



# Cisco Remote PHY Shelf 7200 Software 1.3

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## Upgrading to Cisco Remote PHY Shelf 7200 Software 1.3

### Upgrading Cisco Remote PHY Shelf 7200 and cBR-8 Router

#### Before you begin

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

- All eRPDs are online.
- Download two files from Cisco.com Software Center:
  - IOS XE Software Version 17.3.1x: [cbrsup-universalk9.17.03.01x.SPA.bin](#)
  - Cisco Remote PHY Shelf 7200 Software 1.3: [HA-SHELF-V1-3.itb](#)
  - Cisco Remote PHY Shelf 7200 Firmware 1.3: [hashelf\\_firmware-V1.3\\_20201215093439.pkg](#)
- Console access for both SUPs are required.



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**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\\_17\\_3.html](https://www.cisco.com/c/en/us/td/docs/cable/cbr/upgrade/guide/b_cbr_upgrade_17_3.html).

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**Step 1** Copy Cisco RPHY Shelf 7200 1.3 Firmware package to HTTP or TFTP server that RPDs can reach to.

**Step 2** Telnet to FCC to upgrade FCC UBoot.

```
upgrade hw-programmable fcc uboot tftp <tftp_server_ip> hashelf_firmware-V1.3_20201215093439.pkg
```

**Step 3** Reboot FCC as required in previous step output.

**Step 4** After bootup, check UBoot version.

```
HA-Shelf-FCC#show platform diag
Chassis type: HA-RPHY-CHASSIS

HA-RPHY-FAN-TRAY:
  State                : OK
  Software declared up time : 30 minutes, 54 seconds
  Primary UBoot         : 200821 *
  Golden UBoot          : 180508
  IOFPGA version        : a209 (Primary)
  EOBC version          : 1.01
```

**Step 5** Copy Cisco IOS XE Amsterdam 17.3.1x package to bootflash: and stby-bootflash:.

```
copy <location>/cbrsup-universalk9.17.03.01x.SPA.bin bootflash:
copy <location>/cbrsup-universalk9.17.03.01x.SPA.bin stby-bootflash:
```

**Step 6** Verify Cisco IOS XE Amsterdam 17.3.1x package against the md5 hash as provided in the Cisco.com Software center.

```
verify /md5 bootflash:cbrsup-universalk9.17.03.01x.SPA.bin.SPA.bin
verify /md5 stby-bootflash:cbrsup-universalk9.17.03.01x.SPA.bin
```

**Step 7** Backup current running config to bootflash:.

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

**Step 8** Check system status prior to upgrade. Save the information 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.

**Note** Cisco recommends using HTTP server to upgrade RPHY Shelf 7200.

**Step 9** Copy Cisco RPHY Shelf 7200 1.3 image package to HTTP or TFTP server that RPDs can reach to.

**Step 10** Verify current RPHY Shelf 7200 software version.

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

**Step 11** Upgrade one or more RPHY Shelf image to 1.3 release from cBR-8.

To upgrade one RPHY Shelf image using HTTP server, run this command:

```
cable rpd group <HA-Shelf_chassis_base_mac> upgrade <http_server_ip> http
<HA_Shelf_v1.3_file_path>
```

To upgrade one RPHY Shelf image using TFTP server, run this command:

```
cable rpd group <HA-Shelf_chassis_base_mac> upgrade <tftp_server_ip> tftp
<HA_Shelf_v1.3_file_path>
```

To retrieve the RPHY Shelf 7200 base MAC address, run the **show cable rpd group** command. The Group ID column displays the base mac address for the respective HA Shelf 7200 chassis. If there is a primary RPD in the RPD group, which means the M column in the command output displays Y as shown below, you can upgrade the image of the RPD group.

```

Router#show cable rpd group
Load for five secs: 4%/1%; one minute: 6%; five minutes: 6%
No time source, *09:05:11.393 CST Mon Jun 3 2019
Codes: M-Master
MAC Address      IP Address      I/F      State  Group Id      Slot  M Name
a0f8.496f.f566  120.102.22.198 Te6/1/2  online 0027.900a.4c1a 1      N rphy61
a0f8.496f.f5f0  120.102.22.199 Te6/1/2  online 0027.900a.4c1a 2      Y rphy62
7abd.44a1.0083  120.102.22.194 Te7/1/7  online 7abd.44a1.0000 3      N erpd33
7abd.44a1.0082  120.102.22.193 Te7/1/7  online 7abd.44a1.0000 3      N erpd32
7abd.44a1.0085  120.102.22.196 Te7/1/7  online 7abd.44a1.0000 3      Y erpd35
7abd.44a1.0084  120.102.22.195 Te7/1/7  online 7abd.44a1.0000 3      N erpd34
7abd.44a1.0081  120.102.22.192 Te7/1/7  online 7abd.44a1.0000 3      N erpd31
badb.ad17.0c20  120.102.22.102 Te6/1/7  online badb.ad17.0c00 0      N f02-00
badb.ad17.0c21  120.102.22.101 Te6/1/7  online badb.ad17.0c00 0      N f02-01
badb.ad17.0c24  120.102.22.106 Te6/1/7  online badb.ad17.0c00 0      N f02-04
badb.ad17.0c22  120.102.22.104 Te6/1/7  online badb.ad17.0c00 0      N f02-02
badb.ad17.0c23  120.102.22.105 Te6/1/7  online badb.ad17.0c00 0      Y f02-03
badb.ad17.0c25  120.102.22.109 Te6/1/7  online badb.ad17.0c00 0      N f02-05

```

To upgrade all RPHY Shelf images using HTTP server, run this command

```
cable rpd group all upgrade <http_server_ip> http <HA_Shelf_V1.3_file_path>
```

To upgrade all RPHY Shelf images using TFTP server, run this command

```
cable rpd group all upgrade <tftp_server_ip> tftp <HA_Shelf_V1.3_file_path>
```

**Step 12** Verify one or more RPHY Shelf 7200 chassis status.

To verify one RPHY Shelf 7200 chassis status, run this command.

```
cable rpd group <chassis base mac> upgrade status
```

To verify all RPHY Shelf 7200 chassis status, run this command.

```
cable rpd group all upgrade status
```

**Step 13** Configure the chassis to boot the system with Cisco IOS XE Amsterdam 17.3.1x image and save running-configuration.

```

Configure terminal
no boot system
boot system bootflash:cbrsup-universalk9.17.03.01x.SPA.bin
config-register 0x2102
end
copy running-config startup-config

```

**Step 14** Reload and bring up the cBR-8 router.

```
Reload
```

**Step 15** Adjust RPHY Shelf 7200 max-carrier and type, re-apply rpd-ds base-power for each RPHY Shelf 7200, save and backup current running-config.

```

cBR8(config)#cable rpd shelf-1-1
cBR8(config-rpd)#rpd-ds 0 base-power ?
  <20-22> Base Channel Power Value in dBmV

cBR8(config-rpd)#type shelf
cBR8(config-rpd)#rpd-ds 0 max-carrier 16
cBR8(config-rpd)#rpd-ds 0 base-power ?
  <37-46> Base Channel Power Value in dBmV

```

```
cBR8(config-rpd)#rpd-ds 0 base-power x //depends on customer real env
cBR8(config-rpd)#end
cBR8#copy running-config startup-config
cBR8#copy running-config bootflash:post-upgrade.cfg
```

**Step 16** To check if all RPHY Shelf 7200 chassis have been upgraded to new version 1.3 and come online successfully you can either:

Telnet to FCC IP and run the **show version** command or

To check if one or more RPHY Shelf 7200 chassis have been upgraded, SSH to the eRPD and run the show version command.

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### What to do next

These **show** commands may be useful in the verification test:

- **select erpd slot *slot\_id* index *index\_id***— RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- **select linecard slot *slot\_id***— RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- **show version**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform diag**— Supported on cBR-8 and RPHY Shelf 7200
- **show environment**— Supported on cBR-8
- **show environment all | alarms**— Supported on RPHY Shelf 7200
- **show environment power**— Supported on cBR-8
- **show platform hardware slot P <0-5> mcu status**— Supported on cBR-8
- **show facility-alarm status**— Supported on cBR-8
- **show redundancy**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show redundancy line card all**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show ip ospf neighbor**— Supported on cBR-8
- **show cable modem voice**— Supported on cBR-8
- **show cable calls**— Supported on cBR-8
- **show cable licenses all**— Supported on cBR-8
- **show inventory**— Supported on cBR-8
- **show log**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs
- **show cable rpd**— Supported on cBR-8
- **show cable modem summary total**— Supported on cBR-8

- **show cable rpd lcha**— Supported on cBR-8
- **show running**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs
- **show tech**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs

## Upgrading Cisco Remote PHY Shelf 7200 Only

### Before you begin

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

- All eRPDs are in `init(gcp)`, `init(clock)`, or `online` state.
- Download new image file from Cisco.com Software Center:
  - Cisco Remote PHY Shelf 7200 Software 1.3: [HA-SHELF-V1-3.itb](#)
  - Cisco Remote PHY Shelf 7200 Firmware 1.3: [hashelf\\_firmware-V1.3\\_20201215093439.pkg](#)



**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\\_17\\_3.html](https://www.cisco.com/c/en/us/td/docs/cable/cbr/upgrade/guide/b_cbr_upgrade_17_3.html).



**Note** Cisco recommends that to upgrade only Cisco Remote PHY Shelf 7200, you must run all commands on the Cisco Remote PHY Shelf 7200.

- Step 1** Copy Cisco RPHY Shelf 7200 1.3 Firmware package to HTTP or TFTP server that RPDs can reach to.
- Step 2** Telnet to FCC to upgrade FCC UBoot.

```
upgrade hw-programmable fcc uboot tftp <tftp_server_ip> hashelf_firmware-V1.3_20201215093439.pkg
```

- Step 3** Reboot FCC as required in previous step output.
- Step 4** After bootup, check UBoot version.

```
HA-Shelf-FCC#show platform diag
Chassis type: HA-RPHY-CHASSIS

HA-RPHY-FAN-TRAY:
  State                : OK
  Software declared up time : 30 minutes, 54 seconds
  Primary UBoot         : 200821 *
  Golden UBoot          : 180508
  IOFPGA version        : a209 (Primary)
  EOBC version          : 1.01
```

- Step 5** Copy the Cisco RPHY Shelf 7200 V1.3 image package to HTTP or TFTP server that RPDs can reach to.
- Note** Cisco recommends using HTTP server to upgrade RPHY Shelf 7200.

**Step 6** Verify current RPHY Shelf 7200 software version.

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

**Step 7** Upgrade one or more RPHY Shelf image to 1.3 release from cBR-8.

To upgrade one RPHY Shelf image using HTTP server, run this command:

```
cable rpd group <HA-Shelf_chassis_base_mac> upgrade <http_server_ip> http
<HA_Shelf_V1.3_file_path>
```

To upgrade one RPHY Shelf image using TFTP server, run this command:

```
cable rpd group <HA-Shelf_chassis_base_mac> upgrade <tftp_server_ip> tftp
<HA_Shelf_V1.3_file_path>
```

To retrieve the RPHY Shelf 7200 base MAC address, run the **show cable rpd group** command. The Group ID column displays the base mac address for the respective HA Shelf 7200 chassis. If there is a primary RPD in the RPD group, which means the M column in the command output displays Y as shown below, you can upgrade the image of the RPD group.

```
Router#show cable rpd group
Load for five secs: 4%/1%; one minute: 6%; five minutes: 6%
No time source, *09:05:11.393 CST Mon Jun 3 2019
Codes: M-Master
MAC Address      IP Address      I/F      State  Group Id      Slot  M Name
a0f8.496f.f566  120.102.22.198 Te6/1/2  online 0027.900a.4c1a 1      N rphy61
a0f8.496f.f5f0  120.102.22.199 Te6/1/2  online 0027.900a.4c1a 2      Y rphy62
7abd.44a1.0083  120.102.22.194 Te7/1/7  online 7abd.44a1.0000 3      N erpd33
7abd.44a1.0082  120.102.22.193 Te7/1/7  online 7abd.44a1.0000 3      N erpd32
7abd.44a1.0085  120.102.22.196 Te7/1/7  online 7abd.44a1.0000 3      Y erpd35
7abd.44a1.0084  120.102.22.195 Te7/1/7  online 7abd.44a1.0000 3      N erpd34
7abd.44a1.0081  120.102.22.192 Te7/1/7  online 7abd.44a1.0000 3      N erpd31
badb.ad17.0c20  120.102.22.102 Te6/1/7  online badb.ad17.0c00 0      N f02-00
badb.ad17.0c21  120.102.22.101 Te6/1/7  online badb.ad17.0c00 0      N f02-01
badb.ad17.0c24  120.102.22.106 Te6/1/7  online badb.ad17.0c00 0      N f02-04
badb.ad17.0c22  120.102.22.104 Te6/1/7  online badb.ad17.0c00 0      N f02-02
badb.ad17.0c23  120.102.22.105 Te6/1/7  online badb.ad17.0c00 0      Y f02-03
badb.ad17.0c25  120.102.22.109 Te6/1/7  online badb.ad17.0c00 0      N f02-05
```

To upgrade all RPHY Shelf images using HTTP server, run this command

```
cable rpd group all upgrade <http_server_ip> http <HA_Shelf_V1.3_file_path>
```

To upgrade all RPHY Shelf images using TFTP server, run this command

```
cable rpd group all upgrade <tftp_server_ip> tftp <HA_Shelf_V1.3_file_path>
```

**Step 8** Verify one or more RPHY Shelf 7200 chassis status.

To verify one RPHY Shelf 7200 chassis status, run this command.

```
cable rpd group <chassis base mac> upgrade status
```

To verify all RPHY Shelf 7200 chassis status, run this command.

```
cable rpd group all upgrade status
```

**Step 9** To check if all RPHY Shelf 7200 chassis have been upgraded to new version 1.3 and come online successfully you can either:

Telnet to FCC IP and run the **show version** command or

To check if one or more RPHY Shelf 7200 chassis have been upgraded, SSH to the eRPD and run the show version command.

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### What to do next

These **show** commands may be useful in the verification test:

- **select erpd slot *slot\_id* index *index\_id***— RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- **select linecard slot *slot\_id***— RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- **show version**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform diag**— Supported on cBR-8 and RPHY Shelf 7200
- **show environment**— Supported on cBR-8
- **show environment all | alarms**— Supported on RPHY Shelf 7200
- **show environment power**— Supported on cBR-8
- **show platform hardware slot P <0-5> mcu status**— Supported on cBR-8
- **show facility-alarm status**— Supported on cBR-8
- **show redundancy**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show redundancy line card all**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show ip ospf neighbor**— Supported on cBR-8
- **show cable modem voice**— Supported on cBR-8
- **show cable calls**— Supported on cBR-8
- **show cable licenses all**— Supported on cBR-8
- **show inventory**— Supported on cBR-8
- **show log**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs
- **show cable rpd**— Supported on cBR-8
- **show cable modem summary total**— Supported on cBR-8
- **show cable rpd lcha**— Supported on cBR-8
- **show running**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs
- **show tech**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs

## Upgrading cBR-8 Router Only

### Before you begin

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

- All eRPDs are in init(gcp) state.
- Download new image file from Cisco.com Software Center:
  - IOS XE Software Version 17.3.1x: [cbrsup-universalk9.17.03.01x.SPA.bin](#)
- Console access for both SUPs are required.




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**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\\_17\\_3.html](https://www.cisco.com/c/en/us/td/docs/cable/cbr/upgrade/guide/b_cbr_upgrade_17_3.html).

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**Step 1** Copy Cisco IOS XE Amsterdam 17.3.1x package to bootflash: and stby-bootflash:.

```
copy <location>/cbrsup-universalk9.17.03.01x.SPA.bin bootflash:
copy <location>/cbrsup-universalk9.17.03.01x.SPA.bin stby-bootflash:
```

**Step 2** Verify Cisco IOS XE Amsterdam 17.3.1x package against the md5 hash as provided in the Cisco.com Software center.

```
verify /md5 bootflash:cbrsup-universalk9.17.03.01x.SPA.bin
verify /md5 stby-bootflash:cbrsup-universalk9.17.03.01x.SPA.bin
```

**Step 3** Backup current running config to bootflash:.

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

**Step 4** Check system status prior to upgrade. Save the information 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 Cisco IOS XE Amsterdam 17.3.1x image and save running-configuration.

```
Configure terminal
no boot system
boot system bootflash:cbrsup-universalk9.17.03.01x.SPA.bin
config-register 0x2102
end
copy running-config startup-config
```

**Step 6** Reload and bring up the cBR-8 router.

```
Reload
```



**Step 7** Adjust RPD max-carrier and type, re-apply rpd-ds base-power for each RPD, save and backup current running-config.

```
cBR8(config)#cable rpd shelf-1-1
cBR8(config-rpd)#rpd-ds 0 base-power ?
    <20-22> Base Channel Power Value in dBmV

cBR8(config-rpd)#type shelf
cBR8(config-rpd)#rpd-ds 0 max-carrier 16
cBR8(config-rpd)#rpd-ds 0 base-power ?
    <37-46> Base Channel Power Value in dBmV

cBR8(config-rpd)#rpd-ds 0 base-power x //depends on customer real env
cBR8(config-rpd)#end
cBR8#copy running-config startup-config
cBR8#copy running-config bootflash:post-upgrade.cfg
```

**Step 8** To check if all RPHY Shelf 7200 chassis are upgraded and come online successfully you can either:

Telnet to FCC IP and run the **show version** command or

To check if one or more RPHY Shelf 7200 chassis have been upgraded, SSH to the eRPD and run the show version command.

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### What to do next

These **show** commands may be useful in the verification test:

- select erpd slot *slot\_id* index *index\_id* — RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- select linecard slot *slot\_id* — RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- **show version** — Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform** — Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform diag** — Supported on cBR-8 and RPHY Shelf 7200
- **show environment** — Supported on cBR-8
- **show environment all | alarms** — Supported on RPHY Shelf 7200
- **show environment power** — Supported on cBR-8
- **show platform hardware slot P <0-5> mcu status** — Supported on cBR-8
- **show facility-alarm status** — Supported on cBR-8
- **show redundancy** — Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show redundancy line card all** — Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show ip ospf neighbor** — Supported on cBR-8
- **show cable modem voice** — Supported on cBR-8
- **show cable calls** — Supported on cBR-8

- **show cable licenses all**— Supported on cBR-8
- **show inventory**— Supported on cBR-8
- **show log**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs
- **show cable rpd**— Supported on cBR-8
- **show cable modem summary total**— Supported on cBR-8
- **show cable rpd lcha**— Supported on cBR-8
- **show running**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs
- **show tech**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs

# Downgrading from Cisco Remote PHY Shelf 7200 Software 1.3

## Downgrading Cisco Remote PHY Shelf 7200 and cBR-8 Router

### Before you begin

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

- All eRPDs are online.
- 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 16.10.1f: **cbrsup-universalk9.16.10.01f.SPA.bin**
    - IOS XE Software Version 16.10.1c: **cbrsup-universalk9.16.10.01c.SPA.bin**
  - Cisco Remote PHY Shelf 7200 software: <https://software.cisco.com/download/home/286321242/type>
    - Cisco Remote PHY Shelf 7200 Software 1.2: **HA-SHELF-V1-2.itb**
    - Cisco Remote PHY Shelf 7200 Software 1.1: **HA-SHELF-V1-1.itb**
- 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\\_17\\_3.html](https://www.cisco.com/c/en/us/td/docs/cable/cbr/upgrade/guide/b_cbr_upgrade_17_3.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 system status prior to downgrade. Save the information to compare against the system status after downgrade. For the commands to use to check the status, see the **show** commands at the end of this section.

**Step 5** Copy the Cisco RPHY Shelf 7200 software image package to HTTP or TFTP server that RPHY Shelf 7200 can reach to.

**Step 6** Verify current RPHY Shelf 7200 software version.

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

**Step 7** Downgrade one or more RPHY Shelf images from cBR-8.

To downgrade one RPHY Shelf image using HTTP server, run this command:

```
cable rpd group <HA-Shelf_chassis_base_mac> upgrade <http_server_ip> http
<HA_Shelf_file_path>
```

To downgrade one RPHY Shelf image using TFTP server, run this command:

```
cable rpd group <HA-Shelf_chassis_base_mac> upgrade <tftp_server_ip> tftp
<HA_Shelf_file_path>
```

To retrieve the RPHY Shelf 7200 base mac address, run the **show cable rpd group** command. The Group ID column displays the base mac address for the respective HA Shelf 7200 chassis. If there is a primary RPD in the RPD group, which means the M column in the command output displays Y as shown below, you can upgrade the image of the RPD group.

```
Router#show cable rpd group
Load for five secs: 4%/1%; one minute: 6%; five minutes: 6%
No time source, *09:05:11.393 CST Mon Jun 3 2019
Codes: M-Master
MAC Address      IP Address      I/F      State  Group Id      Slot  M Name
a0f8.496f.f566  120.102.22.198 Te6/1/2  online 0027.900a.4c1a 1      N rphy61
a0f8.496f.f5f0  120.102.22.199 Te6/1/2  online 0027.900a.4c1a 2      Y rphy62
7abd.44a1.0083  120.102.22.194 Te7/1/7  online 7abd.44a1.0000 3      N erpd33
7abd.44a1.0082  120.102.22.193 Te7/1/7  online 7abd.44a1.0000 3      N erpd32
7abd.44a1.0085  120.102.22.196 Te7/1/7  online 7abd.44a1.0000 3      Y erpd35
7abd.44a1.0084  120.102.22.195 Te7/1/7  online 7abd.44a1.0000 3      N erpd34
7abd.44a1.0081  120.102.22.192 Te7/1/7  online 7abd.44a1.0000 3      N erpd31
badb.ad17.0c20  120.102.22.102 Te6/1/7  online badb.ad17.0c00 0      N f02-00
badb.ad17.0c21  120.102.22.101 Te6/1/7  online badb.ad17.0c00 0      N f02-01
badb.ad17.0c24  120.102.22.106 Te6/1/7  online badb.ad17.0c00 0      N f02-04
badb.ad17.0c22  120.102.22.104 Te6/1/7  online badb.ad17.0c00 0      N f02-02
badb.ad17.0c23  120.102.22.105 Te6/1/7  online badb.ad17.0c00 0      Y f02-03
badb.ad17.0c25  120.102.22.109 Te6/1/7  online badb.ad17.0c00 0      N f02-05
```

To downgrade all RPHY Shelf images using HTTP server, run this command

```
cable rpd group all upgrade <http_server_ip> http <HA_Shelf_file_path>
```

To downgrade all RPHY Shelf images using TFTP server, run this command

```
cable rpd group all upgrade <tftp_server_ip> tftp <HA_Shelf_file_path>
```

**Step 8** Verify one or more RPHY Shelf 7200 chassis status.

To verify one RPHY Shelf 7200 chassis status, run this command.

```
cable rpd group <chassis base mac> upgrade status
```

To verify all RPHY Shelf 7200 chassis status, run this command.

```
cable rpd group all upgrade status
```

**Step 9** Configure the chassis to boot the system with target Cisco IOS XE image and save running-configuration.

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

**Step 10** Reload and bring up the cBR-8 router.

```
Reload
```

**Step 11** To check if all RPHY Shelf 7200 chassis have been downgraded to the target version and come online successfully, you can either:

Telnet to FCC IP and run the **show version** command or

To check if one or more RPHY Shelf 7200 chassis have been downgraded, SSH to the eRPD and run the show version command.

### What to do next

These **show** commands may be useful in the verification test:

- select erpd slot *slot\_id* index *index\_id*— RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- select linecard slot *slot\_id*— RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- **show version**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform diag**— Supported on cBR-8 and RPHY Shelf 7200
- **show environment**— Supported on cBR-8
- **show environment all | alarms**— Supported on RPHY Shelf 7200

- **show environment power**— Supported on cBR-8
- **show platform hardware slot P <0-5> mcu status**— Supported on cBR-8
- **show facility-alarm status**— Supported on cBR-8
- **show redundancy**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show redundancy line card all**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show ip ospf neighbor**— Supported on cBR-8
- **show cable modem voice**— Supported on cBR-8
- **show cable calls**— Supported on cBR-8
- **show cable licenses all**— Supported on cBR-8
- **show inventory**— Supported on cBR-8
- **show log**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs
- **show cable rpd**— Supported on cBR-8
- **show cable modem summary total**— Supported on cBR-8
- **show cable rpd lcha**— Supported on cBR-8
- **show running**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs
- **show tech**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs

## Downgrading Cisco Remote PHY Shelf 7200 Only

### Before you begin

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

- All eRPDs are in `init(gcp)` state.
- Download new image file from the following Cisco.com Software Center URL:

<https://software.cisco.com/download/home/286321242/type>

- Cisco Remote PHY Shelf 7200 Software 1.2: **HA-SHELF-V1-2.itb**
- Cisco Remote PHY Shelf 7200 Software 1.1: **HA-SHELF-V1-1.itb**



#### 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\\_17\\_3.html](https://www.cisco.com/c/en/us/td/docs/cable/cbr/upgrade/guide/b_cbr_upgrade_17_3.html).

### Step 1

Copy the target Cisco RPHY Shelf 7200 software image package to HTTP or TFTP server that RPHY Shelf 7200 can reach to.

**Note** Cisco recommends using HTTP server to upgrade RPHY Shelf 7200.

**Step 2** Verify current RPHY Shelf 7200 software version.

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

**Step 3** Downgrade one or more RPHY Shelf image from cBR-8.

To downgrade one RPHY Shelf image using HTTP server, run this command:

```
cable rpd group <HA-Shelf_chassis_base_mac> upgrade <http_server_ip> http
<HA_Shelf_file_path>
```

To downgrade one RPHY Shelf image using TFTP server, run this command:

```
cable rpd group <HA-Shelf_chassis_base_mac> upgrade <tftp_server_ip> tftp
<HA_Shelf_file_path>
```

To retrieve the RPHY Shelf 7200 base mac address, run the **show cable rpd group** command. The Group ID column displays the base mac address for the respective HA Shelf 7200 chassis. If there is a primary RPD in the RPD group, which means the M column in the command output displays Y as shown below, you can upgrade the image of the RPD group.

```
Router#show cable rpd group
Load for five secs: 4%/1%; one minute: 6%; five minutes: 6%
No time source, *09:05:11.393 CST Mon Jun 3 2019
Codes: M-Master
MAC Address      IP Address      I/F      State  Group Id      Slot  M Name
a0f8.496f.f566  120.102.22.198 Te6/1/2  online 0027.900a.4c1a 1      N rphy61
a0f8.496f.f5f0  120.102.22.199 Te6/1/2  online 0027.900a.4c1a 2      Y rphy62
7abd.44a1.0083  120.102.22.194 Te7/1/7  online 7abd.44a1.0000 3      N erpd33
7abd.44a1.0082  120.102.22.193 Te7/1/7  online 7abd.44a1.0000 3      N erpd32
7abd.44a1.0085  120.102.22.196 Te7/1/7  online 7abd.44a1.0000 3      Y erpd35
7abd.44a1.0084  120.102.22.195 Te7/1/7  online 7abd.44a1.0000 3      N erpd34
7abd.44a1.0081  120.102.22.192 Te7/1/7  online 7abd.44a1.0000 3      N erpd31
badb.ad17.0c20  120.102.22.102 Te6/1/7  online badb.ad17.0c00 0      N f02-00
badb.ad17.0c21  120.102.22.101 Te6/1/7  online badb.ad17.0c00 0      N f02-01
badb.ad17.0c24  120.102.22.106 Te6/1/7  online badb.ad17.0c00 0      N f02-04
badb.ad17.0c22  120.102.22.104 Te6/1/7  online badb.ad17.0c00 0      N f02-02
badb.ad17.0c23  120.102.22.105 Te6/1/7  online badb.ad17.0c00 0      Y f02-03
badb.ad17.0c25  120.102.22.109 Te6/1/7  online badb.ad17.0c00 0      N f02-05
```

To downgrade all RPHY Shelf images using HTTP server, run this command

```
cable rpd group all upgrade <http_server_ip> http <HA_Shelf_file_path>
```

To downgrade all RPHY Shelf images using TFTP server, run this command

```
cable rpd group all upgrade <tftp_server_ip> tftp <HA_Shelf_file_path>
```

**Step 4** Verify one or more RPHY Shelf 7200 chassis status.

To verify one RPHY Shelf 7200 chassis status, run this command.

```
cable rpd group <chassis base mac> upgrade status
```

To verify all RPHY Shelf 7200 chassis status, run this command.

```
cable rpd group all upgrade status
```

**Step 5** To check if all RPHY Shelf 7200 chassis have been downgraded to target version and come online successfully, you can either:

Telnet to FCC IP and run the **show version** command or

To check if one or more RPHY Shelf 7200 chassis have been upgraded, SSH to the eRPD and run the show version command.

---

### What to do next

These **show** commands may be useful in the verification test:

- **select erpd slot *slot\_id* index *index\_id***— RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- **select linecard slot *slot\_id***— RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- **show version**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform diag**— Supported on cBR-8 and RPHY Shelf 7200
- **show environment**— Supported on cBR-8
- **show environment all | alarms**— Supported on RPHY Shelf 7200
- **show environment power**— Supported on cBR-8
- **show platform hardware slot P <0-5> mcu status**— Supported on cBR-8
- **show facility-alarm status**— Supported on cBR-8
- **show redundancy**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show redundancy line card all**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show ip ospf neighbor**— Supported on cBR-8
- **show cable modem voice**— Supported on cBR-8
- **show cable calls**— Supported on cBR-8
- **show cable licenses all**— Supported on cBR-8
- **show inventory**— Supported on cBR-8
- **show log**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs
- **show cable rpd**— Supported on cBR-8
- **show cable modem summary total**— Supported on cBR-8
- **show cable rpd lcha**— Supported on cBR-8
- **show running**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs
- **show tech**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs

## Downgrading cBR-8 Router Only

### Before you begin

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

- All eRPDs are in init(gcp) state.
- Download new image file from the following Cisco.com Software Center URL:  
<https://software.cisco.com/download/home/286283913/type>
  - IOS XE Software Version 16.10.1f: **cbrsup-universalk9.16.10.01f.SPA.bin**
  - IOS XE Software Version 16.10.1c: **cbrsup-universalk9.16.10.01c.SPA.bin**
- 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\\_17\\_3.html](https://www.cisco.com/c/en/us/td/docs/cable/cbr/upgrade/guide/b_cbr_upgrade_17_3.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 current running config to bootflash:.

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

**Step 4** Check system status prior to downgrade. Save the information 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 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 bring up the cBR-8 router.



Reload

**Step 7**

To check if all RPHY Shelf 7200 chassis are downgraded and come online successfully, you can either:

Telnet to FCC IP and run the **show version** command or

To check if one or more RPHY Shelf 7200 chassis have been upgraded, SSH to the eRPD and run the show version command.

---

**What to do next**

These **show** commands may be useful in the verification test:

- select erpd slot *slot\_id* index *index\_id* — RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- select linecard slot *slot\_id*— RPHY Shelf 7200 command, normally run on FCC, but can also run on primary eRPD and line cards.
- **show version**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show platform diag**— Supported on cBR-8 and RPHY Shelf 7200
- **show environment**— Supported on cBR-8
- **show environment all | alarms**— Supported on RPHY Shelf 7200
- **show environment power**— Supported on cBR-8
- **show platform hardware slot P <0-5> mcu status**— Supported on cBR-8
- **show facility-alarm status**— Supported on cBR-8
- **show redundancy**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show redundancy line card all**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs.
- **show ip ospf neighbor**— Supported on cBR-8
- **show cable modem voice**— Supported on cBR-8
- **show cable calls**— Supported on cBR-8
- **show cable licenses all**— Supported on cBR-8
- **show inventory**— Supported on cBR-8
- **show log**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs
- **show cable rpd**— Supported on cBR-8
- **show cable modem summary total**— Supported on cBR-8
- **show cable rpd lcha**— Supported on cBR-8
- **show running**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs

- **show tech**— Supported on cBR-8 and RPHY Shelf 7200 with different outputs