Downgrade from Cisco 1x2 / Compact Shelf RPD Software 9.x

Downgrade Cisco RPD and Cisco cBR-8 Router

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

Cisco cBR-8 Original Version	Cisco RPD Original Version	Cisco RPD State Before Upgrade	Cisco cBR-8 Upgrade Version	Cisco RPD Upgrade Version	Cisco RPD State After Upgrade
17.3.1x	9.x	online	Lower than 17.3.1x	Lower than 9.x	online
17.3.1x	9.x	online	Lower than 17.3.1x	Lower than 9.x	init(gcp)

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 17.3.1w
        - IOS XE Software Version 17.2.x
        - IOS XE Software Version 16.12.x
        - IOS XE Software Version 16.10.x
        - IOS XE Software Version 16.9.x
        - IOS XE Software Version 16.8.x
        - IOS XE Software Version 16.7.x
        - IOS XE Software Version 16.6.x

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

- • RPD Software Version 9.x
- • RPD Software Version 8.x
- • RPD Software Version 7.x
- • RPD Software Version 6.x
- • RPD Software Version 5.x
- • RPD Software Version 4.x
- • RPD Software Version 3.x
- • RPD Software Version 2.x

• Console access for both SUPs are required.

Downgrade Procedure for Cisco RPD and Cisco cBR-8 Router

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.

We recommend that you save the information to compare against the system status after the 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.

Step 7

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

Step 8 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 9 Verify the RPD SSD status. It will show the status as downloading.

```
cable rpd all ssd status
```

Step 10 Verify that all RPDs have downloaded the new image.

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

Step 11 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 12 Reload and start the cBR-8 router.

```
Reload
```

Step 13 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
```

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**

Downgrade Cisco RPD

Before you begin

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 Software Version 9.x

  - RPD Software Version 8.x

  - RPD Software Version 7.x

  - RPD Software Version 6.x

  - RPD Software Version 5.x

  - RPD Software Version 4.x

  - RPD Software Version 3.x

  - RPD Software Version 2.x

SUMMARY STEPS

1. Copy the Cisco RPD image package to a TFTP server that is accessible by the RPDs.
2. Verify the current RPD software version.
3. Downgrade all RPDs image via SSD.
4. Verify the RPD SSD status. It will show the status as downloading.
5. Verify that all RPDs have downloaded the new image.

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

DETAILED STEPS

	Command or Action	**Purpose**
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`
		
		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**

	Command or Action	Purpose
		• **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**

Downgrade Cisco cBR-8 Router

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
17.3.1x	Lower than 9.x	init(gcp)	Lower than 17.3.1x	online

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 17.3.1w

    - IOS XE Software Version 17.2.x

    - IOS XE Software Version 16.12.x

    - IOS XE Software Version 16.10.x

    - IOS XE Software Version 16.9.x

    - IOS XE Software Version 16.8.x

    - IOS XE Software Version 16.7.x

    - IOS XE Software Version 16.6.x

- Console access for both SUPs are required.

Note   For information on how to downgrade the cBR-8 router, see Upgrading the Cisco cBR Series Converged Broadband Routers for Cisco IOS XE Amsterdam 17.3.x.

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**