Downgrading from Cisco Remote PHY for Cisco 1x2 / Compact Shelf RPD Software 6.4

Downgrading RPD and cBR-8 Router

The following scenarios are supported in downgrading the RPD and cBR-8 router.

cBR-8 original version	RPD original version	RPD state before upgrade	cBR-8 upgrade version	RPD upgrade version	RPD state after upgrade
16.10.1d	6.4	online	Lower than 16.10.1d	Lower than 6.4	online
16.10.1d	6.43	online	Lower than 16.10.1d	Lower than 6.4	init(gcp)

Note   The versions of Cisco cBR-8 router and RPD must be compatible. That is Cisco IOS XE 16.6.x works with RPD 2.x, IOS XE 16.7.x works with RPD 3.x, IOS XE 16.8.x works with RPD 4.x, IOS XE 16.9.x works with RPD 5.x and IOS XE 16.10.x works with RPD 6.x. If the versions are not matched, RPD is then in the `init(gcp)` state.

Before you begin

Before downgrading the system, make sure the following requirements are met:

- Download two files from the following Cisco.com Software Center URL:

  - IOS XE Software: https://software.cisco.com/download/home/286283913/type

    - IOS XE Software Version 16.9.1: **cbrsup-universalk9.16.09.01.SPA.bin**,

    - IOS XE Software Version 16.8.1: **cbrsup-universalk9.16.08.01.SPA.bin**,

- IOS XE Software Version 16.7.1: **cbrsup-universalk9.16.07.01.SPA.bin**, or

- IOS XE Software Version 16.6.1: **cbrsup-universalk9.16.06.01.SPA.bin**

- RPD Software: https://software.cisco.com/download/home/286316518/type

   - RPD V6.3: **RPD-V6-3.itb.SSA**

   - RPD V6.2: **RPD-V6-2.itb.SSA**

   - RPD V6.1: **RPD-V6-1.itb.SSA**

   - RPD V5.4: **RPD-V5-4.itb.SSA**

   - RPD V5.3: **RPD-V5-3.itb.SSA**

   - RPD V5.2: **RPD-V5-2.itb.SSA**

   - RPD V5.1.0: **RPD-V5-1.itb.SSA**

   - RPD V4.1.1: **RPD-V4-1-1.itb.SSA**,

   - RPD V3.1.1: **RPD-V3-1-1.itb.SSA**, or

   - RPD V2.1: **RPD-V2.1_20170725011837.itb.rel.sign.SSA**

- Console access for both SUPs are required.

Note For more information about upgrading the cBR-8 router, see https://www.cisco.com/c/en/us/td/docs/cable/cbr/upgrade/guide/b_cbr_upgrade_16_10.html.

Step 1 Copy Cisco IOS XE software package to bootflash: and stby-bootflash:.

```
copy <location>/<ios_xe_software_file> bootflash:
copy <location>/<ios_xe_software_file> stby-bootflash:
```

Step 2 Verify Cisco IOS XE software package against the md5 hash as provided in the Cisco.com Software center.

```
verify /md5 bootflash:<ios_xe_software_file>
verify /md5 stby-bootflash:<ios_xe_software_file>
```

Step 3 Backup the current running config to bootflash:.

```
copy running-config bootflash:pre-upgrade.cfg
```

Step 4 Check the system status prior to upgrade. It is recommended that the information is saved to compare against the system status after upgrade. For commands that are used to check the status, see the **show** commands at the end of this section.

Step 5 Copy the Cisco RPD image package to a TFTP server that is accessible by the RPDs.

Step 6   Verify the current RPD software version.

```
show cable rpd sw-version
```

Step 7   Downgrade all RPDs image via SSD from cBR-8.

cable rpd all ssd <tftp_server_ip> tftp <rpd_file_path>

Note   The **all** command is not recommended in large scale RPD deployment. If you have many RPDs, it is recommended to upgrade the RPD per line card or per OUI.

Step 8   Verify the RPD SSD status. It will show the status as downloading.

```
cable rpd all ssd status
```

Step 9   Verify that all RPDs have downloaded the new image.

```
cable rpd all ssd status
show cable rpd
```

Step 10   Configure the chassis to boot the system with target Cisco IOS XE image. Save the running configuration.

```
Configure terminal
no boot system
boot system bootflash:<ios_xe_software_file>
config-register 0x2102
end
copy running-config startup-config
```

Step 11   Reload and start the cBR-8 router.

```
Reload
```

Step 12   Check that all the RPDs have been downgraded to the target version and that they are online.

```
show cable rpd
show cable rpd sw-version
```

What to do next

These **show** commands might be used during the verification test:

- **show version**
- **show platform**
- **show platform diag**
- **show environment**

- **show environment power**

- **show platform hardware slot P <0-5> mcu status**

- **show facility-alarm status**

- **show redundancy**

- **show redundancy line card all**

- **show ip ospf neighbor**

- **show cable modem voice**

- **show cable calls**

- **show cable licenses all**

- **show inventory**

- **show log**

- **show cable rpd**

- **show cable modem summary total**

- **show cable rpd lcha**

- **show running**

- **show tech**

Downgrading RPD Only

Before you begin

Before downgrading the system, make sure the following requirements are met:

- Download new image file from the following Cisco.com Software Center URL:

  https://software.cisco.com/download/home/286316518/type

  - RPD V6.3: **RPD-V6-3.itb.SSA**

  - RPD V6.2: **RPD-V6-2.itb.SSA**

  - RPD V6.1: **RPD-V6-1.itb.SSA**

  - RPD V5.4: **RPD-V5-4.itb.SSA**

  - RPD V5.3: **RPD-V5-3.itb.SSA**

  - RPD V5.2: **RPD-V5-2.itb.SSA**

  - RPD V5.1.0: **RPD-V5-1.itb.SSA**

  - RPD V4.1.1: **RPD-V4-1-1.itb.SSA**,

  - RPD V3.1.1: **RPD-V3-1-1.itb.SSA**, or

• RPD V2.1: **RPD-V2.1_20170725011837.itb.rel.sign.SSA**

Step 1 Copy the Cisco RPD image package to a TFTP server that is accessible by the RPDs.

Step 2 Verify the current RPD software version.

```
show cable rpd sw-version
```

Step 3 Downgrade all RPDs image via SSD.

cable rpd all ssd <tftp_server_ip> tftp <rpd_file_path>

Note The **all** command is not suggested in large scale RPD deployment. If you have too many RPDs, it is recommended to upgrade the RPD per line card or per OUI.

Step 4 Verify the RPD SSD status. It will show the status as downloading.

```
cable rpd all ssd status
```

Step 5 Verify that all RPDs have downloaded the new image.

```
cable rpd all ssd status
show cable rpd
```

Step 6 Check that all the RPDs have been downgraded to the target version and that they are online.

```
show cable rpd
show cable rpd sw-version
```

What to do next

These **show** commands might be used during the verification test:

- **show version**
- **show platform**
- **show platform diag**
- **show environment**
- **show environment power**
- **show platform hardware slot P <0-5> mcu status**
- **show facility-alarm status**
- **show redundancy**

- **show redundancy line card all**

- **show ip ospf neighbor**

- **show cable modem voice**

- **show cable calls**

- **show cable licenses all**

- **show inventory**

- **show log**

- **show cable rpd**

- **show cable modem summary total**

- **show cable rpd lcha**

- **show running**

- **show tech**

Downgrading cBR-8 Router Only

The following scenarios are supported in downgrading the cBR-8 router.

cBR-8 original version	RPD version	RPD state before upgrade	cBR-8 upgrade version	RPD state after upgrade
16.10.1d	Lower than 6.4	init(gcp)	Lower than 16.10.1d	online

Before you begin

Before downgrading the system, make sure the following requirements are met:

- Download new image file from the following Cisco.com Software Center URL:

  https://software.cisco.com/download/home/286283913/type

  - IOS XE Software Version 16.9.1: **cbrsup-universalk9.16.09.01.SPA.bin**,

  - IOS XE Software Version 16.8.1: **cbrsup-universalk9.16.08.01.SPA.bin**,

  - IOS XE Software Version 16.7.1: **cbrsup-universalk9.16.07.01.SPA.bin**, or

  - IOS XE Software Version 16.6.1: **cbrsup-universalk9.16.06.01.SPA.bin**

- Console access for both SUPs are required.

Note For information about upgrading the cBR-8 router, see https://www.cisco.com/c/en/us/td/docs/cable/cbr/upgrade/guide/b_cbr_upgrade_16_9.html.

Step 1   Copy Cisco IOS XE software package to bootflash: and stby-bootflash:.

```
copy <location>/<ios_xe_software_file> bootflash:
copy <location>/<ios_xe_software_file> stby-bootflash:
```

Step 2   Verify the Cisco IOS XE software package against the md5 hash as provided in the Cisco.com Software center.

```
verify /md5 bootflash:<ios_xe_software_file>
verify /md5 stby-bootflash:<ios_xe_software_file>
```

Step 3   Backup the current running config to bootflash:.

```
copy running-config bootflash:pre-upgrade.cfg
```

Step 4   Check system status prior to downgrade. It is recommended that the information is saved to compare against the system status after upgrade. For the commands to use to check the status, see the **show** commands at the end of this section.

Step 5   Configure the chassis to boot the system with target Cisco IOS XE image and save the running configuration.

```
Configure terminal
no boot system
boot system bootflash:<ios_xe_software_file>
config-register 0x2102
end
copy running-config startup-config
```

Step 6   Reload and start the cBR-8 router.

```
Reload
```

Step 7   Check that all the RPDs are successfully online.

```
show cable rpd
show cable rpd sw-version
```

What to do next

The following **show** commands might be used during the verification test:

- **show version**
- **show platform**
- **show platform diag**
- **show environment**
- **show environment power**

- **show platform hardware slot P <0-5> mcu status**

- **show facility-alarm status**

- **show redundancy**

- **show redundancy line card all**

- **show ip ospf neighbor**

- **show cable modem voice**

- **show cable calls**

- **show cable licenses all**

- **show inventory**

- **show log**

- **show cable rpd**

- **show cable modem summary total**

- **show cable rpd lcha**

- **show running**

- **show tech**