**HAProxy &Keepalived for RGW**

**Step 1a: Install haproxy & Keepalived packages in all the rgw nodes**

#  apt-get install haproxy keepalived

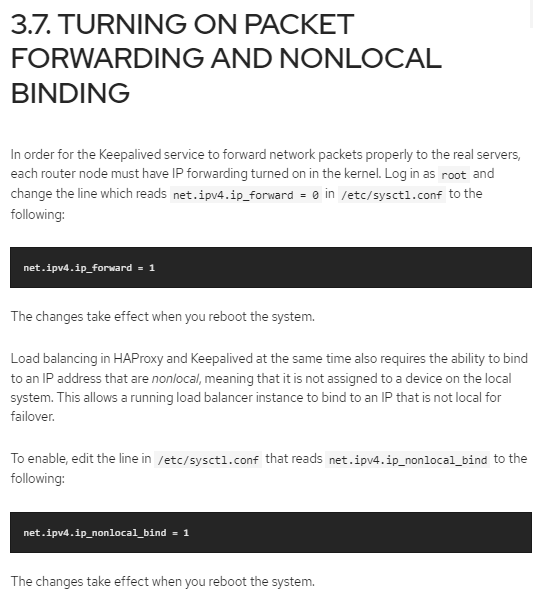
**Step 1b: Install haproxy & Keepalived packages in all the rgw nodes**

#  vi /etc/sysctl.conf

net.ipv4.ip\_nonlocal\_bind = 1

net.ipv4.ip\_forward = 1

# sysctl -p



**Step 2: Update Keepalived configuration based on VIP & interface name (RGE Each Nodes)**

**In RGW01:**

#  vi /etc/keepalived/keepalived.conf

global\_defs {

router\_id R1

}

vrrp\_instance external {

interface enp5s0

virtual\_router\_id 1

state MASTER

priority 100

advert\_int 1

virtual\_ipaddress {

10.157.234.250 dev enp5s0

}

}

vrrp\_instance internal {

interface enp2s0

virtual\_router\_id 2

state MASTER

priority 100

advert\_int 1

virtual\_ipaddress {

192.168.23.250 dev enp2s0

}

}

#  systemctl enable keepalived

# systemctl start keepalived

# systemctl status keepalived

**In RGW02:**

#  vi /etc/keepalived/keepalived.conf

global\_defs {

router\_id R1

}

vrrp\_instance external {

interface enp5s0

virtual\_router\_id 1

state BACKUP

priority 99

advert\_int 1

virtual\_ipaddress {

10.157.234.250 dev enp5s0

}

}

vrrp\_instance internal {

interface enp2s0

virtual\_router\_id 2

state BACKUP

priority 99

advert\_int 1

virtual\_ipaddress {

192.168.23.250 dev enp2s0

}

}

#  systemctl enable keepalived

# systemctl start keepalived

# systemctl status keepalived

**Step 3: Check VIP’s are moving into Backup nodes.**

**Stop Keepalived service in RGW01:**

#  systemctl stop keepalived

# ip a

Note: VIP’s should not be in RGW01 because keepalived service is stopped,

**In RGW02 go & check VIP IP’s are present or not:**

#  ip a

Note: RGW02 having the next priority so VIP came here. Incase RGW03 has the high priority compare with RGW02 then VIP will go to RGW03.

**Step 4: Update Keepalived configuration based on VIP & interface name**

**In RGW03:**

#  vi /etc/keepalived/keepalived.conf

global\_defs {

router\_id R1

}

vrrp\_instance external {

interface enp5s0

virtual\_router\_id 1

state BACKUP

priority 98

advert\_int 1

virtual\_ipaddress {

10.157.234.250 dev enp5s0

}

}

vrrp\_instance internal {

interface enp2s0

virtual\_router\_id 2

state BACKUP

priority 98

advert\_int 1

virtual\_ipaddress {

192.168.23.250 dev enp2s0

}

}

#  systemctl enable keepalived

# systemctl start keepalived

# systemctl status keepalived

**Step 5: Update haproxy.cfg file**

#  vi /etc/haproxy/haproxy.cfg

frontend http\_web

bind 10.157.234.250:443 ssl crt /etc/ssl/certs/rgwcert.pem

mode http

default\_backend rgw

backend rgw

balance source

mode http

server ceph-rgw01 10.157.234.251:8080 check

server ceph-rgw02 10.157.234.252:8080 check

server ceph-rgw03 10.157.234.253:8080 check

listen rgw\_internal

bind 192.168.23.250:80

balance source

mode http

server ceph-rgw01 192.168.23.251:8080 check

server ceph-rgw02 192.168.23.252:8080 check

server ceph-rgw03 192.168.23.253:8080 check

listen haproxy.stats

bind 10.157.234.250:9000 transparent

mode http

stats enable

stats uri /

stats auth admin:ZZCmhLTeWuj5beNEkRVBr7KPK

**Step 6: Create radosgw certificate in mentioned configuration location above**

#  ll /etc/ssl/certs/rgwcert.pem

**Step 7: Restart the haproxy service one by one where vip is running.**

#  systemctl restart haproxy.service