 10.244.12.4: seq=2 ttl=64 time=0.097 ms
64 bytes from 10.244.12.4: seq=3 ttl=64 time=0.091 ms

--- 10.244.12.4 ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 0.091/0.116/0.150 ms
/ # ping 10.244.12.3 -c 4
PING 10.244.12.3 (10.244.12.3): 56 data bytes
64 bytes from 10.244.12.3: seq=0 ttl=64 time=0.193 ms
64 bytes from 10.244.12.3: seq=1 ttl=64 time=0.162 ms
64 bytes from 10.244.12.3: seq=2 ttl=64 time=0.180 ms
64 bytes from 10.244.12.3: seq=3 ttl=64 time=0.156 ms
```

```
[root@k8s-master dyx]# k get nodes -o wide
NAME         STATUS   ROLES                  AGE     VERSION                   INTERNAL-IP     EXTERNAL-IP   OS-IMAGE                KERNEL-VERSION                CONTAINER-RUNTIME
k8s-master   Ready    control-plane,master   23d     v1.21.8                   192.168.0.229   <none>        CentOS Linux 8          4.18.0-240.10.1.el8_3.x86_64  docker://19.3.15
k8s-node1    Ready    <none>                 23d     v1.21.8                   192.168.0.71    <none>        CentOS Linux 8 (Core)   4.18.0-240.1.1.el8_3.x86_64   docker://19.3.15
k8s-node2    Ready    <none>                 23d     v1.21.8                   192.168.0.243   <none>        Ubuntu 20.04.4 LTS      5.4.0-100-generic             docker://20.10.18
ke-edge1     Ready    agent,edge,edge1       102m    v1.22.6-kubeedge-v1.12.1  192.168.5.231   <none>        CentOS Linux 8 (Core)   4.18.0-147.5.1.el8_1.x86_64   docker://19.3.13
ke-edge2     Ready    agent,edge,edge1       4h44m   v1.22.6-kubeedge-v1.12.1  192.168.5.121   <none>        Ubuntu 18.04.5 LTS      4.15.0-136-generic            docker://20.10.11
ke-edge3     Ready    agent,edge,edge2       4h43m   v1.22.6-kubeedge-v1.12.1  10.60.106.49    <none>        Ubuntu 22.04.1 LTS      5.15.0-43-generic             docker://23.0.5
[root@k8s-master dyx]# k apply  -f test-cni-pod2.yaml
deployment.apps/alpine-test-deployment created
[root@k8s-master dyx]# k get pods  -o wide
NAME                                     READY   STATUS              RESTARTS   AGE     IP              NODE        NOMINATED NODE   READINESS GATES
alpine-test-deployment-765c98577d-2dpm8  0/1     ContainerCreating   0          5s      <none>          ke-edge1    <none>           <none>
alpine-test-deployment-765c98577d-nfvnx  0/1     ContainerCreating   0          5s      <none>          ke-edge1    <none>           <none>
alpine-test-deployment-765c98577d-nrlvb  0/1     ContainerCreating   0          5s      <none>          ke-edge2    <none>           <none>
kubeedge-counter-app-8446d87d7-8jz58     1/1     Running             0          10d     192.168.0.243   k8s-node2   <none>           <none>
kubeedge-pi-counter-55c96d86c-qkwv4      1/1     Running             1          4h39m   192.168.5.121   ke-edge2    <none>           <none>
[root@k8s-master dyx]# k get pods  -o wide
NAME                                     READY   STATUS    RESTARTS   AGE     IP              NODE        NOMINATED NODE   READINESS GATES
alpine-test-deployment-765c98577d-2dpm8  1/1     Running   0          3m1s    10.244.13.3     ke-edge1    <none>           <none>
alpine-test-deployment-765c98577d-nfvnx  1/1     Running   0          3m1s    10.244.13.2     ke-edge1    <none>           <none>
alpine-test-deployment-765c98577d-nrlvb  1/1     Running   0          3m1s    10.244.11.3     ke-edge2    <none>           <none>
kubeedge-counter-app-8446d87d7-8jz58     1/1     Running   0          10d     192.168.0.243   k8s-node2   <none>           <none>
kubeedge-pi-counter-55c96d86c-qkwv4      1/1     Running   1          4h42m   192.168.5.121   ke-edge2    <none>           <none>
[root@k8s-master dyx]#
```

```
[root@ke-edge1 ~]# cat /run/flannel/subnet.env
FLANNEL_NETWORK=10.244.0.0/16
FLANNEL_SUBNET=10.244.13.1/24
FLANNEL_MTU=1450
FLANNEL_IPMASQ=true
[root@ke-edge1 ~]# vim /usr/lib/systemd/system/docker.service
[root@ke-edge1 ~]# systemctl daemon-reload
[root@ke-edge1 ~]# systemctl restart docker
[root@ke-edge1 ~]# ip route show
default via 192.168.5.1 dev eth0 proto dhcp metric 100
10.244.11.0/24 via 10.244.11.0 dev flannel.1 onlink
10.244.12.0/24 via 10.244.12.0 dev flannel.1 onlink
10.244.13.0/24 dev docker0 proto kernel scope link src 10.244.13.1
169.254.169.254 via 192.168.5.254 dev eth0 proto dhcp metric 100
192.168.5.0/24 dev eth0 proto kernel scope link src 192.168.5.231 metric 100
[root@ke-edge1 ~]# docker ps -a
CONTAINER ID        IMAGE                  COMMAND                  CREATED             STATUS              PORTS               NAMES
f7943f3e24d         pooronga/alpine-curl   "sleep 12000"            6 minutes ago       Up 6 minutes                            k8s_alpine-curl_alpine-test-deployment-765c98577d-2dpm8_default_914227c3-f957-4137-952b-0568a45d210c_0
4e39d82b542         pooronga/alpine-curl   "sleep 12000"            6 minutes ago       Up 6 minutes                            k8s_alpine-curl_alpine-test-deployment-765c98577d-nfvnx_default_8126e5f6-b02d-4421-88f8-71bb9cc4725c_0
2570039c84a5        kubeedge/pause:3.6     "/pause"                 6 minutes ago       Up 6 minutes                            k8s_POD_alpine-test-deployment-765c98577d-2dpm8_default_914227c3-f957-4137-952b-0568a45d210c_0
e4bd722863e6        kubeedge/pause:3.6     "/pause"                 6 minutes ago       Up 6 minutes                            k8s_POD_alpine-test-deployment-765c98577d-nfvnx_default_8126e5f6-b02d-4421-88f8-71bb9cc4725c_0
af0ca8b03c5b        11ae74319a21           "/opt/bin/flanneld --…"  34 minutes ago      Up 34 minutes                           k8s_kube-flannel-edge_kube-flannel-edge-ds-gwchw_kube-flannel_5499766d-fba4-4c28-865a-bc2494298e55_1
50f79e2c4512        f70621d55c05           "/usr/local/bin/kube…"   34 minutes ago      Up 34 minutes                           k8s_kube-proxy_kube-proxy-dvt47_kube-system_091cd584-5e18-4788-b57b-0dd70e2060c1_1
a5ed2cdb8dde        kubeedge/pause:3.6     "/pause"                 34 minutes ago      Up 34 minutes                           k8s_POD_kube-flannel-edge-ds-gwchw_kube-flannel_5499766d-fba4-4c28-865a-bc2494298e55_3
c0358ef5e702        kubeedge/pause:3.6     "/pause"                 34 minutes ago      Up 34 minutes                           k8s_POD_kube-proxy-dvt47_kube-system_091cd584-5e18-4788-b57b-0dd70e2060c1_4
[root@ke-edge1 ~]# docker exec -it f7943f3e24d /bin/sh
/ # ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
87: eth0@if88: <BROADCAST,MULTICAST,UP,LOWER_UP,M-DOWN> mtu 1450 qdisc noqueue state UP
    link/ether 02:42:0a:f4:0d:03 brd ff:ff:ff:ff:ff:ff
    inet 10.244.13.3/24 brd 10.244.13.255 scope global eth0
       valid_lft forever preferred_lft forever
/ # ping 10.244.11.3 -c 4
PING 10.244.11.3 (10.244.11.3): 56 data bytes
64 bytes from 10.244.11.3: seq=0 ttl=62 time=0.985 ms
64 bytes from 10.244.11.3: seq=1 ttl=62 time=0.878 ms
64 bytes from 10.244.11.3: seq=2 ttl=62 time=0.886 ms
64 bytes from 10.244.11.3: seq=3 ttl=62 time=0.873 ms

--- 10.244.11.3 ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 0.873/0.905/0.985 ms
/ #
```

```
3 packets transmitted, 3 packets received, 0% packet loss
round-trip min/avg/max = 0.130/0.149/0.164 ms
/ # ping 10.244.12.5 -c 3
PING 10.244.12.5 (10.244.12.5): 56 data bytes
64 bytes from 10.244.12.5: seq=0 ttl=64 time=0.280 ms
64 bytes from 10.244.12.5: seq=1 ttl=64 time=0.166 ms
64 bytes from 10.244.12.5: seq=2 ttl=64 time=0.131 ms

--- 10.244.12.5 ping statistics ---
3 packets transmitted, 3 packets received, 0% packet loss
round-trip min/avg/max = 0.131/0.192/0.280 ms
/ # [root@ke-edge3:ubuntu]# docker ps -a
CONTAINER ID   IMAGE                COMMAND                  CREATED             STATUS              PORTS     NAMES
3ab413948005   aacbc4ec9e38         "sleep 12000"            About a minute ago   Up About a minute             k8s_alpine-curl_alpine-t
e7524860cd69   kubeedge/pause:3.1   "/pause"                 About a minute ago   Up About a minute             k8s_POD_alpine-test-depl
e88ff92bfb55   11ae74319a21         "/opt/bin/flanneld -…"   About an hour ago    Up About an hour              k8s_kube-flannel-edge_ku
3b61c4adc58e   f70621d55c05         "/usr/local/bin/kube…"   About an hour ago    Up About an hour              k8s_kube-proxy_kube-prox
ca9039d86f79   kubeedge/pause:3.1   "/pause"                 About an hour ago    Up About an hour              k8s_POD_kube-proxy-dsj9z
79f59b713e5a   kubeedge/pause:3.1   "/pause"                 About an hour ago    Up About an hour              k8s_POD_kube-flannel-edg
3621e456fa97   a1abbd75d6c0         "/serve_hostname"        About an hour ago    Up About an hour              k8s_hostname_hostname-ed
0a47a1ada965   kubeedge/pause:3.1   "/pause"                 About an hour ago    Up About an hour              k8s_POD_hostname-edge-84
[root@ke-edge3:ubuntu]# docker exec -it 3ab413948005 /bin/sh
/ # ip a'
> '
BusyBox v1.34.1 (2021-11-23 00:57:35 UTC) multi-call binary.

Usage: ip [OPTIONS] address|route|link|tunnel|neigh|rule [ARGS]

OPTIONS := -f[amily] inet|inet6|link | -o[neline]

ip addr add|del IFADDR dev IFACE | show|flush [dev IFACE] [to PREFIX]
ip route list|flush|add|del|change|append|replace|test ROUTE
ip link set IFACE [up|down] [arp on|off] [multicast on|off]
        [promisc on|off] [mtu NUM] [name NAME] [qlen NUM] [address MAC]
        [master IFACE | nomaster]
ip tunnel add|change|del|show [NAME]
        [mode ipip|gre|sit] [remote ADDR] [local ADDR] [ttl TTL]
ip neigh show|flush [to PREFIX] [dev DEV] [nud STATE]
ip rule [list] | add|del SELECTOR ACTION
/ # ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
36: eth0@if37: <BROADCAST,MULTICAST,UP,LOWER_UP,M-DOWN> mtu 1450 qdisc noqueue state UP
    link/ether 02:42:0a:f4:0c:03 brd ff:ff:ff:ff:ff:ff
    inet 10.244.12.3/24 brd 10.244.12.255 scope global eth0
       valid_lft forever preferred_lft forever
/ # ping 10.244.11.3 -c 4
PING 10.244.11.3 (10.244.11.3): 56 data bytes

--- 10.244.11.3 ping statistics ---
4 packets transmitted, 0 packets received, 100% packet loss
/ # ping 10.244.13.2 -c 4
PING 10.244.13.2 (10.244.13.2): 56 data bytes

--- 10.244.13.2 ping statistics ---
4 packets transmitted, 0 packets received, 100% packet loss
/ # exit
```

```
deployment.apps/tcp-echo-deployment created
service/tcp-echo-service created
[root@k8s-master examples]# k get pods -n testzone
NAME                                READY   STATUS    RESTARTS   AGE
alpine-test                         1/1     Running   2          7h37m
hostname-edge-7b7486cc5f-865b4      1/1     Running   0          7h36m
hostname-edge-7b7486cc5f-vnqdd      1/1     Running   1          7h36m
tcp-echo-deployment-85654c8b8f-7qn2w   0/1     Pending   0          9s
tcp-echo-deployment-85654c8b8f-x46bq   0/1     Pending   0          9s
websocket-test                      1/1     Running   0          7h37m
[root@k8s-master examples]# k get pods -n testzone
NAME                                READY   STATUS    RESTARTS   AGE
alpine-test                         1/1     Running   2          7h37m
hostname-edge-7b7486cc5f-865b4      1/1     Running   0          7h37m
hostname-edge-7b7486cc5f-vnqdd      1/1     Running   1          7h37m
tcp-echo-deployment-85654c8b8f-7qn2w   0/1     Pending   0          54s
tcp-echo-deployment-85654c8b8f-x46bq   0/1     Pending   0          54s
websocket-test                      1/1     Running   0          7h37m
[root@k8s-master examples]# k get pods -n testzone
NAME                                READY   STATUS    RESTARTS   AGE
alpine-test                         1/1     Running   2          7h37m
hostname-edge-7b7486cc5f-865b4      1/1     Running   0          7h37m
hostname-edge-7b7486cc5f-vnqdd      1/1     Running   1          7h37m
tcp-echo-deployment-85654c8b8f-7qn2w   0/1     Pending   0          56s
tcp-echo-deployment-85654c8b8f-x46bq   0/1     Pending   0          56s
websocket-test                      1/1     Running   0          7h37m
[root@k8s-master examples]# k get pods -n testzone
NAME                                READY   STATUS    RESTARTS   AGE
alpine-test                         1/1     Running   2          7h58m
hostname-edge-7b7486cc5f-865b4      1/1     Running   0          7h57m
hostname-edge-7b7486cc5f-vnqdd      1/1     Running   1          7h57m
tcp-echo-deployment-85654c8b8f-7qn2w   1/1     Running   0          21m
tcp-echo-deployment-85654c8b8f-x46bq   1/1     Running   0          21m
websocket-test                      1/1     Running   0          7h58m
[root@k8s-master examples]# kubectl exec -it alpine-test -- sh
Error from server (NotFound): pods "alpine-test" not found
[root@k8s-master examples]# kubectl exec -n testzone -it alpine-test -- sh
/ # telnet tcp-echo-service 2701
Connected to tcp-echo-service
Welcome, you are connected to node ke-edge2.
Running on Pod tcp-echo-deployment-85654c8b8f-7qn2w.
In namespace testzone.
With IP address 10.244.11.3.
Service default.
```

```
pod/tcp-echo-edge-95649b6d8-v65sx         0/1     Terminating   0          13m   10.244.11.2   ke-edge2   <none>           <none>
[root@k8s-master examples]# k get all -n edgezone -o wide
NAME                                      READY   STATUS        RESTARTS   AGE   IP            NODE       NOMINATED NODE   READINESS GA
TES
pod/busybox-sleep-edge-675c5b84f8-jj22l   1/1     Terminating   0          13m   10.244.11.3   ke-edge2   <none>           <none>
pod/tcp-echo-edge-95649b6d8-v65sx         0/1     Terminating   0          13m   10.244.11.2   ke-edge2   <none>           <none>
[root@k8s-master examples]# k get all -n testzone
NAME                                  READY   STATUS    RESTARTS   AGE
pod/alpine-test                       1/1     Running   0          15m
pod/hostname-lb-edge-5cdf5c758c-4vkfh   1/1     Running   0          83s
pod/hostname-lb-edge-5cdf5c758c-565xh   1/1     Running   0          83s
pod/hostname-lb-edge-5cdf5c758c-85hkm   1/1     Running   0          83s
pod/websocket-test                    1/1     Running   0          15m

NAME                     TYPE        CLUSTER-IP       EXTERNAL-IP   PORT(S)     AGE
service/hostname-lb-svc   ClusterIP   10.105.239.238   <none>        12345/TCP   83s

NAME                                 READY   UP-TO-DATE   AVAILABLE   AGE
deployment.apps/hostname-lb-edge   3/3     3            3           83s

NAME                                          DESIRED   CURRENT   READY   AGE
replicaset.apps/hostname-lb-edge-5cdf5c758c   3         3         3       83s
[root@k8s-master examples]# k get all -n testzone
NAME                                  READY   STATUS    RESTARTS   AGE
pod/alpine-test                       1/1     Running   0          15m
pod/hostname-lb-edge-5cdf5c758c-4vkfh   1/1     Running   0          86s
pod/hostname-lb-edge-5cdf5c758c-565xh   1/1     Running   0          86s
pod/hostname-lb-edge-5cdf5c758c-85hkm   1/1     Running   0          86s
pod/websocket-test                    1/1     Running   0          15m

NAME                     TYPE        CLUSTER-IP       EXTERNAL-IP   PORT(S)     AGE
service/hostname-lb-svc   ClusterIP   10.105.239.238   <none>        12345/TCP   86s

NAME                                 READY   UP-TO-DATE   AVAILABLE   AGE
deployment.apps/hostname-lb-edge   3/3     3            3           86s

NAME                                          DESIRED   CURRENT   READY   AGE
replicaset.apps/hostname-lb-edge-5cdf5c758c   3         3         3       86s
[root@k8s-master examples]# kubectl exec -n testzone -it alpine-test -- sh
/ # curl hostname-lb-svc:12345
hostname-lb-edge-5cdf5c758c-4vkfh
/ # curl hostname-lb-svc:12345
hostname-lb-edge-5cdf5c758c-4vkfh
/ # curl hostname-lb-svc:12345
hostname-lb-edge-5cdf5c758c-85hkm
/ # curl hostname-lb-svc:12345
hostname-lb-edge-5cdf5c758c-85hkm
/ # curl hostname-lb-svc:12345
hostname-lb-edge-5cdf5c758c-565xh
/ # curl hostname-lb-svc:12345
hostname-lb-edge-5cdf5c758c-4vkfh
/ # curl hostname-lb-svc:12345
hostname-lb-edge-5cdf5c758c-85hkm
/ # curl hostname-lb-svc:12345
hostname-lb-edge-5cdf5c758c-85hkm
/ # curl hostname-lb-svc:12345
hostname-lb-edge-5cdf5c758c-4vkfh
/ # curl hostname-lb-svc:12345
hostname-lb-edge-5cdf5c758c-4vkfh
/ # curl hostname-lb-svc:12345
hostname-lb-edge-5cdf5c758c-4vkfh
/ # curl hostname-lb-svc:12345
```

```
[root@master step1]# ./run.sh
Ready to call the cni program adn create resources
interfance Name: eth10
netns path: /var/run/netns/ns1
the config data: {
        "name": "mynet",
        "BridgeName": "test",
        "IP": "192.0.2.1/24"
}

The CNI has been called, see the following results
[root@master step1]# ls
config  example  example.go  run.sh
[root@master step1]# cd ..
[root@master tutorial]# ls
step1  step2  step3  step4
[root@master tutorial]# cd step
-bash: cd: step: No such file or directory
[root@master tutorial]# cd step4
[root@master step4]# ls
config  example.go  run.sh  step4
[root@master step4]# vim run.sh
[root@master step4]# ls
config  example.go  run.sh  step4
[root@master step4]# chmod +x run.sh
[root@master step4]# ./run.sh
Cannot remove namespace file "/var/run/netns/ns1": No such file or directory
test: ERROR while getting interface flags: No such device
bridge test doesn't exist; can't delete it
Ready to call the cni to create ip for ns1
{test 192.0.2.15/24}
The CNI has been called, see the following results
The bridge and the veth has been attatch to
bridge name     bridge id               STP enabled     interfaces
test            8000.b6e6090625de       no              veth2a9d8a3d
The interface in the netns
eth10: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.0.2.15  netmask 255.255.255.0  broadcast 192.0.2.255
        inet6 fe80::477:7aff:fee3:a9b8  prefixlen 64  scopeid 0x20<link>
        ether 06:77:7a:e3:a9:b8  txqueuelen 0  (Ethernet)
        RX packets 1  bytes 90 (90.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 1  bytes 90 (90.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=8<LOOPBACK>  mtu 65536
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 0  bytes 0 (0.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 0  bytes 0 (0.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@master step4]# sudo ifconfig test 192.0.2.1
[root@master step4]# sudo ip netns exec ns1 ping 192.0.2.1
PING 192.0.2.1 (192.0.2.1) 56(84) bytes of data.
64 bytes from 192.0.2.1: icmp_seq=1 ttl=64 time=0.077 ms
64 bytes from 192.0.2.1: icmp_seq=2 ttl=64 time=0.044 ms
64 bytes from 192.0.2.1: icmp_seq=3 ttl=64 time=0.053 ms
```