Commands: show h through show n

show if-status

To display the interface status information, use the **show if-status** command in privileged EXEC mode.

show if-status

Command Default

None.

Command Modes

Privileged EXEC (#) (Non-Primary eRPD and Primary eRPD)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

The following is a sample output of the **show if-status** command:

```
HA-Shelf-eRPD-0/0# show if-status
Registered Cores    Interface      IP                 Status
CORE-2875071719     vbh0           120.102.22.107     OK
CORE-2381902550     vbh0           120.102.22.107     OK
```

show interface backhaul

To display the backhaul information of the Cisco Remote PHY Shelf 7200 interface, use the **show interface backhaul** command in privileged EXEC mode.

show interface backhaul

Command Default

None.

Command Modes

Privileged EXEC (#) (FCC and Line Card)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

The following is a sample output of the **show interface backhaul** command:

```
HA-Shelf-FCC# show interface backhaul
Chassis type: HA-Shelf
LC is not up, slot is  0
Slot  Interface  Status

 1    BH0       up

 1    BH1       up

 1    BH2       up

 1    BH3       up

 1    BH4       up

 1    BH5       up

 1    BH6       down

 1    BH7       down
LC is not up, slot is  2
Slot  Interface  Status

 3    BH0       up

 3    BH1       up

 3    BH2       up

 3    BH3       up

 3    BH4       up

 3    BH5       up

 3    BH6       down

 3    BH7       down
LC is not up, slot is  4
```

```
LC is not up, slot is  5
Slot  Interface  Status

 6    BH0       up

 6    BH1       up

 6    BH2       up

 6    BH3       up

 6    BH4       up

 6    BH5       up

 6    BH6       down

 6    BH7       up
LC is not up, slot is  7
LC is not up, slot is  8
Slot  Interface  Status

 9    BH0       up

 9    BH1       up

 9    BH2       up

 9    BH3       up

 9    BH4       up

 9    BH5       up

 9    BH6       up

 9    BH7       up
LC is not up, slot is  10
LC is not up, slot is  11
Slot  Interface  Status

 12    BH0       up

 12    BH1       up

 12    BH2       up

 12    BH3       up

 12    BH4       up

 12    BH5       up

 12    BH6       down

 12    BH7       down
```

show interface info

To display ethernet interface information, use the **show interface info** command in privileged EXEC mode.

show interface info

Command Default

None.

Command Modes

Privileged EXEC (#) (Line Card, Primary eRPD, and Non-Primary eRPD)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

This is a sample output of the **show interface info** command:

```
HA-Shelf-eRPD-0/0# show interface info
vbh0      Link encap:Ethernet  HWaddr BA:DB:AD:17:0C:20
          inet6 addr: fe80::b8db:adff:fe17:c20/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:660699 errors:0 dropped:0 overruns:0 frame:0
          TX packets:310359 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:62230395 (59.3 MiB)  TX bytes:37813724 (36.0 MiB)
vbh1      Link encap:Ethernet  HWaddr BA:DB:AD:17:0C:21
          inet6 addr: fe80::b8db:adff:fe17:c21/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:1549970 errors:0 dropped:0 overruns:0 frame:0
          TX packets:808438 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:131218389 (125.1 MiB)  TX bytes:85823495 (81.8 MiB)
vbh2      Link encap:Ethernet  HWaddr BA:DB:AD:17:0C:22
          inet6 addr: fe80::b8db:adff:fe17:c22/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:1456941 errors:0 dropped:0 overruns:0 frame:0
          TX packets:684850 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:123227893 (117.5 MiB)  TX bytes:68501199 (65.3 MiB)
vbh3      Link encap:Ethernet  HWaddr BA:DB:AD:17:0C:23
          inet6 addr: fe80::b8db:adff:fe17:c23/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:513973 errors:0 dropped:0 overruns:0 frame:0
          TX packets:204409 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:50659725 (48.3 MiB)  TX bytes:27145669 (25.8 MiB)
vbh4      Link encap:Ethernet  HWaddr BA:DB:AD:17:0C:24
          inet6 addr: fe80::b8db:adff:fe17:c24/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:1331676 errors:0 dropped:0 overruns:0 frame:0
          TX packets:630875 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:113642408 (108.3 MiB)  TX bytes:65867769 (62.8 MiB)
vbh5      Link encap:Ethernet  HWaddr BA:DB:AD:17:0C:25
          inet6 addr: fe80::b8db:adff:fe17:c25/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:1273297 errors:0 dropped:0 overruns:0 frame:0
          TX packets:602388 errors:0 dropped:0 overruns:0 carrier:0
```

```
collisions:0 txqueuelen:1000
RX bytes:109267735 (104.2 MiB)  TX bytes:63531613 (60.5 MiB)
```

show inventory

To display the inventory information of the Cisco Remote PHY Shelf 7200, use the **show inventory** command in privileged EXEC mode.

show inventory

Command Default

None.

Command Modes

Privileged EXEC (#) (FCC, Line Card, Primary eRPD, and Non-Primary eRPD)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

The following is a sample output of the **show inventory** command:

```
HA-Shelf-FCC# show inventory
NAME: Cisco Smart PHY 7200 HA-Shelf Chassis
PID: HA-RPHY-CHASSIS    SN: FXS220301ME      VID: 04

NAME: Cisco Smart PHY 7200 HA-Shelf Fan Control Card
PID: HA-RPHY-FAN-TRAY   SN: CAT2213E1F9      VID: 04

NAME: Cisco Smart PHY 7200 HA-Shelf PIC 0
PID: HA-RPHY-PIC        SN: CAT2213E001      VID: 04

NAME: Cisco Smart PHY 7200 HA-Shelf PIC 1
PID: HA-RPHY-PIC        SN: CAT2213E00Q      VID: 04

NAME: Cisco Smart PHY 7200 HA-Shelf PIC 2
PID: HA-RPHY-PIC        SN: CAT2213E002      VID: 04

NAME: Cisco Smart PHY 7200 HA-Shelf PIC 3
PID: HA-RPHY-PIC        SN: CAT2213E01J      VID: 04

NAME: Cisco Smart PHY 7200 HA-Shelf PIC 4
PID: HA-RPHY-PIC        SN: CAT2213E00C      VID: 04

NAME: Cisco Smart PHY 7200 HA-Shelf PIC 5
PID: HA-RPHY-PIC        SN: CAT2142E03J      VID: 04
```

show ipc

To display the interprocess communication (IPC) statistics, use the **show ipc** command in privileged EXEC mode.

show ipc

Command Default

None.

Command Modes

Privileged EXEC (#) (FCC, Primary eRPD, and Non-Primary eRPD)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

The following is a sample output of the **show ipc** command:

```
HA-Shelf-FCC# show ipc
tcp        0      0 192.168.100.200:9503    192.168.100.103:60732   ESTABLISHED 6001/hds-lcred
tcp        0      0 192.168.100.200:9512    192.168.100.112:46028   ESTABLISHED 6001/hds-lcred
tcp        0      0 192.168.100.200:9509    192.168.100.109:41552   ESTABLISHED 6001/hds-lcred
tcp        0      0 192.168.100.200:9501    192.168.100.101:47488   ESTABLISHED 6001/hds-lcred
tcp        0      0 192.168.100.200:9506    192.168.100.106:52864   ESTABLISHED 6001/hds-lcred
```

show ipv4 route

To display the IPv4 route information, use the **show ipv4 route** command in privileged EXEC mode.

show ipv4 route

Command Default

None.

Command Modes

Privileged EXEC (#) (Non-Primary eRPD and Primary eRPD)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

The following is a sample output of the **show ipv4 route**command:

```
HA-Shelf-eRPD-0/0# show ipv4 route
Kernel IP routing table
Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
default         120.102.22.3    0.0.0.0         UG    0      0        0 vbh3
default         120.102.22.3    0.0.0.0         UG    0      0        0 vbh2
default         120.102.22.3    0.0.0.0         UG    0      0        0 vbh0
default         120.102.22.3    0.0.0.0         UG    0      0        0 vbh1
default         120.102.22.3    0.0.0.0         UG    0      0        0 vbh4
default         120.102.22.3    0.0.0.0         UG    0      0        0 vbh5
10.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh3
10.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh2
10.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh0
10.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh1
10.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh4
10.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh5
20.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh3
20.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh2
20.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh0
20.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh1
20.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh4
20.0.0.0        120.102.22.3    255.0.0.0       UG    0      0        0 vbh5
120.102.22.0    *               255.255.255.0   U     0      0        0 vbh5
120.102.22.0    *               255.255.255.0   U     0      0        0 vbh4
120.102.22.0    *               255.255.255.0   U     0      0        0 vbh1
120.102.22.0    *               255.255.255.0   U     0      0        0 vbh0
120.102.22.0    *               255.255.255.0   U     0      0        0 vbh2
120.102.22.0    *               255.255.255.0   U     0      0        0 vbh3
192.168.1.0     *               255.255.255.0   U     0      0        0 vph0
192.168.2.0     *               255.255.255.0   U     0      0        0 vph1
192.168.3.0     *               255.255.255.0   U     0      0        0 vph2
192.168.4.0     *               255.255.255.0   U     0      0        0 vph3
192.168.5.0     *               255.255.255.0   U     0      0        0 vph4
192.168.6.0     *               255.255.255.0   U     0      0        0 vph5
192.168.10.0    *               255.255.255.0   U     0      0        0 l2tpvph0
192.168.11.0    *               255.255.255.0   U     0      0        0 l2tpvph1
192.168.12.0    *               255.255.255.0   U     0      0        0 l2tpvph2
192.168.13.0    *               255.255.255.0   U     0      0        0 l2tpvph3
192.168.14.0    *               255.255.255.0   U     0      0        0 l2tpvph4
192.168.15.0    *               255.255.255.0   U     0      0        0 l2tpvph5
192.168.126.0   *               255.255.255.0   U     0      0        0 vfi
```

show ipv6 address

To display the IPv6 address information, use the **show ipv6 address** command in privileged EXEC mode.

show ipv6 address

Command Default

None.

Command Modes

Privileged EXEC (#) (Non-Primary eRPD and Primary eRPD)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

The following is a sample output of the **show ipv6 address**command:

```
HA-Shelf-eRPD-0/0# show ipv6 address
vbh0@ni0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 state UP qlen 1000
    inet6 fe80::b8db:adff:fe17:c40/64 scope link
       valid_lft forever preferred_lft forever
vbh1@ni0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 state UP qlen 1000
    inet6 fe80::b8db:adff:fe17:c41/64 scope link
       valid_lft forever preferred_lft forever
```

show ipv6 route

To display the IPv6 route information, use the **show ipv6 route** command in privileged EXEC mode.

show ipv6 route

Command Default

None.

Command Modes

Privileged EXEC (#) (Non-Primary eRPD and Primary eRPD)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

The following is a sample output of the **show ipv6 route**command:

```
HA-Shelf-eRPD-0/0# show ipv6 route
Kernel IPv6 routing table
Destination                                 Next Hop                                Flags
Metric Ref    Use Iface
fe80::/64                                   ::                                      U
256    0        1 vph3
fe80::/64                                   ::                                      U
256    0        1 vph4
fe80::/64                                   ::                                      U
256    0        1 vph5
fe80::/64                                   ::                                      U
256    0        1 ni0
fe80::/64                                   ::                                      U
256    0        1 vfi
fe80::/64                                   ::                                      U
256    0        1 vph0
fe80::/64                                   ::                                      U
256    0        1 vph1
fe80::/64                                   ::                                      U
256    0        1 vph2
fe80::/64                                   ::                                      U
256    0        1 l2tpvph5
fe80::/64                                   ::                                      U
256    0        1 vbh5
fe80::/64                                   ::                                      U
256    0        1 l2tpvph3
fe80::/64                                   ::                                      U
256    0        1 l2tpvph0
fe80::/64                                   ::                                      U
256    0        1 l2tpvph4
fe80::/64                                   ::                                      U
256    0        1 l2tpvph2
fe80::/64                                   ::                                      U
256    0        1 vbh3
fe80::/64                                   ::                                      U
256    0        1 l2tpvph1
fe80::/64                                   ::                                      U
256    0        1 vbh0
fe80::/64                                   ::                                      U
256    0        1 vbh4
fe80::/64                                   ::                                      U
```

```
256    0        1 vbh2
fe80::/64                                  ::                                  U
256    0        1 vbh1
::1/128                                    ::                                  U
0      10       5 lo
fe80::/128                                 ::                                  U
0      0        2 vph3
fe80::/128                                 ::                                  U
0      0        2 vph4
fe80::/128                                 ::                                  U
0      0        2 vph5
fe80::/128                                 ::                                  U
0      0        2 vph0
fe80::/128                                 ::                                  U
0      0        2 ni0
fe80::/128                                 ::                                  U
0      0        2 vph1
fe80::/128                                 ::                                  U
0      0        2 vph2
fe80::/128                                 ::                                  U
0      0        2 vfi
fe80::/128                                 ::                                  U
0      0        2 l2tpvph5
fe80::/128                                 ::                                  U
0      0        2 vbh5
fe80::/128                                 ::                                  U
0      0        2 l2tpvph3
fe80::/128                                 ::                                  U
0      0        2 l2tpvph0
fe80::/128                                 ::                                  U
0      0        2 l2tpvph4
fe80::/128                                 ::                                  U
0      0        2 l2tpvph2
fe80::/128                                 ::                                  U
0      0        2 vbh3
fe80::/128                                 ::                                  U
0      0        2 l2tpvph1
fe80::/128                                 ::                                  U
0      0        2 vbh0
fe80::/128                                 ::                                  U
0      0        2 vbh4
fe80::/128                                 ::                                  U
0      0        2 vbh2
fe80::/128                                 ::                                  U
0      0        2 vbh1
fe80::ad:f9ff:fe30:ca1a/128                ::                                  U
0      0        2 l2tpvph3
fe80::208a:bfff:fe6a:26b0/128              ::                                  U
0      0        2 l2tpvph0
fe80::2c53:ceff:fe9c:d88b/128              ::                                  U
0      0        2 l2tpvph4
fe80::3c7f:aeff:fedf:7709/128              ::                                  U
0      0        2 l2tpvph2
fe80::3ceb:4cff:fe83:5224/128              ::                                  U
0      0        2 l2tpvph5
fe80::5405:c1ff:fe0b:6e08/128              ::                                  U
0      0        2 ni0
fe80::a833:11ff:fe66:0/128                 ::                                  U
0      0        2 vfi
fe80::a833:11ff:fe66:1/128                 ::                                  U
0      0        2 vph0
fe80::a833:11ff:fe66:2/128                 ::                                  U
0      0        2 vph1
fe80::a833:11ff:fe66:3/128                 ::                                  U
```

```
0      0        2 vph2
fe80::a833:11ff:fe66:4/128                 ::                                  U
0      0        2 vph3
fe80::a833:11ff:fe66:5/128                 ::                                  U
0      0        2 vph4
fe80::a833:11ff:fe66:6/128                 ::                                  U
0      0        2 vph5
fe80::b8db:adff:fe17:c40/128               ::                                  U
0      0        2 vbh0
fe80::b8db:adff:fe17:c41/128               ::                                  U
0      0        2 vbh1
fe80::b8db:adff:fe17:c42/128               ::                                  U
0      0        2 vbh2
fe80::b8db:adff:fe17:c43/128               ::                                  U
0      0        2 vbh3
fe80::b8db:adff:fe17:c44/128               ::                                  U
0      0        2 vbh4
fe80::b8db:adff:fe17:c45/128               ::                                  U
0      0        2 vbh5
fe80::d467:5fff:fed9:4c90/128              ::                                  U
0      0        2 l2tpvph1
ff00::/8                                   ::                                  U
256    0        1 vph3
ff00::/8                                   ::                                  U
256    0        1 vph4
ff00::/8                                   ::                                  U
256    0        1 vph5
ff00::/8                                   ::                                  U
256    0        1 ni0
ff00::/8                                   ::                                  U
256    0        1 vfi
ff00::/8                                   ::                                  U
256    0        1 vph0
ff00::/8                                   ::                                  U
256    0        1 vph1
ff00::/8                                   ::                                  U
256    0        1 vph2
ff00::/8                                   ::                                  U
256    0        1 l2tpvph5
ff00::/8                                   ::                                  U
256    111394       2 vbh5
ff00::/8                                   ::                                  U
256    0        1 l2tpvph3
ff00::/8                                   ::                                  U
256    0        1 l2tpvph0
ff00::/8                                   ::                                  U
256    0        1 l2tpvph4
ff00::/8                                   ::                                  U
256    0        1 l2tpvph2
ff00::/8                                   ::                                  U
256    1827       2 vbh3
ff00::/8                                   ::                                  U
256    0        1 l2tpvph1
ff00::/8                                   ::                                  U
256    1817       2 vbh0
ff00::/8                                   ::                                  U
256    1806       2 vbh4
ff00::/8                                   ::                                  U
256    1796       2 vbh2
ff00::/8                                   ::                                  U
256    1785       2 vbh1
```

show l2tp

To display information on Layer 2 VPN, use the **show l2tp** command in privileged EXEC mode.

show l2tp [**multicast** |**session**[*local_tunnel_id local_session_id*| **link**]| **statistics**| **tunnel**]

Syntax Description

multicast	Displays the IGMPv3 join sessions information.
session	Displays information on the Layer 2 VPN sessions.
session link	Displays the fan related information.
statistics	Displays the Layer 2 VPN error statistics.
tunnel	Displays the Layer 2 VPN tunnel information.

Command Default

None.

Command Modes

Privileged EXEC (#) (Non-Primary eRPD and Primary eRPD)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

The following is a sample output of the **show l2tp** command:

```
HA-Shelf-eRPD-0/0# show l2tp

cmd: SYSTEM_INFO

rsp: SUCCESS
retMsg: "Success"
sysInfo {
  conns {
    connectionID: 582604466
    remoteConnectionID: 3129247339
    remoteAddr: "120.102.22.17"
    localAddr: "120.102.22.120"
    hostname: "GMM"
    currentState: "established"
    localSessionID: 15990784
    localSessionID: 6553601
    localSessionID: 13893634
    localSessionID: 13893635
    localSessionID: 11796484
    localSessionID: 11796485
    localSessionID: 11796486
    localSessionID: 13893633
    localSessionID: 15990792
    localSessionID: 13893641
    localSessionID: 6553610
    localSessionID: 11796491
    localSessionID: 15990786
    localSessionID: 13893643
```

```
    localSessionID: 15990787
    localSessionID: 11796489
    localSessionID: 15990788
    localSessionID: 6553605
    localSessionID: 13893632
    localSessionID: 11796480
    localSessionID: 15990794
    localSessionID: 15990790
    localSessionID: 17039361
    localSessionID: 6553606
    localSessionID: 15990789
    localSessionID: 15990791
    localSessionID: 13893640
    localSessionID: 8650752
    localSessionID: 11796481
    localSessionID: 6553609
    localSessionID: 11796487
    localSessionID: 13893638
    localSessionID: 11796490
    localSessionID: 6553602
    localSessionID: 6553611
    localSessionID: 17039360
    localSessionID: 11796482
    localSessionID: 11796488
    localSessionID: 15990795
    localSessionID: 13893639
    localSessionID: 272695296
    localSessionID: 6553603
    localSessionID: 11796483
    localSessionID: 6553600
    localSessionID: 15990793
    localSessionID: 6553607
    localSessionID: 13893637
    localSessionID: 15990785
    localSessionID: 6553608
    localSessionID: 13893636
    localSessionID: 13893642
    localSessionID: 6553604
  }
}

HA-Shelf-eRPD-0/0# show l2tp multicast
Interface  LocalIp  Grp  Src  Status  Refcnt  Last Chg

HA-Shelf-eRPD-0/0# show l2tp session link
L2TP Tunnel Information Total tunnels 1 sessions 52
LocSessID RemSessID LocTunID  RemTunID  State Type       Link Last Chg
10410000  00009d9f  3336a80a  0b499600  est   PSP_DEPI   UP   16:03:50 2019-01-22
00840000  44020074  3336a80a  0b499600  est   BW_SCQAM   UP   16:03:50 2019-01-22
00640002  44010128  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:51 2019-01-22
00f40003  4408012c  3336a80a  0b499600  est   SPECMAN    UP   16:03:50 2019-01-22
00640004  44010130  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:50 2019-01-22
00f40005  44080134  3336a80a  0b499600  est   SPECMAN    UP   16:03:50 2019-01-22
00b40000  44040120  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:50 2019-01-22
00f40001  44080124  3336a80a  0b499600  est   SPECMAN    UP   16:03:50 2019-01-22
00b40008  44040140  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:50 2019-01-22
00f40009  44080144  3336a80a  0b499600  est   SPECMAN    UP   16:03:51 2019-01-22
00f4000a  44080148  3336a80a  0b499600  est   SPECMAN    UP   16:03:50 2019-01-22
00d4000b  4400014c  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:51 2019-01-22
00d40005  44000134  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:51 2019-01-22
00b4000b  4404014c  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:52 2019-01-22
00640003  4401012c  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:50 2019-01-22
00b40009  44040144  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:51 2019-01-22
00d40004  44000130  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:51 2019-01-22
```

```
00b40005  44040134  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:50 2019-01-22
00f40000  44080120  3336a80a  0b499600  est   SPECMAN    UP   16:03:51 2019-01-22
00d40002  44000128  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:52 2019-01-22
00640006  44010138  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:51 2019-01-22
01040001  44201074  3336a80a  0b499600  est   PSP_PNM    UP   16:03:50 2019-01-22
00b40006  44040138  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:50 2019-01-22
00d40001  44000124  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:52 2019-01-22
00b40007  4404013c  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:51 2019-01-22
00f40007  4408013c  3336a80a  0b499600  est   SPECMAN    UP   16:03:50 2019-01-22
00f40008  44080140  3336a80a  0b499600  est   SPECMAN    UP   16:03:51 2019-01-22
0064000a  44010148  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:51 2019-01-22
00b40001  44040124  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:51 2019-01-22
00640009  44010144  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:51 2019-01-22
00640005  44010134  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:51 2019-01-22
00f40006  44080138  3336a80a  0b499600  est   SPECMAN    UP   16:03:50 2019-01-22
00d4000a  44000148  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:51 2019-01-22
00f40002  44080128  3336a80a  0b499600  est   SPECMAN    UP   16:03:51 2019-01-22
0064000b  4401014c  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:51 2019-01-22
00d40000  44000120  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:50 2019-01-22
01040000  44200074  3336a80a  0b499600  est   PSP_PNM    UP   16:03:52 2019-01-22
00d40006  44000138  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:51 2019-01-22
00b40002  44040128  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:51 2019-01-22
00d40008  44000140  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:52 2019-01-22
00f4000b  4408014c  3336a80a  0b499600  est   SPECMAN    UP   16:03:51 2019-01-22
00640001  44010124  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:51 2019-01-22
00d40007  4400013c  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:51 2019-01-22
00d40003  4400012c  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:50 2019-01-22
00b40003  4404012c  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:51 2019-01-22
00640000  44010120  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:51 2019-01-22
00d40009  44000144  3336a80a  0b499600  est   MAP_SCQ    UP   16:03:52 2019-01-22
00640007  4401013c  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:52 2019-01-22
00640008  44010140  3336a80a  0b499600  est   UEPI_SCQAM UP   16:03:51 2019-01-22
00b40004  44040130  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:52 2019-01-22
00b4000a  44040148  3336a80a  0b499600  est   RNG_SCQ    UP   16:03:52 2019-01-22
00f40004  44080130  3336a80a  0b499600  est   SPECMAN    UP   16:03:51 2019-01-22
```

```
HA-Shelf-eRPD-0/0# show l2tp statistics
rsp: SUCCESS
retMsg: "Success"
stats_info {
  dispacher_stats {
    exception: 0
    error: 0
    pkt_error: 0
    zmq_error: 0
    unexpected_else: 0
  }
  halclient_stats {
    exception: 0
    error: 2
    zmq_error: 1
  }
}
```

```
HA-Shelf-eRPD-0/0# show l2tp tunnel
L2TP Tunnel Information Total tunnels 1 sessions 52
LocTunID  RemTunID  Remote Name  State  Remote Address  Local Address   Sessn Count
bb931cff  e8cc8446  GMM          est    120.102.22.17   120.102.22.116  52
```

show link-redundancy

To display the operation status of link redundancy, use the **show link-redundancy** command in privileged EXEC mode.

show link-redundancy all | **slot** *slot_id*

Syntax Description

all	Displays the link redundancy operation status of all RPD line cards.
slot *slot_id*	Displays the link redundancy operation status of a specific RPD line card.

Command Default

None.

Command Modes

Privileged EXEC (#) (FCC and Primary eRPD)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

The following is a sample output of the **link-redundancy** command for all the RPD line cards:

```
HA-Shelf-FCC# show link-redundancy all
LC 0 is not up.

LC 1 :
---------------------------
Backhaul |State   Role
---------|-----------------
0        |Active  Primary
1        |Active  Primary
2        |Active  Primary
3        |Active  Primary
4        |Active  Primary
5        |Active  Primary
6        |  -     Primary
7        |  -     Primary
---------------------------

LC 2 is not up.

LC 3 :
---------------------------
Backhaul |State   Role
---------|-----------------
0        |Active  Primary
1        |Active  Primary
2        |Active  Primary
3        |Active  Primary
4        |Active  Primary
5        |Active  Primary
6        |  -     Primary
7        |  -     Primary
---------------------------
```

```
LC 4 is not up.

LC 5 is not up.

LC 6 :
--------------------------
Backhaul |State   Role
---------|----------------
0        |Active  Primary
1        |Active  Primary
2        |Active  Primary
3        |Active  Primary
4        |Active  Primary
5        |Active  Primary
6        |  -     Primary
7        |Active  Primary
--------------------------

LC 7 is not up.

LC 8 is not up.

LC 9 :
--------------------------
Backhaul |State   Role
---------|----------------
0        |Active  Primary
1        |Active  Primary
2        |Active  Primary
3        |Active  Primary
4        |Active  Primary
5        |Active  Primary
6        |Active  Primary
7        |Active  Primary
--------------------------

LC 10 is not up.

LC 11 is not up.

LC 12 :
--------------------------
Backhaul |State   Role
---------|----------------
0        |Active  Primary
1        |Active  Primary
2        |Active  Primary
3        |Active  Primary
4        |Active  Primary
5        |Active  Primary
6        |  -     Primary
7        |  -     Primary
--------------------------
```

show logging

To display Cisco Remote PHY Shelf 7200 log buffer, use the **show logging** command in privileged EXEC mode.

show logging [**onboardcurrent** | **message** | **startup_time** | **temperature** | **voltage** | **resetlog**]

Syntax Description

current	Displays the current log.
message	Displays the obfl error message.
startup_time	Displays the board startup_time data.
temperature	Displays the temperature data.
voltage	Displays the voltage data.
resetlog	Displays the reset reason log.

Command Default

None.

Command Modes

Privileged EXEC (#) (FCC and Line Card)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

The following is a sample output of the **show logging** command:

```
HA-Shelf-FCC# show logging
Log Buffer (16 messages)

2018-12-26T17:40:06.474484+00:00 INFO  hmon Health Monitor running
2018-12-26T17:40:06.691867+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T17:45:06.466080+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T17:50:06.333826+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T17:55:06.376094+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T18:00:06.246609+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T18:05:07.055469+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T18:10:06.902042+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T18:15:06.742502+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T18:19:37.199332+00:00 INFO  shelfmgrctrl Shelf Manager received unknown control
 message from slot FCC.
2018-12-26T18:20:06.558040+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T18:25:06.361379+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T18:30:06.224301+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T18:35:07.074222+00:00 WARNING  hmon disk Usage /bootflash:88%
2018-12-26T18:40:06.727998+00:00 INFO  hmon Health Monitor running
2018-12-26T18:40:06.933981+00:00 WARNING  hmon disk Usage /bootflash:88%


HA-Shelf-FCC# show logging onboard message
2018-05-18 03:55:56     ACT2           3            ACT2 device on DMP is not programed
2018-05-18 03:55:59     ACT2           3            ACT2 device on DMP is not programed
```

```
2018-05-24 05:46:50     FCC_CMAN       3           Master RPD two inlet temperature
difference value is more than 8 degree
2018-05-25 04:14:28     FCC_CMAN       3           Master RPD two inlet temperature
difference value is more than 8 degree
2018-05-28 18:48:27     FCC_CMAN       3           Master RPD two inlet temperature
difference value is more than 8 degree
2018-06-03 16:21:57     FCC_CMAN       3           Master RPD two inlet temperature
difference value is more than 8 degree
2018-05-01 15:19:32     FCC_CMAN       3           FAN0 module is MISSING
2018-05-01 15:19:32     FCC_CMAN       3           FAN1 module is MISSING
2018-05-01 15:19:32     FCC_CMAN       3           FAN2 module is MISSING
2018-05-01 15:19:32     FCC_CMAN       3           FAN3 module is MISSING
2018-05-01 15:19:32     FCC_CMAN       3           FAN4 module is MISSING
2018-05-01 15:19:37     FCC_CMAN       3           FAN0 module is MISSING
2018-05-01 15:19:37     FCC_CMAN       3           FAN1 module is MISSING
2018-05-01 15:19:37     FCC_CMAN       3           FAN2 module is MISSING
2018-05-01 15:19:37     FCC_CMAN       3           FAN3 module is MISSING
2018-05-01 15:19:37     FCC_CMAN       3           FAN4 module is MISSING
2018-05-01 15:19:42     FCC_CMAN       3           FAN0 module is MISSING
2018-05-01 15:19:42     FCC_CMAN       3           FAN1 module is MISSING
2018-05-01 15:19:42     FCC_CMAN       3           FAN2 module is MISSING
2018-05-01 15:19:42     FCC_CMAN       3           FAN3 module is MISSING
2018-05-01 15:19:42     FCC_CMAN       3           FAN4 module is MISSING
2018-05-01 15:19:47     FCC_CMAN       3           FAN0 module is MISSING
2018-05-01 15:19:47     FCC_CMAN       3           FAN1 module is MISSING
2018-05-01 15:19:47     FCC_CMAN       3           FAN2 module is MISSING
2018-05-01 15:19:47     FCC_CMAN       3           FAN3 module is MISSING
2018-05-01 15:19:47     FCC_CMAN       3           FAN4 module is MISSING
```

show memory

To view the available and utillized memory for all line cards or a specific line card , use the **show memory** command in privileged EXEC mode.

show memory all | **slot** *slot_id*

Command Default

None.

Command Modes

Privileged EXEC (#) (FCC, Line Card, and Primary eRPD)

Command History

Release	Modification
Cisco Remote PHY Shelf 7200 Software 1.1	This command was introduced on the Cisco Remote PHY Shelf 7200.

This is a sample output of the **show memory all**command:

```
HA-Shelf-FCC# show memory all
Slot  MemoryUsed  MemoryFree
1     4092600K    1820952K
3     3813888K    2099664K
6     2396380K    3517172K
9     3554012K    2359540K
12    3877308K    2036244K
FCC   876908K     1029345K
```

This is a sample output of the **show memory slot** command.

```
HA-Shelf-FCC# show memory slot 1
Memory usage on Slot 1
-----------------------
MemUsed:      4135236K
MemFree:      1778316K
MemShared:    126800K
MemBuff:      6624K
MemCached:    324760K
```