

Active Gateway:

```
1      \ cphaprob state

Cluster Mode:   Sync only (OPSEC) with IGMP Membership

ID           Unique Address  Firewall State (*)
1 (local)    172.30.251.122  Active
2           172.30.251.123  Active

(*) FW-1 monitors only the sync operation and the security policy
    Use OPSEC's monitoring tool to get the cluster status
    \ cphaprob -a if

CCP mode: Manual (Multicast)
eth1         sync(secured), multicast
eth1-01      non sync(non secured)
eth1-01      non sync(non secured)
eth1-02      non sync(non secured)

S - sync, LM - link monitor, HA/LS - bond type

Virtual cluster interfaces: 6

eth1-01.1491 163.166.149.36
eth1-01.1098 163.166.98.121
eth1-01.2534 163.166.5.170
eth1-02.4    163.166.150.123
eth1-01.2160 161.2.160.121
eth1-01.1494 163.166.149.129
```

cphaprob list

There are no notes in problem state

cphaprob syncstat

Delta Sync Statistics

Sync status: OK

Drops:

Lost updates.....	0
Lost bulk update events.....	0
Oversized updates not sent.....	0

Sync at risk:

Sent reject notifications.....	0
Received reject notifications.....	0

Sent messages:

Total generated sync messages.....	26288192
Sent retransmission requests.....	0
Sent retransmission updates.....	19
Peak fragments per update.....	1

Received messages:

Total received updates.....	1623347
Received retransmission requests.....	19

Sync Interface:

Name.....	eth1
Link speed.....	1000Mb/s
Rate.....	34660 [Bps]
Peak rate.....	35520 [Bps]
Link usage.....	0%
Total.....	138297 [MB]

Queue sizes (num of updates):

Sending queue size.....	512
Receiving queue size.....	256
Fragments queue size.....	50

Timers:

Delta Sync interval (ms).....	100
-------------------------------	-----

Reset on Wed Mar 15 00:18:16 2023 (triggered by fullsync).

```
7         cphaprob roles
```

```
ID          Role
1 (local)   Master
2           Non-Master
```

```
8         cphaprob tablestat
```

```
----- Unique IP's Table -----
```

Member	Interface	IP-Address

(Local)		
0	2	172.30.251.122
0	11	163.166.149.35
0	12	163.166.98.65
0	13	163.166.1.72
0	14	163.166.5.171
0	15	163.166.150.178
0	16	163.166.128.72
0	17	163.166.0.72
0	18	161.2.160.72
0	19	163.166.149.130
1	2	172.30.251.123
1	11	163.166.149.36
1	12	163.166.98.66
1	13	163.166.1.73
1	14	163.166.5.172
1	15	163.166.150.179
1	16	163.166.128.73
1	17	163.166.0.73
1	18	161.2.160.73
1	19	163.166.149.131

```
-----
```

```
r1f500> show vrrp summary
```

VRRP State

```
VRRP Router State: Up
Flags: On,MonitorFirewall
Coldstart delay (30 seconds): completed
Interface enabled: 6
Virtual routers configured: 6
    In Init state 0
    In Backup state 0
    In Master state 6
```

Route for VRF 28 is showing in connected routes

```
r1f500> show route destination 163.166.149.36
```

```
Codes: C - Connected, S - Static, R - RIP, B - BGP (D - Default),
O - OSPF IntraArea (IA - InterArea, E - External, N - NSSA),
A - Aggregate, K - Kernel Remnant, H - Hidden, P - Suppressed,
U - Unreachable, i - Inactive
```

```
C          163.166.149.32/27  is directly connected, eth1-01.1491
                                PCI DMZ Live transit to F5 and VRF 28
```

```
r1f500> show route direct
```

```
Codes: C - Connected, S - Static, R - RIP, B - BGP (D - Default),
O - OSPF IntraArea (IA - InterArea, E - External, N - NSSA),
A - Aggregate, K - Kernel Remnant, H - Hidden, P - Suppressed,
U - Unreachable, i - Inactive
```

```
C          127.0.0.0/8        is directly connected, lo
C          161.2.160.0/24     is directly connected, eth1-01.2160
C          163.166.0.0/24     is directly connected, eth1-01.1660
                                F5 VIP VRF 28 PCI live
C          163.166.1.0/24     is directly connected, eth1-01.1661
                                F5 VIP VRF 28 PCI live
C          163.166.5.160/27   is directly connected, eth1-01.2534
                                Interim Inter FW interface
C          163.166.98.0/24    is directly connected, eth1-01.1098
                                inter firewall vlan
C          163.166.128.0/24   is directly connected, eth1-01.1668
                                F5 VIP VRF 29
C          163.166.149.32/27  is directly connected, eth1-01.1491
                                PCI DMZ Live transit to F5 and VRF 28
C          163.166.149.128/27 is directly connected, eth1-01.1494
                                transit to F5 PCIDMZ Test VRF 29
C          163.166.150.0/24   is directly connected, eth1-02.4
                                Internet dirty VLAN 4 to Internet
C          172.30.251.112/28  is directly connected, eth1
                                Sync interface
```

```

r1-1000> show vrrp interface eth1-01.1491

VRRP Interface
Interface eth1-01.1491
Number of virtual routers: 1
Flags:
Authentication: SimpleTextPassword
VRID 35
      State:           Master           Time since transition: 4123148
      BasePriority:     227             Effective Priority:    227
      Master transitions: 1             Flags:
      Advertisement interval: 2         Router Dead Interval: 6
      VMAC Mode:       VRRP             VMAC:                 00:00:5e:00:01:23
      Primary address: 163.166.149.35
      Number of Addresses: 1
      163.166.149.33
r1-1000>

```

Standby Gateway

```

r1-1000> cphaprob state

Cluster Mode:   Sync only (OPSEC) with IGMP Membership

ID             Unique Address  Firewall State (*)
1              172.30.251.122  Active
2 (local)     172.30.251.123  Active

(*) FW-1 monitors only the sync operation and the security policy
    Use OPSEC's monitoring tool to get the cluster status
r1-1000> cphaprob -a if

CCP mode: Manual (Multicast)
eth1          sync(secured), multicast
eth1-01       non sync(non secured)
eth1-01       non sync(non secured)
eth1-02       non sync(non secured)

S - sync, LM - link monitor, HA/LS - bond type

Virtual cluster interfaces: 6

eth1-01.1491  163.166.149.36
eth1-01.1098  163.166.98.121
eth1-01.2534  163.166.5.170
eth1-02.4     163.166.150.123
eth1-01.2160  161.2.160.121
eth1-01.1494  163.166.149.129

```

```
root@kali:~# cphaprob list
```

```
There are no pnotes in problem state
```

```
root@kali:~# cphaprob syncstat
```

Delta Sync Statistics

```
Sync status: OK
```

Drops:

```
Lost updates..... 0
Lost bulk update events..... 0
Oversized updates not sent..... 0
```

Sync at risk:

```
Sent reject notifications..... 0
Received reject notifications..... 0
```

Sent messages:

```
Total generated sync messages..... 3590863
Sent retransmission requests..... 35
Sent retransmission updates..... 11
Peak fragments per update..... 1
```

Received messages:

```
Total received updates..... 236615641
Received retransmission requests..... 11
```

Sync Interface:

```
Name..... eth1
Link speed..... 1000Mb/s
Rate..... 34660 [Bps]
Peak rate..... 34660 [Bps]
Link usage..... 0%
Total..... 238095 [MB]
```

Queue sizes (num of updates):

```
Sending queue size..... 512
Receiving queue size..... 256
Fragments queue size..... 50
```

Timers:

```
Delta Sync interval (ms)..... 100
```

```
Reset on Wed Feb 1 03:11:25 2023 (triggered by fullsync).
```

```
root@36 ~ # cphaprob roles
```

```
ID          Role
1           Master
2 (local)   Non-Master
```

```
root@36 ~ # cphaprob tablestat
```

```
---- Unique IP's Table ----
```

Member	Interface	IP-Address
0	2	172.30.251.122
0	11	163.166.149.35
0	12	163.166.98.65
0	13	163.166.1.72
0	14	163.166.5.171
0	15	163.166.150.178
0	16	163.166.128.72
0	17	163.166.0.72
0	18	161.2.160.72
0	19	163.166.149.130

```
(Local)
```

1	2	172.30.251.123
1	11	163.166.149.36
1	12	163.166.98.66
1	13	163.166.1.73
1	14	163.166.5.172
1	15	163.166.150.179
1	16	163.166.128.73
1	17	163.166.0.73
1	18	161.2.160.73
1	19	163.166.149.131

```
-----
```

```
nc155007 show vrrp summary
```

VRRP State

```
VRRP Router State: Up
Flags: On,MonitorFirewall
Coldstart delay (30 seconds): completed
Interface enabled: 6
Virtual routers configured: 6
    In Init state 1
    In Backup state 5
    In Master state 0
```

```
nc155007
```

Route for VRF 28 is not showing in connected routes

```
nc155007> show route destination 163.166.149.35
Codes: C - Connected, S - Static, R - RIP, B - BGP (D - Default),
O - OSPF IntraArea (IA - InterArea, E - External, N - NSSA),
A - Aggregate, K - Kernel Remnant, H - Hidden, P - Suppressed,
U - Unreachable, i - Inactive

S          0.0.0.0/0          via 163.166.150.252, eth1-02.4, cost 0, age 774112
  > show route direct
Codes: C - Connected, S - Static, R - RIP, B - BGP (D - Default),
O - OSPF IntraArea (IA - InterArea, E - External, N - NSSA),
A - Aggregate, K - Kernel Remnant, H - Hidden, P - Suppressed,
U - Unreachable, i - Inactive

C          127.0.0.0/8          is directly connected, lo
C          161.2.160.0/24       is directly connected, eth1-01.2160
C          163.166.0.0/24       is directly connected, eth1-01.1660
                                F5 VIP VRF 28 Live PCI
C          163.166.1.0/24       is directly connected, eth1-01.1661
                                F5 VIP VRF 28 Live PCI
C          163.166.5.160/27     is directly connected, eth1-01.2534
                                Interim Inter FW interface
C          163.166.98.0/24      is directly connected, eth1-01.1098
                                inter firewall vlan
C          163.166.128.0/24     is directly connected, eth1-01.1668
                                F5 VIP VRF 29 test PCI
C          163.166.149.128/27   is directly connected, eth1-01.1494
                                transit to F5 PCIDMZ Test VRF 29
C          163.166.150.0/24     is directly connected, eth1-02.4
                                Internet dirty VLAN 4 to Internet
C          172.30.251.112/28    is directly connected, eth1
                                Sync
```



```
1997 10/27 show vrrp interface eth1-01.1491
```

```
VRRP Interface
```

```
Interface eth1-01.1491
```

```
Number of virtual routers: 1(active=0)
```

```
Flags:
```

```
Authentication: SimpleTextPassword
```

```
VRID 35
```

State:	Initialize	Time since transition:	1622932
Master: 0.0.0.0			
BasePriority:	225	Effective Priority:	225
Master transitions:	0	Flags:	Disabled
Advertisement interval:	2	Router Dead Interval:	6
VMAC Mode:	VRRP	VMAC:	00:00:5e:00:01:23
Number of Addresses: 1			
163.166.149.33			