



Configure DAA Infrastructure

This section describes how to configure your Distributed Access Architecture (DAA) infrastructure to work with the Cisco Smart PHY application.

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Configure DHCP

To establish a GCP session with the Cisco Smart PHY application, and later to be GCP-redirected to the appropriate CCAP Cores, the RPDs must first discover Smart PHY's Converged Interconnect Network (CIN) virtual IP address.

Discovery is performed using DHCP. The DHCP servers assigning leases to RPDs must include the CIN virtual IP address of Cisco Smart PHY in the suboption 61 `CCAP Cores`, under DHCP option 43.

To configure suboption 61 `CCAP Cores` under DHCP option 43, contact your DHCP software vendor.

Configure Cisco cBR-8 for Smart PHY Application

The Cisco Smart PHY application collects SNMP traps and syslog messages to determine and report the operational status of Cisco cBR-8 routers and RPDs.

Enable Syslog

Configure the Cisco cBR-8 router to send syslog messages to the Cisco Smart PHY application, including the messages for Line Card high availability (HA) events.

```
configure terminal
logging host <Smart PHY CIN Virtual IP Address> transport [tcp|udp]
port 8514
logging trap informational
cable logging layer2events
```

Enable SNMP Traps

Configure the Cisco cBR-8 router to send syslog and SNMP messages to the Cisco Smart PHY application.

The Cisco Smart PHY application uses syslog messages to monitor the state of the RPD on the Cisco cBR-8 router. Run the following command on the Cisco cBR-8 router:

```
configure terminal
snmp-server host <Smart PHY CIN Virtual IP address> version 2c public udp-port <port-number>
```

Configure Cable Service Profile-Group

Configure the Cable Service Profile-Group on the Cisco cBR-8 router. The following is a sample of how to configure the Service Profile-Group:



Note The number for US bonding groups must be a 2 or 4.

```
cable profile mac-domain test_MD
  cable ip-init dual-stack
  cable privacy accept-self-signed-certificate
  cable privacy skip-validity-period
  !
  !
cable profile wideband-interface test_WB
  cable downstream attribute-mask 80000001
  !
  !
cable profile downstream test_DS
  cable rf-bandwidth-percent 20
  !
  !
cable profile service-group test_SG1
  cable bundle 2
  mac-domain 0 profile test_MD
  downstream sg-channel 0-23 profile test_DS
  upstream 0 sg-channel 0
  upstream 1 sg-channel 1
  upstream 2 sg-channel 2
  upstream 3 sg-channel 3
  upstream 4 sg-channel 4
  upstream 5 sg-channel 5
  us-bonding-group 1
    upstream 0
    upstream 1
    upstream 2
    upstream 3
  us-bonding-group 2
    upstream 2
    upstream 3
    upstream 4
    upstream 5

wideband-interface 0 profile test_WB
  downstream sg-channel 0-23 rf-bandwidth-percent 20
```