Best Practices

This section provides some best practices that you can follow for configuring and using the Cisco Smart PHY application.

Best Practices

System and Cluster Recommendations

On multinode installations, we recommend exporting DB data to a remote server. Do not export the DB data to a local host, because the local host may be any of the three worker nodes.

Do not use `systemctl network restart` or `ifup` and `ifdown` commands. `keepalived` does not monitor these Linux commands. Hence, use the following commands as `keepalived` monitors them:

- `ip link set down dev <interface>`

- `ip link set up dev <interface>`

Smart PHY Application User Recommendations

Cisco cBR Router

- The Cisco cBR router IP address used in the Cisco Smart PHY application should belong to the interface which the router uses to send SNMP traps.

- Use the following Cisco cBR router command to configure the SNMP trap source: `snmp-server trap-source <interface>`

- We recommend that you should not enter the Cisco cBR-8 hostname in the application. The Cisco Smart PHY application retrieves the hostname, after it connects to the Cisco cBR-8 router. Retrieving the hostname prevents any human errors due to incorrect entries of hostname or the IP address.

- In case of a network outage or loss of connectivity, make sure that the Cisco cBR-8 router is online on the Smart PHY application before modifying the RPD associations.

- Unprovision all RPDs assigned to a Cisoc cBR-8 router before deleting the router from the Smart PHY application.

RPD Provisioning

- When MD splitting is enabled, clear RPDs in the RPD Assignment UI before making changes to the existing RPD assignments. Make sure that all cleared RPDs are in Installed, Inventory, or NotProvisioned state before provisioning them again. If the RPD status does not change, manually verify whether the RPD and fiber node configurations are cleared on the Cisco cBR-8 router.

- Modifications to RPDs provisioning do not require clear or delete. Except for the above mentioned scenario, RPD fields should be modified directly via API/UI/CSV uploads.

- In case of clear of RPDs, make sure that the RPDs have reached the Installed, Inventory, or the NotProvisioned state before provisioning them again. If you are deleting RPDs, make sure that the delete transactions are complete before provisioning them again.

- If pilot-tone is being configured for the RPDs, we recommend that not more than 10 RPDs be provisioned in one CSV upload or REST API call. The Cisco cBR-8 router needs more time to configure RPDs with the pilot-tone and it will reject all subsequent RPD configurations if there are more than 10 pending RPD transactions in the Cisco cBR-8 router internal queue.

- Any assignment or configuration change to an online RPD will result in the RPD service being interrupted. We recommend that you provision all needed parameters before the RPD is brought Online.