

Monitor and Troubleshoot

Following are some troubleshooting tips for installing and using the Cisco Smart PHY.

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Monitor Host Resources

Use the Grafana dashboard for monitoring host resources.

Go to Cisco Operations Hub main menu > Dashboards.

The Gallery page opens. The following two types of dashboards are available:

- · Operations Hub Dashboard: Capturing Kubernetes, Open Source, Infrastructure, and KPI metrics.
- User Created Dashboards: Customized dashboards (if any).

Debug RPD SSD on Cisco Smart PHY

The SSD related logs in Cisco Smart PHY application are available at: /var/log/rpd-service-manager/rpd-service-manager.log.

Check SSD on NSO

The Cisco Network Services Orchestrator (NSO) supports the SSD profile from the iosNed 6.28.

- 1. Access the robot-cfgsvc container and check the SSD configuration on the NSO side.
- 2. Wait until the device moves into in-sync.

```
router# devices device _DEVICE_20.5.30.13 check-sync
result out-of-sync
```

```
info got: 4a0ba9b4ecdaa8710a9202e8656bfe82 expected: c22a63a573c84e40clad5e735888461c
router# devices device _DEVICE_20.5.30.13 check-sync
result in-sync
show running-config devices device _DEVICE_20.5.30.13 | begin ssd
ios:cable profile ssd 1
    ssd 12.2.2.2 tftp xxx
  !
    ios:cable profile ssd 2
    description ssd 2
    ssd 10.1.1.1 tftp abc
```

The SSD configuration on NSO must be the same as with the Cisco cBR-8 router.

Check SSD using RestAPI

1. Get the SSD profiles, which are read by NSO from the Cisco cBR-8 router, use the **query-core-details** command.

```
https://{{controller}}:{{new-port}/rpd-service-manager/rpdorch/v2/core-topology/query-core-details
Output:
```

SSD profile info must be the same as that with the Cisco cBR-8 router.

```
Input:
{
  "ipAddress": "10.0.0.1"
}
Result:
{
    "status": "Success",
    "coreList": [
        {
             "ipAddressList": [
                 "10.0.0.1"
             ],
             "uuid": " DEVICE 10.0.0.1",
             "gpsLocation": {},
             "hostName": "NG03.cisco.com",
             "interfacesList": [...],
             "virtualSGs": [],
             "ndfProfiles": {},
             "ndrProfiles": {},
             "ssdProfiles": [
                 {
                     "id": 1,
                     "name": "xxx"
                 },
                 {
                     "id": 2,
                     "name": "abc"
                 },
                 {
                     "id": 3,
                     "name": "aaa"
                 },
                 {
                     "id": 4,
                     "name": "abcdef"
                 },
                 {
```

```
"id": 5,
             "name": "abbbc"
        },
        {
             "id": 6,
             "name": "acde"
        },
        {
             "id": 7,
             "name": "xxx"
        },
         {
             "id": 9,
             "name": null
        },
        {
             "id": 10,
             "name": "abcc"
        }
    ],
    "state": "ONLINE",
    "productType": "CBR-8-CCAP-CHASS",
    "swVersion": "16.10.1f",
    "vendorName": "Cisco",
    "protectedLC": -1
}
```

2. Check the RPD paring details, use the query-rpd-pairing command.

https://{{controller}}:{{new-port}/rpd-service-manager/rpdorch/v2/rpd-pairing/query-rpd-pairing

Output:

]

}

The value of ssdProfileId must be correct.

```
Input:
{
}
Result:
{
    "status": "Success",
    "rpdPairingRspList": [
        {
            "macAddress": "aabb11112124",
            "name": "1",
            "serviceTemplate": "C02",
            "approvalState": "Approved",
            "assignedCores": [
                {
                    "serviceType": "Data",
                    "mgmtCore": "C02.cisco.com",
                    "rpdConnectionInterface": "TenGigabitEthernet7/1/0",
                    "primaryUsPort": 1
                }
            ],
            "pairingChangeTimestamp": 1563823890549,
            "description": "",
            "state": "ResourceAllocationError",
            "gpsLocation": {
                "latitude": 77,
                "longitude": 99,
                "genericLocation": "Shanghai"
```

}

```
},
"ssdProfileId": 1
}
],
"nextFrom": null
```

3. Verify the SSD profile ID and the image name in the Edit window of the RPD paring table.

Over	view	RPD	Assign	Edit - N	IK_DB_D	UMMY_0	7							×	
Assign Service Definitions				RPD P	arameters	🗆 sh	ielf 🛈								
Associate RPDs				RPD Name * MK_DB_DUMMY_07				Latitude -90 to 90						Select	
Ð	0	0	7	RPD MAC	* a0f8.496f.611	7		Longitude -180 to 18	0						
				Node Seg	mentation * 2x2		Ŧ	RPD Description hh u	h uhu						ilt Pi
	□			Service Definition CBR_37 v			Cable DSG TGs 1 to 65535. Separate with ';'								
				Disable N	etwork Delay no		Ŧ								
	×	-	-												
		-		✓ Data / Principal Core				First Logical DS/US Pairing Second Logical DS/US Pairing						- 1	
				Principal (Principal Core sphy-c2.cisco.com v			Downstream Physical Port 0 v			Downstream Physical Port 1				
	0		/ N	Principal Core Interface TenGigabitEthernet6/1/0 v			Upstream Physical Port 0			Upstream Physical Port 1					
				SSD Profile 🗸 1 - ssd_171				DS Data Service Group DS_SG2 DS			S Data Service Group DS_SG2				
								US Data Service Group	US_SG2	US C	ata Service Group	US_SG2			
	0	~	́м	∧ Vide	o Configuratic	on									
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				OOB & Additional Core Configuration											
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	~														
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	×	_		DUMMY_07	a0f8.496f.6117	1 - ssd_171	2x2	CBR_37	sphy-c2.cisco.com	TenGigabitEthernet6		0			
											1	1			
	0	~	MK_DB_	DUMMY_01	a0f8.496f.6100	1 - ssd_171	1x1	CBR_171	sphy-c2.cisco.com	TenGigabitEthernet8	/1/2 0	0	25	0	

4. Verify whether the RPD Details contain the SSD command.



Check SSD on Cisco cBR-8

Run the following command to check the SSD on the Cisco cBR-8 router.

```
cable rpd PRPD
identifier a0f8.496f.6506
type shelf
rpd-ds 0 base-power 25
rpd-ds 1 base-power 25
core-interface Te9/1/6
principal
rpd-ds 0 downstream-cable 9/0/16 profile 100
rpd-us 0 upstream-cable 9/0/1 profile 4
r-dti 2
rpd-event profile 0
ssd 1
rpd-55d1-us-event profile 0
```

Debug SSD on Cisco cBR-8

Use the following command to check the upgrading state on the Cisco cBR-8 router.

cable rpd xxxx.xxxx ssd status

DEPI Latency Measurement in Service Template

If a Service Template is already in use, you can update only the DLM fields (Static delay, DLM sampling value, Measure Only) and the existing behavior is maintained for all other fields.

Following operations are allowed when Service Template is already in use:

• If there is no existing DLM configuration in the service template, you can add network-delay static <delay-val>, network-delay dlm <interval>, and network-delay dlm <interval><measure-only>.

If the network-delay static <delay-val> is configured in the service template, the user can modify the <delay-val> for static.

If the network-delay dlm <interval> is configured in the service template, the user can modify the dlm <interval> and <measure-only> parameters.

If the network-delay dlm <interval><measure-only> is configured in the service template, the user can modify only the dlm <interval>.

The RPD detailed information contains the DLM command.

Before you update a Service Definition, you should check whether any Cisco cBR-8 line cards are in a high availability state an active secondary line card.

The DLM configuration gets automatically applied to all RPDs assigned to the Service Definition. However, the RPD configuration is rejected if the Cisco cBR-8 line card for DOCSIS controllers is in high availability mode. In addition, because this operation might take more time, you may see a network connectivity issue.

After updating a Service Definition, you should check the RPD service manager logs for errors. To recover an RPD with a configuration rejection or error, do the following:

- If the secondary line card is active:
- **1.** Revert to the primary line card.
- 2. Wait until the primary line card is active
- For each RPD with a configuration rejection or error:
- 1. From the **RPD** Assignment page, click Edit for that RPD.
- 2. On the Edit page, click Save.

Check New DLM Configuration on Cisco cBR-8

```
cable rpd <RPD Name>
identifier a0f8.496f.6506
type shelf
rpd-ds 0 base-power 25
rpd-ds 1 base-power 25
core-interface Te9/1/6
principal
rpd-ds 0 downstream-cable 9/0/16 profile 100
rpd-us 0 upstream-cable 9/0/1 profile 4
network-delay dlm 100
r-dti 2
rpd-event profile 0
```

ssd 1
rpd-55d1-us-event profile 0
!