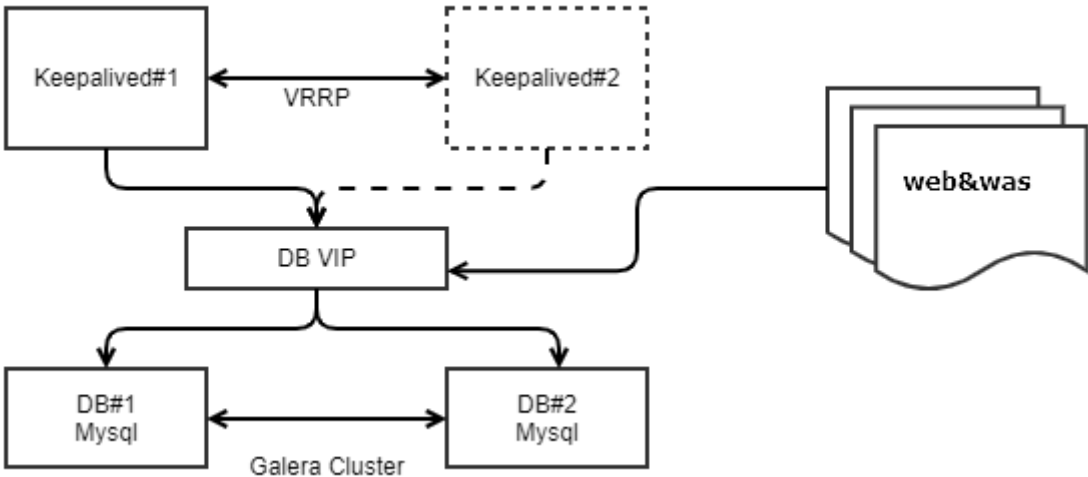


keepalived 和 DB

和

1.



2. 和

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和	和	rr
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iptables -F	iptables -F	iptables -F
iptables -A	iptables -A	iptables -A
iptables -D	iptables -D	iptables -D
iptables -L	iptables -L	iptables -L
iptables -t	iptables -t	iptables -t
iptables -s	iptables -s	iptables -s
iptables -d	iptables -d	iptables -d
iptables -p	iptables -p	iptables -p
iptables -j	iptables -j	iptables -j
iptables -m	iptables -m	iptables -m
iptables -c	iptables -c	iptables -c
iptables -n	iptables -n	iptables -n
iptables -v	iptables -v	iptables -v
iptables -x	iptables -x	iptables -x
iptables -Z	iptables -Z	iptables -Z
iptables -F	iptables -F	iptables -F
iptables -A	iptables -A	iptables -A
iptables -D	iptables -D	iptables -D
iptables -L	iptables -L	iptables -L
iptables -t	iptables -t	iptables -t
iptables -s	iptables -s	iptables -s
iptables -d	iptables -d	iptables -d
iptables -p	iptables -p	iptables -p
iptables -j	iptables -j	iptables -j
iptables -m	iptables -m	iptables -m
iptables -c	iptables -c	iptables -c
iptables -n	iptables -n	iptables -n
iptables -v	iptables -v	iptables -v
iptables -x	iptables -x	iptables -x
iptables -Z	iptables -Z	iptables -Z

iptables (iptables)

1. iptables

```
$> yum install keepalived ipvsadm -y
```

2. keepalived

```
$> vi /etc/keepalived/keepalived.conf
global_defs {
    router_id MARIA_HA
    script_user root
}

vrrp_instance DB_HA {
    state BACKUP
    interface eth0
```

```

virtual_router_id 10
priority 100
lvs_sync_daemon_interface eth0

authentication {
    auth_type PASS
    auth_pass mariadb
}

virtual_ipaddress {
    172.21.115.207
}
}

virtual_server 172.21.115.217 3306 {
    delay_loop 3
    lb_algo dh
    protocol TCP
    real_server 172.21.115.218 3306 {
        weight 100
        MISC_CHECK {
            misc_path "/svc/mysql_check.sh 172.21.115.218"
            misc_timeout 3
        }
    }
    real_server 172.21.115.215 3306 {
        weight 100
        MISC_CHECK {
            misc_path "/svc/mysql_check.sh 172.21.115.215"
            misc_timeout 3
        }
    }
}
}

```

3. ☐ ☐ ☐

```
$> vi /svc/mysql_check.sh
```

```
#!/bin/bash
```

```
/svc/mysql/bin/mysql -u monitor -pmonitor -h $1 -Nse 'select now()'
```

```
$> chmod 755 /svc/mysql_check.sh
```

1. 配置数据库 (DB#1)

1. 配置数据库

```
MariaDB [(none)]> grant process on *.* to monitor@'172.21.115.215' identified by 'monitor' with grant option;
```

```
MariaDB [(none)]> grant process on *.* to monitor@'172.21.115.218' identified by 'monitor' with grant option;
```

```
MariaDB [(none)]> flush privileges;
```

2. 配置网络

```
$> vi /etc/sysctl.conf
```

```
...
```

```
net.ipv4.ip_forward = 1
```

```
...
```

```
$> sysctl -p
```

3. 配置VIP

```
$> systemctl start keepalived
```

```
$> ip addr show | grep 32
```

```
inet 172.21.115.217/32 scope global eth0 #1 Active 1 VIP 1
```

keepalived

1. 配置

```
$> ipvsadm -Ln
```

```
IP Virtual Server version 1.2.1 (size=4096)
```

```
Prot LocalAddress:Port Scheduler Flags
```

```
-> RemoteAddress:Port      Forward Weight ActiveConn InActConn
```

```
TCP 172.21.115.217:3306 sh
```

```
-> 172.21.115.215:3306      Masq    100    2      0
```

```
-> 172.21.115.218:3306      Masq    100    50     0
```

2.

```
$> ipvsadm -Lnc
```

```
IPVS connection entries
```

```
pro expire state      source          virtual         destination
```

```
TCP 14:56 ESTABLISHED 172.21.114.22:52950 172.21.115.217:3306 172.21.115.218:3306
```

```
TCP 14:56 ESTABLISHED 172.21.114.22:52968 172.21.115.217:3306 172.21.115.218:3306
```

```
TCP 14:56 ESTABLISHED 172.21.114.22:52984 172.21.115.217:3306 172.21.115.218:3306
```

```
TCP 14:54 ESTABLISHED 172.21.114.22:52928 172.21.115.217:3306 172.21.115.218:3306
```

```
TCP 14:56 ESTABLISHED 172.21.114.22:52980 172.21.115.217:3306 172.21.115.218:3306
```



1. (DB#1 Mariadb)

```
# Keepalived  Mysql   
```

```
$> vi /var/log/messages
```

```
...
```

```
Mar 11 14:36:43 dbms01 Keepalived_healthcheckers[666145]: Misc check for
```

```
[[172.21.115.218]:tcp:3306 VS [172.21.115.217]:tcp:3306] by [/svc/mysql_check.sh] timed out with  
retry disabled.
```

```
Mar 11 14:36:43 dbms01 Keepalived_healthcheckers[666145]: Removing service
```

```
[172.21.115.218]:tcp:3306 to VS [172.21.115.217]:tcp:3306
```

```
...
```

```
# ipvsadm  1  1
```

```
$> ipvsadm
IP Virtual Server version 1.2.1 (size=4096)
Prot LocalAddress:Port Scheduler Flags
  -> RemoteAddress:Port          Forward Weight ActiveConn InActConn
TCP 172.21.115.217:3306 sh
  -> 172.21.115.215:3306      Masq    100    33      13
```

2. (DB#1)

```
#master
$> vi /var/log/messages
Mar 11 14:19:21 dbms01 systemd[1]: Stopping LVS and VRRP High Availability Monitor...
Mar 11 14:19:21 dbms01 Keepalived[664420]: Stopping
Mar 11 14:19:21 dbms01 Keepalived_healthcheckers[664421]: Shutting down service
[172.21.115.218]:tcp:3306 from VS [172.21.115.217]:tcp:3306
Mar 11 14:19:21 dbms01 kernel: IPVS: stopping master sync thread 664516 ...
Mar 11 14:19:21 dbms01 Keepalived_vrrp[664422]: (DB_HA) sent 0 priority
Mar 11 14:19:21 dbms01 Keepalived_vrrp[664422]: (DB_HA) removing VIPs.
Mar 11 14:19:21 dbms01 Keepalived_healthcheckers[664421]: Shutting down service
[172.21.115.215]:tcp:3306 from VS [172.21.115.217]:tcp:3306
Mar 11 14:19:21 dbms01 Keepalived_healthcheckers[664421]: Stopped - used 0.011017 user time,
0.141106 system time
Mar 11 14:19:22 dbms01 Keepalived_vrrp[664422]: Stopped - used 0.011218 user time, 0.026105
system time
Mar 11 14:19:22 dbms01 Keepalived[664420]: CPU usage (self/children) user: 0.000000/1.222181
system: 0.001086/1.218784
Mar 11 14:19:22 dbms01 Keepalived[664420]: Stopped Keepalived v2.1.5 (07/13,2020)
Mar 11 14:19:22 dbms01 systemd[1]: keepalived.service: Succeeded.
Mar 11 14:19:22 dbms01 systemd[1]: Stopped LVS and VRRP High Availability Monitor.
1
2
3
4
```

5
6
7
8

#Standby []

\$> vi /var/log/messages

Mar 11 14:20:41 dbms02 Keepalived_vrrp[666146]: (DB_HA) Backup received priority 0 advertisement

Mar 11 14:20:42 dbms02 Keepalived_vrrp[666146]: (DB_HA) Receive advertisement timeout

Mar 11 14:20:42 dbms02 Keepalived_vrrp[666146]: (DB_HA) Entering MASTER STATE

Mar 11 14:20:42 dbms02 Keepalived_vrrp[666146]: (DB_HA) setting VIPs.

Mar 11 14:20:42 dbms02 Keepalived_vrrp[666146]: (DB_HA) Sending/queueing gratuitous ARPs on eth0 for 172.21.115.217

Mar 11 14:20:42 dbms02 Keepalived_vrrp[666146]: Sending gratuitous ARP on eth0 for 172.21.115.217

reference

- https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/7/html/load_balancer_administration/index//
- <https://www.slideshare.net/neoclova/maria-db-250919306//>

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