



# Best Practices

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

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## Best Practices

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>`

### System and Cluster Recommendations

On multinode installations, we recommend exporting the Database to a remote server. Exporting the Database to the local Operations Hub cluster isn't recommended because the Database could be saved on any one of the three worker nodes.

### Smart PHY Application User Recommendations

#### Cisco cBR Router

- The Management IP address that is configured in Smart PHY's Inventory should belong to the interface the cBR-8 router uses to send SNMP traps.
- Use the following cBR-8 router command to configure the SNMP trap source: `snmp-server trap-source <interface>`
- We advise against specifying a device name when adding a cBR-8 router to Smart PHY's Inventory. Smart PHY automatically retrieves the hostname and uses it as the router's device name after it connects to the cBR-8 router. Retrieving the hostname prevents any human errors due to incorrect entries of hostname or the IP address.
- If there is a network outage or loss of connectivity, confirm the cBR-8 router's state is *Online* in Smart PHY before modifying the RPD associations.
- Unprovision all RPDs assigned to a cBR-8 router before deleting the router from Smart PHY.

### 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 rejects all subsequent RPD configurations if there are more than ten pending RPD transactions in the Cisco cBR-8 router internal queue.
- Any assignment or configuration change to an online RPD results in the RPD service being interrupted. We recommend that you provision all needed parameters before the RPD is brought Online.