



## **Cisco uBR7200 Router Release Notes for Cisco IOS Release 12.2(33)SCC**

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# CHAPTER 1

## Introduction

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This document contains information about downloading and installing Cisco IOS Release 12.2(33)SCC. It also provides new and changed information, hardware support, limitations and restrictions, and caveats for Cisco IOS Release 12.2(33)SCC.

For software caveats that apply to the Cisco IOS Release 12.2(33)SCC on the Cisco uBR10012 routers, see the corresponding release notes for Cisco uBR10012 Routers.

We recommend that you view the field notices for this release to see if your software or hardware platforms are affected. If you have an account on Cisco.com, you can find field notices at [http://www.cisco.com/en/US/customer/support/tsd\\_products\\_field\\_notice\\_summary.html](http://www.cisco.com/en/US/customer/support/tsd_products_field_notice_summary.html).

If you do not have a Cisco.com login account, you can find field notices at [http://www.cisco.com/en/US/support/tsd\\_products\\_field\\_notice\\_summary.html](http://www.cisco.com/en/US/support/tsd_products_field_notice_summary.html).

This chapter includes the following sections:

- [System Requirements, page 1-1](#)
- [New and Changed Information, page 1-9](#)
- [MIBs, page 1-18](#)
- [Limitations and Restrictions, page 1-19](#)
- [Important Notes, page 1-21](#)
- [Obtaining Documentation and Submitting a Service Request, page 1-22](#)

## System Requirements

These sections describe the system requirements for Cisco IOS Release 12.2(33)SCC:

- [Memory Requirements, page 1-2](#)
- [Hardware Supported, page 1-2](#)
- [Verifying the Software Version, page 1-6](#)
- [Upgrading to a New Software Release, page 1-6](#)
- [Feature Support, page 1-6](#)

## Memory Requirements

This section describes the memory requirements for Cisco IOS Release 12.2(33)SCC.


**Note**

Effective with Cisco IOS Release 12.2(33)SCC, the image size is greater than 65 MB and requires TFTP servers capable of downloading large images.

[Table 1](#) displays the memory recommendations for the Cisco uBR7200 series universal broadband routers with Cisco IOS Release 12.2SC feature sets. Cisco uBR7200 series routers are only available with 48 MB or 128 MB of flash memory on the I/O Controller cards. The UBR7200-NPE-G1 and NPE-G2 use FlashDisks only.


**Note**

FlashDisks, an alternative to linear flash memory, are flash memory-based devices that can be used as file storage media in the PCMCIA card slots of the I/O controllers. Each I/O Controller has two PCMCIA slots and can be configured with up to 256 MB of FlashDisk memory.

**Table 1** Memory Recommendations for the Cisco uBR7200 Series Routers

| Feature Set   | Software Image    | Recommended Flash Memory | Recommended DRAM Memory | Runs From |
|---|-------------------|--------------------------|-------------------------|-----------|
| <b>Two-Way Data/VoIP Images (NPE-G1 and NPE-G2)</b> |                   |                          |                         |           |
| DOCSIS 2-Way 3DES for Cisco NPE-G1                  | ubr7200-jk9su2    | 48 MB                    | 512 MB DRAM             | RAM       |
| DOCSIS 2-Way 3DES for Cisco NPE-G2                  | ubr7200p-jk9su2   | 128 MB                   | 1 GB DRAM               | RAM       |
| <b>Boot Image</b>                                   |                   |                          |                         |           |
| UBR7200 Boot Image                                  | ubr7200-kboot-mz  | None                     | None                    | —         |
| UBR7200 NPE-G2 Boot Image                           | ubr7200p-kboot-mz | None                     | None                    | —         |

The image subset legend for [Table 1](#) is as follows:

- j—IP routing, MPLS-VPN support, and non-cable interface bridging, including Network Address Translation (NAT)
- k9—AES/DES level of encryption. Greater than 64-bit encryption (on 12.2 and up)
- s—“Plus” features: NAT and Inter-Switch Link (ISL)

## Hardware Supported

The following sections list the hardware supported on various Cisco IOS Releases:

- [Platforms Supported, page 1-3](#)
- [Cable Interface Line Cards Supported, page 1-3](#)
- [Cisco uBR7200 Series Universal Broadband Router Port Adapters Supported, page 1-4](#)



## Platforms Supported

Table 2 provides information about the CMTS router platforms and processors supported in Cisco IOS Release 12.2(33)SCC.

**Table 2** Platforms Supported in Cisco IOS Release 12.2(33)SCC

| Platform                                    | Processor Engine  | Minimum Cisco IOS Release               |
|---|-------------------|---|
| Cisco uBR7246VXR Universal Broadband Router | NPE-G1 and NPE-G2 | Cisco IOS Release 12.2(33)SCA           |
| Cisco uBR7225VXR Universal Broadband Router | NPE-G1 only       | Cisco IOS Release 12.2(33)SCA           |
|   | NPE-G1 and NPE-G2 | Cisco IOS Release 12.2(33)SCB and later |

## Cable Interface Line Cards Supported

Table 3 provides information about the cable interface line cards supported in Cisco IOS Release 12.2(33)SCC.

**Table 3** Cable Interface Line Cards Supported in Cisco IOS Release 12.2(33)SCC

| Platform                                    | Supported Cable Interface Line Cards   |
|---|--|
| Cisco uBR7246VXR universal broadband router | Cisco IOS Release 12.2(33)SCA and later <ul style="list-style-type: none"> <li>• Cisco uBR-MC28U/X—maximum 4</li> <li>• Cisco uBR-MC16U/X—maximum 4</li> </ul>   |
| Cisco uBR7225VXR universal broadband router | Cisco IOS Release 12.2(33)SCA and later <ul style="list-style-type: none"> <li>• Cisco uBR-E-28U—maximum 2</li> <li>• Cisco uBR-E-16U—maximum 2</li> <li>• Cisco uBR-MC28U/X—maximum 2</li> <li>• Cisco uBR-MC16U/X—maximum 2</li> </ul> |

### OIR of Cable Interface Line Cards on the Cisco uBR7200 Universal Broadband Router

The Cisco uBR7200 series universal broadband routers support online insertion and removal (OIR) or “hot swapping” of cable interface line cards only when exchanging cable interface line cards of the exact type. For example, exchanging a Cisco uBR-MC28U card for another Cisco uBR-MC28U line card. Under these conditions, no reload of the router is required.



#### Caution

When you perform OIR of different types of cable interface line cards (for example, a Cisco uBR-MC16U line card replaced by a Cisco uBR-MC16X line card, Cisco uBR-MC16U line card replaced by a Cisco uBR-MC28U line card, or Cisco uBR-MC28U line card replaced by a Cisco uBR-MC88V cable interface line card), you might not only have to reconfigure the interfaces, but also reload the router (recommended).

## Cisco uBR7200 Series Universal Broadband Router Port Adapters Supported

Table 4 provides information about the maximum number of port adapters (PA) supported on the Cisco uBR7200 series universal broadband routers:

**Table 4** Number of Port Adapters Supported in Cisco uBR7200 Series Universal Broadband Routers

| Platform                                    | Port Adapters—Maximum Number | Minimum Cisco IOS Release     |
|---|------------------------------|-------------------------------|
| Cisco uBR7246VXR universal broadband router | See Table 5; maximum 2       | Cisco IOS Release 12.2(33)SCA |

Table 5 provides information about the port adapters supported by the Cisco uBR7200 series universal broadband routers in Cisco IOS Release 12.2SC and uses the following conventions:

- Yes—The port adapter is supported in the software image.
- No—The port adapter is not supported in the software image.
- In—The “Release” column indicates the release of the Cisco IOS Release 12.2SB when the port adapter was introduced. If a cell in this column contains an em dash (—), it indicates that:
  - Support for the port adapter was inherited from Cisco IOS Release 12.2 or from another release.
  - Support for the port adapter was included in the initial base release of Cisco IOS Release 12.2SC.

**Table 5** Port Adapters Supported for the Cisco uBR7200 Series Universal Broadband Routers

| Cisco Product Number <sup>1</sup>                   | Adapter Description                               | Cisco IOS Release | Cisco uBR7246VXR |
|---|---|-------------------|------------------|
| <b>ATM Port Adapters</b>                            |   |                   |                  |
| PA-A3-OC3MM   | 1-port ATM Enhanced OC3c/STM1 multimode           | —                 | No               |
| PA-A3-OC3SMI  | 1-port ATM Enhanced OC3c/STM1 single mode (IR)    | —                 | No               |
| PA-A3-OC3SML  | 1-port ATM Enhanced OC3c/STM1 single mode (LR)    | —                 | No               |
| PA-A3-OC12MM  | 1-port ATM Enhanced OC12/STM4 multimode           | —                 | No               |
| PA-A3-OC12SMI                                       | 1-port ATM Enhanced OC12/STM4 single mode (IR)    | —                 | No               |
| PA-A3-E3  | 1-port ATM Enhanced E3                            | —                 | No               |
| PA-A3-T3  | 1-port ATM Enhanced DS3                           | —                 | No               |
| PA-A3-8E1IMA  | 8-port ATM Inverse Mux E1, 120 ohms               | —                 | No               |
| PA-A3-8T1IMA  | 8-port ATM Inverse Mux T1                         | —                 | No               |
| PA-A6-OC3MM   | 1-port ATM OC-3c/STM-1 multimode, enhanced        | 12.2(28)SB        | Yes              |
| PA-A6-OC3SML  | 1-port ATM OC-3c/STM-1 single-mode (LR), enhanced | 12.2(28)SB        | Yes              |
| PA-A6-E3  | 1-port ATM E3, enhanced                           | 12.2(28)SB        | No               |
| PA-A6-T3  | 1-port ATM DS3, enhanced                          | 12.2(28)SB        | Yes              |
| <b>Fast Ethernet/Gigabit Ethernet Port Adapters</b> |   |                   |                  |
| PA-4E   | 4-port Ethernet 10BASE-T                          | —                 | No               |
| PA-2FE-FX   | 2-port Fast Ethernet 100BASE-FX                   | —                 | Yes              |

**Table 5** Port Adapters Supported for the Cisco uBR7200 Series Universal Broadband Routers (continued)

| Cisco Product Number <sup>1</sup>        | Adapter Description                                 | Cisco IOS Release | Cisco uBR7246VXR |
|--|---|-------------------|------------------|
| PA-2FE-TX                                | 2-port Fast Ethernet 100BASE-TX                     | —                 | Yes              |
| PA-GE                                    | 1-port Gigabit Ethernet                             | —                 | Yes              |
| <b>High-Speed Serial Port Adapters</b>   |   |                   |                  |
| PA-2H                                    | 2-port High-Speed Serial Interface (HSSI)           | —                 | No               |
| <b>Multichannel Serial Port Adapters</b> |   |                   |                  |
| PA-MC-T3-EC                              | 1-port multichannel T3 enhanced capability          | —                 | Yes              |
| PA-MC-T3                                 | 1-port multichannel T3                              | —                 | No               |
| PA-MC-E3                                 | 1-port multichannel E3                              | —                 | No               |
| PA-MC-2T3+                               | 2-port multichannel T3                              | —                 | No               |
| PA-MC-2E1/120                            | 2-port multichannel E1, G.703 120-ohm interface     | —                 | No               |
| PA-MC-4T1                                | 4-port multichannel T1, integrated CSU/DSUs         | —                 | No               |
| PA-MC-8TE1+                              | 8-port multichannel T1/E1 8PRI                      | —                 | No               |
| PA-MC-STM-1MM                            | 1-port multichannel STM-1 multimode                 | —                 | No               |
| PA-MC-STM-1SMI                           | 1-port multichannel STM-1 single mode               | —                 | No               |
| PA-4B-U                                  | 4-port BRI, U Interface                             | —                 | No               |
| PA-8B-S/T                                | 8-port BRI, S/T Interface                           | —                 | No               |
| <b>SONET Port Adapters</b>               |   |                   |                  |
| PA-POS-OC3SMI                            | 1-port Packet over SONET OC3c/STM1 single mode (IR) | —                 | No               |
| PA-POS-1OC3                              | 1-port OC-3/STM-1 POS (with APS)                    | 12.2(28)SB6       | Yes              |
| PA-POS-2OC3                              | 2-port OC-3/STM-1 POS (with APS)                    | —                 | Yes              |
| <b>T1/E1 Port Adapters</b>               |   |                   |                  |
| PA-4T+                                   | 4-port Serial, Enhanced                             | —                 | Yes              |
| PA-8T-V35                                | 8-port Serial, V.35                                 | —                 | No               |
| <b>T3/E3 Port Adapters</b>               |   |                   |                  |
| PA-T3+                                   | 1-port T3 Serial, Enhanced                          | 12.2(x)SB         | Yes              |
| PA-2T3+                                  | 2-port T3 Serial, Enhanced                          | 12.2(x)SB         | Yes              |
| PA-E3                                    | 1-port E3 Serial, E3 DSUs                           | —                 | No               |
| PA-2E3                                   | 2-port E3 Serial, E3 DSUs                           | 12.2(x)SB         | Yes              |

1. For a spare product number, append an equal sign (=) to the product number. If a product number is listed as a spare product in the table, that is, with an equal sign (=), it means that the product is only available as a spare product.

## Verifying the Software Version

To verify the version of the Cisco IOS software running on your Cisco universal broadband router, log in to the router and enter the **show version EXEC** command:

```
Router# show version

Cisco IOS Software, 7200 Software (UBR7200P-JK9SU2-M), Version 12.2(32.7.9)SCC
EXPERIMENTAL IMAGE ENGINEERING C10K_WEEKLY BUILD, synced to
MAYFLOWER_BASE_FOR_V122_33_SB_THROTTLE
Copyright (c) 1986-2009 by Cisco Systems, Inc.

ROM: System Bootstrap, Version 12.4(12.2r)T, RELEASE SOFTWARE (fc1)
```

## Upgrading to a New Software Release

For information about selecting a new Cisco IOS software release, see "How to Choose a Cisco IOS Software Release" at the following location:

[http://www.cisco.com/en/US/products/sw/iosswrel/ps1834/products\\_tech\\_note09186a00800fb9d9.shtml](http://www.cisco.com/en/US/products/sw/iosswrel/ps1834/products_tech_note09186a00800fb9d9.shtml)

For information about upgrading the Cisco universal broadband routers, see the *Software Installation and Upgrade Procedures* document at the following location:

[http://www.cisco.com/en/US/products/hw/routers/ps133/products\\_tech\\_note09186a0080094c07.shtml](http://www.cisco.com/en/US/products/hw/routers/ps133/products_tech_note09186a0080094c07.shtml)

For Cisco IOS upgrade ordering instructions, see the document at the following location:

[http://www.cisco.com/warp/public/cc/pd/iosw/prodlit/957\\_pp.htm](http://www.cisco.com/warp/public/cc/pd/iosw/prodlit/957_pp.htm)

To choose a new Cisco IOS software release based on information about defects that affect that software, use Bug Search Tool (BST) at the following URL:

<https://tools.cisco.com/bugsearch/>

## Feature Support

Cisco IOS software is packaged in feature sets that consist of software images that support specific platforms. The feature sets available for a specific platform depend on which Cisco IOS software images are included in a release. Each feature set contains a specific set of Cisco IOS features.



### Caution

Cisco IOS images with strong encryption (including, but not limited to 168-bit [3DES] data encryption feature sets) are subject to U.S. government export controls and have limited distribution. Strong encryption images to be installed outside the United States are likely to require an export license. Customer orders may be denied or subject to delay because of U.S. government regulations. When applicable, the purchaser or user must obtain local import and use authorizations for all encryption strengths. Please contact your sales representative or distributor for more information, or send an e-mail to [export@cisco.com](mailto:export@cisco.com).

## Cisco CMTS User Documentation References for Cisco IOS Release 12.2SC

The table below provides information about important user documents in Cisco IOS Release 12.2SC.

**Table 1-6** Important User Documents in Cisco IOS Release 12.2SC

| Guide                      | Description  |
|----------------------------|--|
| Documentation Roadmap      | <p>Describes a set of Cisco CMTS documents and contains links to the referenced documents.</p> <p>Go to the following link to access this document:<br/> <a href="http://www.cisco.com/en/US/docs/cable/cmts/ubr7200/roadmap/7200rdmp.html">http://www.cisco.com/en/US/docs/cable/cmts/ubr7200/roadmap/7200rdmp.html</a></p>   |
| Command Reference          | <p>Provides information about the software commands used to configure a Cisco CMTS. Includes command syntax, default value, value range, command mode, usage guidelines, and examples.</p> <p>Go to the following link to access this document:<br/> <a href="http://www.cisco.com/en/US/docs/ios/cable/command/reference/cbl_book.html">http://www.cisco.com/en/US/docs/ios/cable/command/reference/cbl_book.html</a></p>   |
| Design Guides              | <p>Describes how to plan, install, and configure a Cisco CMTS. Contains information about the supported technologies, interfaces and protocols and can also contain special installation considerations, network diagrams, example applications, system design, and environmental recommendations.</p> <p>Go to the following link to access this document set:<br/> <a href="http://www.cisco.com/en/US/products/hw/cable/ps2217/tsd_products_support_design_technotes_list.html">http://www.cisco.com/en/US/products/hw/cable/ps2217/tsd_products_support_design_technotes_list.html</a></p>   |
| Install and Upgrade Guides | <p>Provides step-by-step instructions for installing or upgrading a Cisco CMTS. Also includes line card installation guides, shipping documents, safety information, and quick-start guides for experienced users.</p> <p>Go to the following link to access this document set:<br/> <a href="http://www.cisco.com/en/US/products/hw/cable/ps2217/prod_installation_guides_list.html">http://www.cisco.com/en/US/products/hw/cable/ps2217/prod_installation_guides_list.html</a></p> <p>Important guides in this section are:</p> <ul style="list-style-type: none"> <li>• <a href="#">Cisco uBR7200 Series Universal Broadband Router Hardware Installation Guide</a></li> <li>• <a href="#">Upgrading to the Cisco uBR7246 VXR Universal Broadband Router</a></li> </ul> |
| Configuration Guides       | <p>Contains detailed, step-by-step instructions for configuring a Cisco CMTS, including software feature guides, configuration examples, network diagrams, and technical concepts.</p> <p>Go to the following link to access this document:</p> <ul style="list-style-type: none"> <li>• <a href="#">Cisco IOS CMTS Cable Software Configuration Guide, Release 12.2SC</a></li> </ul>  |

| Guide                     | Description  |
|---------------------------|--|
| Error and System Messages | Lists error and system messages for a Cisco CMTS, including any recommended user action for each message.<br><br>Go to the following link to access this document:<br><a href="http://www.cisco.com/en/US/docs/cable/cmts/system/message/uberrmes.html">http://www.cisco.com/en/US/docs/cable/cmts/system/message/uberrmes.html</a>  |
| Troubleshooting Guides    | Provides problem-solving techniques for a Cisco CMTS, including methods to identify problems based on symptoms and recommended actions for resolution.<br><br>Go to the following link to access this document set:<br><a href="http://www.cisco.com/en/US/products/hw/cable/ps2217/prod_troubleshooting_guides_list.html">http://www.cisco.com/en/US/products/hw/cable/ps2217/prod_troubleshooting_guides_list.html</a> |

## Cisco Feature Navigator

The Cisco Feature Navigator is a web-based tool that enables you to determine which Cisco IOS software images support a specific set of features and which features are supported in a specific Cisco IOS image. You can search by feature or by feature set (software image). Under the release section, you can compare Cisco IOS software releases side-by-side to display both the features unique to each software release and the features that the releases have in common.

To access the Cisco Feature Navigator, you must have an account on Cisco.com. If you have forgotten or lost your account information, send a blank e-mail to [cco-locksmith@cisco.com](mailto:cco-locksmith@cisco.com). An automatic check verifies that your e-mail address is registered with Cisco.com. If the check is successful, account details with a new random password is e-mailed to you. Qualified users can establish an account on Cisco.com by following the directions found at this URL:

<https://tools.cisco.com/RPF/register/register.do>

The Cisco Feature Navigator is updated regularly when major Cisco IOS software releases and technology releases occur. For the most current information, go to the Cisco Feature Navigator home page at the following URL:

<http://www.cisco.com/go/fn>

For frequently asked questions about the Cisco Feature Navigator, see the FAQs at the following URL:

<http://www.cisco.com/support/FeatureNav/FNFAQ.html>

## Determining Which Software Images Support a Specific Feature

To identify the software images (feature sets) in Cisco IOS Release 12.2(33)SC that support a specific feature:

- 
- Step 1** Go to the Cisco Feature Navigator home page. Enter your Cisco.com login.
  - Step 2** Click **Search by Feature**.
  - Step 3** To find a feature, use either **Filter by full or partial feature name** or search for available features in alphabetical order. Either a list of features that match the search criteria or a list of features that begin with the number or letter selected from the ordered list is displayed in the text box.
  - Step 4** Select a feature from the Available Features pane, and click **Add** to add a feature to the Selected Features pane.




---

**Note** To learn more about a feature in the list, click **Show Descriptions**.

---

Repeat this step to add additional features. A maximum of 20 features can be chosen for a single search.

- Step 5** Click **Continue** when you are finished selecting features.
  - Step 6** From the Major Release drop-down menu, choose **12.2SC**.
  - Step 7** From the Release drop-down menu, choose the appropriate maintenance release.
  - Step 8** From the Platform Family drop-down menu, select the appropriate hardware platform. The **Search Results** table lists all the software images (feature sets) that support the selected feature.
- 

### Determining Which Features Are Supported in a Specific Software Image

To determine the features supported in a specific software image (feature set) in Cisco IOS Release 12.2(33)SC:

- 
- Step 1** Go to the Cisco Feature Navigator home page. Enter your Cisco.com login.
  - Step 2** Click **Compare Images**.
  - Step 3** From the Software drop-down menu in the **Select First Image Parameters** pane, choose **IOS**.
  - Step 4** From the Major Release drop-down menu, choose **12.2SC**.
  - Step 5** From the Release Number drop-down menu, choose the appropriate maintenance release.
  - Step 6** From the Platform Family drop-down menu, choose the appropriate hardware platform.
  - Step 7** From the Feature Set drop-down menu, choose the appropriate feature set. The **Search Results** table lists all the features that are supported by the selected feature set (software image).
- 

## New and Changed Information

The following sections list the new and modified hardware and software features supported on the Cisco uBR7200 routers in Cisco IOS Release 12.2(33)SCC:

- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCC7, page 1-10](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCC6, page 1-10](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCC5, page 1-10](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCC4, page 1-10](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCC3, page 1-10](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCC2, page 1-10](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCC1, page 1-10](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCC, page 1-11](#)
- [New Software Features in Cisco IOS Release 12.2\(33\)SCC7, page 1-11](#)
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCC7, page 1-11](#)
- [New Software Features in Cisco IOS Release 12.2\(33\)SCC6, page 1-11](#)
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCC6, page 1-11](#)
- [New Software Features in Cisco IOS Release 12.2\(33\)SCC5, page 1-11](#)

- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCC5](#), page 1-12
- [New Software Features in Cisco IOS Release 12.2\(33\)SCC4](#), page 1-12
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCC4](#), page 1-14
- [New Software Features in Cisco IOS Release 12.2\(33\)SCC3](#), page 1-14
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCC3](#), page 1-14
- [New Software Features in Cisco IOS Release 12.2\(33\)SCC2](#), page 1-14
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCC2](#), page 1-14
- [New Software Features in Cisco IOS Release 12.2\(33\)SCC1](#), page 1-14
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCC1](#), page 1-15
- [New Software Features in Cisco IOS Release 12.2\(33\)SCC](#), page 1-15
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCC](#), page 1-18

## **New Hardware Features in Cisco IOS Release 12.2(33)SCC7**

There are no new hardware features in Cisco IOS Release 12.2(33)SCC7.

## **New Hardware Features in Cisco IOS Release 12.2(33)SCC6**

There are no new hardware features in Cisco IOS Release 12.2(33)SCC6.

## **New Hardware Features in Cisco IOS Release 12.2(33)SCC5**

There are no new hardware features in Cisco IOS Release 12.2(33)SCC5.

## **New Hardware Features in Cisco IOS Release 12.2(33)SCC4**

There are no new hardware features in Cisco IOS Release 12.2(33)SCC4.

## **New Hardware Features in Cisco IOS Release 12.2(33)SCC3**

There are no new hardware features in Cisco IOS Release 12.2(33)SCC3.

## **New Hardware Features in Cisco IOS Release 12.2(33)SCC2**

There are no new hardware features in Cisco IOS Release 12.2(33)SCC2.

## **New Hardware Features in Cisco IOS Release 12.2(33)SCC1**

There are no new hardware features in Cisco IOS Release 12.2(33)SCC1.



## New Hardware Features in Cisco IOS Release 12.2(33)SCC

There are no new hardware features in Cisco IOS Release 12.2(33)SCC.

## New Software Features in Cisco IOS Release 12.2(33)SCC7

There are no new software features in Cisco IOS Release 12.2(33)SCC7.

## Modified Software Features in Cisco IOS Release 12.2(33)SCC7

There are no modified software features in Cisco IOS Release 12.2(33)SCC7.

## New Software Features in Cisco IOS Release 12.2(33)SCC6

This section lists the new features in Cisco IOS Release 12.2(33)SCC6. Some of the features that were released in earlier Cisco IOS software releases are now supported in Cisco IOS Release 12.2(33)SCC6.

### Suppressing Downstream and Upstream Peak Rate TLVs for pre DOCSIS 3.0 Cable Modems

The DOCSIS 3.0 upstream (US) peak rate TLV 24.27 and downstream (DS) peak rate TLV 25.27 are enabled on the Cisco CMTS through the **cable service class** command or the CM configuration file. The DOCSIS 1.x and DOCSIS 2.0 CMs do not support these TLVs. Ideally, if a DOCSIS 1.x or DOCSIS 2.0 CM receives peak rate TLVs during registration, it should ignore these TLVs and proceed with the registration. However there are a few old non-compliant pre DOCSIS 3.0 CMs, which may fail to come online when peak-rate TLVs are received in the registration response from the Cisco CMTS. To overcome this, the Cisco CMTS has introduced this feature which allows you to suppress sending of DOCSIS 3.0 peak rate TLVs to the pre DOCSIS 3.0 CMs.

The following command was introduced:

- **cable service attribute withhold-TLV**

For more details on this feature, refer to the *DOCSIS 1.1 for the Cisco CMTS Routers* at the following location:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts\\_docsis11.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_docsis11.html)

## Modified Software Features in Cisco IOS Release 12.2(33)SCC6

There are no modified software features in Cisco IOS Release 12.2(33)SCC6.

## New Software Features in Cisco IOS Release 12.2(33)SCC5

There are no new software features in Cisco IOS Release 12.2(33)SCC5.

## Modified Software Features in Cisco IOS Release 12.2(33)SCC5

There are no modified software features in Cisco IOS Release 12.2(33)SCC5.

## New Software Features in Cisco IOS Release 12.2(33)SCC4

There are no new software features in Cisco IOS Release 12.2(33)SCC4.

## Features Integrated into Cisco IOS Release 12.2(33)SCC4

The following features introduced in Cisco IOS Release 12.2(33)SCD2 are now supported in Cisco IOS Release 12.2(33)SCC4:

### CMTS Upstream Traffic Prioritization

With the CMTS Upstream Traffic Prioritization feature, you can now set the priority of the QoS profile-2 to a higher value. This higher priority ensures that the Cisco CMTS allows bandwidth request from an initializing cable modem to get precedence over those from online cable modems.

For more information, see the *Configuring Upstream Cable Interface Features on the Cisco CMTS Routers* document at:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts\\_upstrm\\_if.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_upstrm_if.html)

### Dynamic Insertion of TFTP Server tlv for CM Firmware Upgrade

This feature describes how to upgrade firmware on cable modems by dynamically inserting the correct TLV values in the DOCSIS configuration file, which is downloaded by the cable modem. The **cable dynamic-secret tftp insert-upgrade-server** command was added to support dynamic insertion of the TFTP server address in the DOCSIS configuration file.

For detailed information about upgrading firmware on the cable modems, see the *Configuring a Dynamic Shared Secret for the Cisco CMTS* document at:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts\\_dyn\\_sh\\_sec.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_dyn_sh_sec.html)

### SAMIS Inactive Service Flow and Channel Utilization Interval CLIs

A new keyword, **full-records**, has been added to the **cable metering destination** and **cable metering filesystem** commands to provide information about both, active and idle service flow records.

A new command, **cable util-interval**, has been introduced to configure the interval of the channel utilization. This command can be used for both, cable line cards and the SPA channel.

For more information, see the *Usage-Based Billing for the Cisco CMTS Routers* document at:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts\\_use-bsd\\_bill.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_use-bsd_bill.html)

### Show Cable Modem Partial Mode

A new command, **show cable modem partial-mode**, was introduced in Cisco IOS Release 12.2(33)SCD2 to display information about the cable modems that are in upstream and downstream partial service mode.

For more information about this command, see the *Cisco IOS CMTS Cable Command Reference* at the following URL:

[http://www.cisco.com/en/US/docs/ios/cable/command/reference/cbl\\_16\\_show\\_cable\\_m\\_to\\_show\\_cable\\_u.html](http://www.cisco.com/en/US/docs/ios/cable/command/reference/cbl_16_show_cable_m_to_show_cable_u.html)

## Subscriber Traffic Management version 1.3

The Subscriber Traffic Management (STM) feature allows the service provider to configure a maximum bandwidth threshold over a fixed time period, for a specific service-class (or QoS-profile). The subscribers who exceed this configured threshold are identified and allocated with a reduced QoS. STM works as a low CPU alternative to Network-Based Application Recognition (NBAR) and access control lists (ACLs), however, using STM does not mean that NBAR and ACLs have to be turned off; STM can be applied along with NBAR and ACLs. STM also works in conjunction with the Cisco Broadband Troubleshooter to support additional network management and troubleshooting functions in the Cisco CMTS.

Following are the enhancements in STM Version 1.3:

- Support for configuring minute-level peak time: Peak time can now be configured in the hh:mm format, which enables a user to pinpoint the exact time at which monitoring should start.
- Support for configuring minute-level penalty end time: Penalty end time can now be configured in the hh:mm format, which enables a user to pinpoint the exact time at which monitoring should stop.
- Ability to configure a unique penalty duration for weekdays and weekends.
- Ability to specify whether the monitoring should be turned on after the cable modem is released from the penalty.

The following SNMP objects have been added to the CISCO-CABLE-QOS-MONITOR-MIB:

- ccqmCmtsEnfRuleFirstPeakTimeMin
- ccqmCmtsEnfRuleSecondPeakTimeMin
- ccqmCmtsEnfRuleWkndFirstPeakTimeMin
- ccqmCmtsEnfRuleWkndSecondPeakTimeMin
- ccqmCmtsEnfRulePenaltyEndTimeMin
- ccqmCmtsEnfRuleWkPenaltyPeriod
- ccqmCmtsEnfRuleWkndPenaltyPeriod
- ccqmCmtsEnfRuleRelTimeMonitorOn

The following commands are new or modified:

- **duration**
- **peak-time1**
- **penalty-period**
- **show cable qos enforce-rule verbose**
- **weekend duration**
- **weekend peak-time1**

For more information about this feature, see the *Subscriber Traffic Management* feature guide at the following URL:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts\\_sbsbr\\_tfmgt.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_sbsbr_tfmgt.html)

## Upstream Weighted Fair Queuing

The upstream weighted fair queuing (WFQ) is a quality of service (QoS) feature that enables the Cisco CMTS router to allocate optimum bandwidth to upstream service flows based on the WFQ parameter configurations. To enable upstream WFQ, you must configure either the class-based or activity-based WFQ on a cable interface.

The following commands are new or modified:

- **cable upstream qos wfq**
- **show interface cable mac-scheduler**

For more information about this feature, see the *Upstream Channel Bonding* feature guide at the following URL:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr\\_uscb\\_ps2209\\_TSD\\_Products\\_Configuration\\_Guide\\_Chapter.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_uscb_ps2209_TSD_Products_Configuration_Guide_Chapter.html)

## Modified Software Features in Cisco IOS Release 12.2(33)SCC4

There are no modified software features in Cisco IOS Release 12.2(33)SCC4.

## New Software Features in Cisco IOS Release 12.2(33)SCC3

There are no new software features in Cisco IOS Release 12.2(33)SCC3.

## Modified Software Features in Cisco IOS Release 12.2(33)SCC3

There are no modified software features in Cisco IOS Release 12.2(33)SCC3.

## New Software Features in Cisco IOS Release 12.2(33)SCC2

There are no new software features in Cisco IOS Release 12.2(33)SCC2.

## Modified Software Features in Cisco IOS Release 12.2(33)SCC2

There are no modified software features in Cisco IOS Release 12.2(33)SCC2.

## New Software Features in Cisco IOS Release 12.2(33)SCC1

There are no new software features in Cisco IOS Release 12.2(33)SCC1.

## Features Integrated into Cisco IOS Release 12.2(33)SCC1

The following features introduced in earlier Cisco IOS Releases are now supported in Cisco IOS Release 12.2(33)SCC1:

## Adding DSG Tunnel Group to a Subinterface

Cisco IOS Release 12.2(33)SCB4 introduces the option to add a DOCSIS Set-Top Gateway (DSG) tunnel-group to a subinterface using the **cable dsg tg** command. After adding the DSG tunnel-group to a subinterface using **cable dsg tg** command, appropriate IP Internet Group Management Protocol (IGMP) static joins are created and forwarding of DSG traffic begins.

The **cable dsg tg group-id** command was introduced in this release.

The updated section in the 'Advanced Mode DOCSIS Set-Top Gateway 1.2 for the Cisco CMTS Routers' feature guide is available at the following URL:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts\\_docsis\\_gw12.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_docsis_gw12.html)

## Modified Software Features in Cisco IOS Release 12.2(33)SCC1

There are no modified software features in Cisco IOS Release 12.2(33)SCC1.

## New Software Features in Cisco IOS Release 12.2(33)SCC

This section describes the new cable software features in Cisco IOS Release 12.2(33)SCC. Some features may be new to Cisco IOS Release 12.2(33)SCC but were released in earlier Cisco IOS software releases. Some features may have been released in earlier Cisco IOS software releases and have been changed in Cisco IOS Release 12.2(33)SCC. To determine if a feature is new or changed, see the feature history table at the beginning of the feature module for that feature. Links to feature modules are included below. If a feature listed below does not have a link to a feature module, that feature is documented only in the release notes, and information about whether the feature is new or changed will be available in the feature description provided below.

### Cable IPC Statistics Collection Tool

The Cable Interprocess Communication (IPC) Statistics Collection tool provides debugging information about all CMTS related IPC messages. You can use this tool to analyze the IPC traffic in a cable communications network.

The following commands are new or modified:

- **cable ipc-stats**
- **clear cable ipc-stats**
- **show cable ipc-stats**

For more information about the feature, see:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr\\_ipc\\_stats\\_ps2209\\_TSD\\_Products\\_Configuration\\_Guide\\_Chapter.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_ipc_stats_ps2209_TSD_Products_Configuration_Guide_Chapter.html)

### Embedded Event Manager

For detailed information about this feature, see the Embedded Event Manager Overview feature guide at the following URL:

[http://www.cisco.com/en/US/docs/ios/netmgmt/configuration/guide/nm\\_eem\\_overview.html](http://www.cisco.com/en/US/docs/ios/netmgmt/configuration/guide/nm_eem_overview.html)

## IPv6 Dual Stack CPE Support on the CMTS

From Cisco IOS Release 12.2(33)SCC onwards, CMTS also supports dual-stack that is both IPv4 and IPv6 addressing on the customer premises equipment (CPE). CMTS also supports IPv6 over bundle subinterfaces.

There are no new or modified commands for this feature. For detailed information about this feature, see the IPv6 on Cable document at:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts\\_ipv6.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_ipv6.html)

## MPLS Pseudowire for Cable L2VPN

The Multiprotocol Label Switching (MPLS) Pseudowire for Cable Layer 2 Virtual Private Network (L2VPN) feature enables service providers to use a single, converged, Internet Protocol (IP)/MPLS network infrastructure to offer Ethernet data link layer (Layer 2) connectivity to two or more VPN customer sites.

The MPLS Pseudowire for Cable L2VPN feature is fully compliant with CableLabs Business Services over DOCSIS (BSOD) L2VPN specification, and is an extension to the existing DOCSIS L2VPN features supported on Cisco CMTS routers.

The following commands are new or modified:

- **cable l2vpn**
- **cable l2-vpn-service xconnect**
- **cable set mpls-experimental**
- **service instance**
- **show cable l2-vpn xconnect**
- **show mpls l2transport vc**
- **show xconnect**
- **xconnect**

For detailed information about this feature, see:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr\\_mpls\\_pw.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_mpls_pw.html)

## Restricted/General Load Balancing and Narrowband Dynamic Bandwidth Sharing with Downstream Dynamic Load Balancing

In Cisco IOS Release 12.2(33)SCC, support for the restricted load balancing group (RLBG)/general load balancing group (GLBG) is based on DOCSIS 2.0 and 3.0 specifications. Using the DOCSIS 3.0 modem-based load balancing specifications, you can manage the load balancing (LB) activity on a per-modem basis. Implementing the DOCSIS 3.0 modem-based LB specifications enables the Cable Modem Termination Systems (CMTS) to provide an advanced service-based LB. With the service-based LB enabled, existing service-based CM segregation features and channel restriction become special cases and can be handled within the same LB framework.

Narrowband (NB) dynamic bandwidth sharing (DBS) with dynamic load balancing (DLB) is also supported and uses radio frequency (RF) channel utilization instead of interface utilization, for load balancing. In earlier releases, there was a restriction on modular cable (MC) interfaces using DBS included in a LB group. In Cisco IOS Release 12.2(33)SCC, a new measurement of link utilization is introduced to overcome the restriction of load balancing on an MC interface using DBS.

The following commands are new or modified in Cisco IOS Release 12.2(33)SCC:

- **cable load-balance docsis-group**
- **cable load-balance d30-ggrp-default**
- **cable load-balance modem max-failures**
- **cable load-balance restrict modem**
- **cable tag**
- **show cable load-balance docsis-group**
- **show cable fiber-node**
- **cable load-balance docsis-enable**
- **docsis-policy**
- **docsis-version**
- **downstream**
- **init-tech-list**
- **init-tech-ovr**
- **interval**
- **method**
- **name**
- **oui**
- **override**
- **policy**
- **restricted**
- **service-class**
- **service-type-id**
- **service-type-id\_(cmts-tag)**
- **tag**
- **threshold**
- **upstream\_(config-lb-group)**
- **cable load-balance rule**
- **show cable load-balance**
- **cable load-balance docsis-policy**

For detailed information about this feature, refer the following guides.

*Restricted/General Load Balancing and Narrowband Dynamic Bandwidth Sharing with Downstream Dynamic Load Balancing* document at:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/UBR\\_RLBG\\_GLBG\\_support.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/UBR_RLBG_GLBG_support.html)

*CM Steering on the Cisco CMTS Routers* guide at:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr\\_cm\\_steer.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_cm_steer.html)

## Three Steps Dynamic Modulation Profiles

Three Step Dynamic Modulation allows you to create and use an optional third modulation profile in the Dynamic Upstream Modulation feature, to increase the upstream throughput and to satisfy the demand for new spectrum management.

For more details on this feature, refer to *Spectrum Management and Advanced Spectrum Management for the Cisco CMTS* guide at the following location:

[http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts\\_spctrm\\_mgt.html](http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_spctrm_mgt.html)

## Modified Software Features in Cisco IOS Release 12.2(33)SCC

There are no modified software features in Cisco IOS Release 12.2(33)SCC.

## MIBs

To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL:

<http://tools.cisco.com/ITDIT/MIBS/servlet/index>

If Cisco MIB Locator does not support the MIB information that you need, you can also obtain a list of supported MIBs and download MIBs from the Cisco MIBs page at the following URL:

<http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>

To access Cisco MIB Locator, you must have an account on Cisco.com. If you have forgotten or lost your account information, send a blank e-mail to [cco-locksmith@cisco.com](mailto:cco-locksmith@cisco.com). An automatic check verifies that your e-mail address is registered with Cisco.com. If the check is successful, account details with a new random password is e-mailed to you. Qualified users can establish an account on Cisco.com by following the directions found at this URL:

<http://tools.cisco.com/RPF/register/register.do>

For information about the MIBs supported by the Cisco universal broadband routers, see the *Cisco CMTS Universal Broadband Series Router MIB Specifications Guide*.

## New and Changed MIB Information in Cisco IOS Release 12.2(33)SCC

The Cisco universal broadband routers include or add support for the following MIBs in Cisco IOS Release 12.2(33)SCC:

### New MIBs added in this release:

- CISCO-CABLE-L2VPN-MIB
- CISCO-IETF-PW-MIB
- CISCO-IETF-PW-MPLS-MIB
- DOCS-IF-M-CMTS-MIB
- DOCS-LOADBAL3-MIB
- DOCS-LOADBALANCING-MIB
- DOCS-MCAST-AUTH-MIB



- DOCS-SEC-MIB
- DOCS-SUBMGT3-MIB
- ENTITY-SENSOR-MIB
- MPLS-LSR-MIB
- MPLS-LDP-MIB
- MPLS-TE-MIB
- MPLS-TE-STD-MIB

**Updated MIBs for this release:**

- CISCO-CABLE-ADMISSION-CTRL-MIB
- CISCO-CABLE-SPECTRUM-MIB
- CISCO-CABLE-WIDEBAND-MIB
- CISCO-ENTITY-SENSOR-MIB
- DOCS-BPI-PLUS-MIB
- DOCS-CABLE-DEVICE-MIB
- DOCS-IF3-MIB
- DOCS-IF-MIB
- DOCS-DRF-MIB
- DOCS-DSG-IF-MIB
- DOCS-QOS3-MIB
- DTI-MIB
- ENTITY-MIB
- IF-MIB

## Limitations and Restrictions

This section describes restrictions for the Cisco universal broadband routers in Cisco IOS Release 12.2(33)SCC.

### Unsupported Hardware

For a list of unsupported hardware, see the End-of-Life and End-of-Sale Notices at the following URLs:

- [http://www.cisco.com/en/US/products/hw/cable/ps2217/prod\\_eol\\_notices\\_list.html](http://www.cisco.com/en/US/products/hw/cable/ps2217/prod_eol_notices_list.html)

### Software Feature Restrictions

This section describes other important guidelines or restrictions to consider when running Cisco IOS Release 12.2SC that might not yet be documented in the supporting customer documentation.

## DOCSIS

- You cannot configure an upstream connector to more than one fiber node.
- Multicast over DOCSIS L2VPN does not work for a DOCSIS 3.0-bonded cable modem (CM) when DOCSIS L2VPN is provisioned on a DOCSIS 3.0-bonded CM and downstream multicast traffic is sent over L2VPN. You can use a DOCSIS L2VPN classifier to classify multicast traffic on a secondary DS service flow with SF attributes (TLV 25.31/32) specifying primary DS for the CM. As a result, L2VPN multicast traffic will use the primary DS and L2VPN unicast traffic will be forwarded over the primary bonding group. The service flow attribute feature is available in Cisco IOS Release 12.2SCB.

## MIBs Restriction

- IP-MIB is implemented as read-only. Writing is not supported for `ipv6IPForwarding` or `ipv6IpDefaultHopLimit`.
- `docsIf3MdCfgMcastDsidFwdEnabled` object is implemented as read-only.
- `cdxBWQueueMaxDepth` object sometimes reports a value out of range. The supported range is from 0 to 64, but the object sometimes returns a value of 128 when queried.

## PacketCable

Payload Header Suppression (PHS) is not supported on wideband Embedded Media Terminal Adapters (eMTAs) for dynamic downstream service flows.

## PXF

Statistics for two different divert-rate limit (DRL) WAN-IP streams can momentarily overlap or collide and produce statistics that are lower than expected.

## Redundancy

- Although the software does not prevent it, pre-configuring commands on a protect line card is not supported.
- A dynamic service-flow for a PacketCable call is not deleted during a line card switchover.
- Although the Cisco CMTS router is initially configured only for global N+1 redundancy, the **show running-configuration** command displays both global and legacy interface-level Hot-Standby Connection-to-Connection Protocol (HCCP) configuration when you change redundancy mode configuration from SSO to RPR mode. If you switch back to SSO mode, both redundancy configurations are still shown.
- In very rare circumstances after an N+1 switchover, upstream traffic that is using Baseline Privacy Interface (BPI) encryption is not received properly by the CMTS router. Input errors are logged on the interface and the **debug cable error** command shows error messages similar to the following:

```
Cable5/1/4: Bad rx packet. JIB status code 0xA
```

The issue occurs on upstream channels that use a “shared” connector, where the other upstream channel using the same shared connector is on another downstream and is shutdown. To workaround this issue, you can activate the downstream and other upstream channel using the same shared connector or temporarily unshare the upstream connector.

## Wideband

- If you configure a wideband interface with more than one MAC domain host sharing the committed information rate (CIR) bandwidth, then the total wideband interface CIR bandwidth gets fragmented among the MAC Domain hosts sharing the WB interface CIR bandwidth.

The WB interface CIR bandwidth can be shared by multiple MAC domain hosts, and these MAC domain hosts could potentially be on the same or different cable line cards. As admission control for WB interfaces happens on cable line cards, the available CIR bandwidth gets partitioned and given to the MD hosts causing the bandwidth fragmentation. However if a typical service flow CIR is very small compared to the total CIR of the wideband interface, then this fragmentation is not visible until the CIR usage reaches very high levels close to the total interface bandwidth.

With certain bandwidth percent configuration and traffic distribution, the overall link utilization of dynamic bandwidth sharing (DBS) can be as low as 85%. For example, this can occur if the traffic rate on a wideband interface is smaller than its configured bandwidth percent, but the traffic rate on a modular-cable interface is much larger than its bandwidth percent. The packet drops happen only on the modular-cable interface which has a larger amount of traffic than its bandwidth-percent. To workaroud this scenario, configure a higher bandwidth percentage to the modular-cable interface, which is larger than or equal to its expected/average traffic rate.

## Important Notes



### Note

This section is subject to change and is not intended to cover all changes found in the software. There may be other changes within the software that are not identified here, such as within the new and modified features. Closely read these release notes in their entirety, as well as review the related caveats documents for more information.

[Table 7](#) identifies some of the key changes that you should consider when running Cisco IOS Release 12.2(33)SCC.

**Table 7** Important Changes in Cisco IOS Release 12.2SC

| Change Description   | Release Introduced |
|--|--------------------|
| <b>Clearing Address Resolution Protocol (ARP) Entries</b><br>Using the <b>clear arp</b> command can take about 15 seconds to remove all ARP table entries.   | 12.2(33)SCA        |
| <b>Point-to-Point over Ethernet Configuration</b><br>For Point-to-Point over Ethernet (PPoE) configuration on the Cisco uBR7200 series routers, the <b>bba-group</b> command replaces the <b>vpdn-group</b> command. The software automatically converts an existing <b>vpdn-group</b> configuration to <b>bba-group</b> global configuration. After the configuration of <b>bba-group</b> , you cannot configure PPoE at the virtual private dialup network (VPDN) level. You need to use the <b>bba-group</b> configuration. | 12.2(33)SCA        |
| <b>DOCSIS</b><br>CM-STATUS messages are enabled by default.  | 12.2(33)SCB        |
| <b>MQC Change between 12.3BC and 12.2SC and the DOCSIS WFQ Implementation</b><br>The priority command does not have any arguments. You must use the police command to specify a guaranteed bandwidth   | 12.2(33)SCC        |

Table 7 Important Changes in Cisco IOS Release 12.2SC (continued)

| Change Description   | Release Introduced |
|--|--------------------|
| <p><b>Logical Channel Support</b></p> <p>To support logical channel feature, the ordering of the "channel-width" and "docsis-mode" parameters have changed in the <b>cable upstream docsis-mode</b> and <b>cable upstream channel-width</b> commands. Since "channel-width" is a physical channel level parameter, it must be configured before "docsis-mode" which is a logical channel level parameter.</p> <p>For more details on this feature, see the <i>SCDMA and Logical Channel Support on the Cisco CMTS Routers</i> at the following location:</p> <p><a href="http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_d30_scdma_lc.html">http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_d30_scdma_lc.html</a></p>  | 12.2(33)SCC        |
| <p><b>Behavior Change in DSG Tunnel</b></p> <p>When DOCSIS Set-top Gateway (DSG) is configured to have a quality of service (QoS) for the DSG tunnel, ensure that the default multicast QoS (MQoS) is configured by using the command</p> <p><b>cable multicast group-qos default scn <i>service class name</i> aggregate</b></p> <p>where <i>service class name</i> is any service class name.</p> <p>Note that:</p> <ul style="list-style-type: none"> <li>• If the last service class name is not configured with the DSG tunnel, you are prompted to remove the default MQoS, if it is not required.</li> <li>• If the service class name is configured with the DSG tunnel when no default MQoS exists, the configuration is rejected and you are prompted to configure the default MQoS.</li> <li>• If you are using an earlier Cisco IOS image, then while upgrading to the Cisco IOS Release 12.2(33)SCC1, during reload if the service class name is configured with the DSG tunnel and the default MQoS does not exist, the default MQoS is automatically configured.</li> <li>• The wideband interface is used to send multicast traffic when no MQoS is configured. After you configure the default MQoS, the primary downstream channel is used to forward the multicast traffic. However, the multicast session on the wideband interface is not deleted. This may cause duplicate traffic to be sent for the same multicast stream. Wait for 180 seconds for the old session to time out.</li> <li>• This behavior is observed only when you toggle (enable/disable) the default MQoS.</li> </ul> | 12.2(33)SCC        |

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: <http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>.

Subscribe to *What's New in Cisco Product Documentation*, which lists all new and revised Cisco technical documentation, as an RSS feed and deliver content directly to your desktop using a reader application. The RSS feeds are a free service.



## CHAPTER 2

# Caveat List for Cisco IOS Release 12.2(33)SCC

This chapter describes open and resolved severity 1 and 2 caveats and select severity 3 caveats:

- The “Open Caveats” sections list open caveats that apply to the current release and may apply to previous releases. A caveat that is open for a prior release and is still unresolved applies to all future releases until it is resolved.
- The “Resolved Caveats” sections list caveats resolved in a specific release, but open in previous releases.

The caveats are sorted alphanumerically by caveat number.

The following information is provided for each caveat:

- Symptoms—A description of what is observed when the caveat occurs.
- Conditions—The conditions under which the caveat has been known to occur.
- Workaround—Solutions, if available, to counteract the caveat.



### Note

From Cisco IOS Release 12.2(33)SCC4, the Caveats section includes the bug ID and a short description of the bug. For details on the symptoms, conditions, and workaround for a specific caveat you must use the Bug Search Tool.

## Cisco Bug Search

Cisco Bug Search Tool (BST), the online successor to Bug Toolkit, is designed to improve effectiveness in network risk management and device troubleshooting. You can search for bugs based on product, release, and keyword, and aggregates key data such as bug details, product, and version. For more details on the tool, see the help page located at <http://www.cisco.com/web/applicat/cbsshhelp/help.html>.

## Open Caveats—Cisco IOS Release 12.2(33)SCC7

| Bug ID                     | Description   |
|----------------------------|---|
| <a href="#">CSCeh33888</a> | A Cisco uBR7246VXR router may reload with the configurations set during the last watchdog reset.  |
| <a href="#">CSCsi75761</a> | Rate-limiting of ICMP unreachable messages is larger than configured when Parallel Express Forwarding (PXF) is configured on the Cisco CMTS router. |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCs150133</a> | The Cisco uBR7246VXR router with UBR7200-NPE-G1 reloads.   |
| <a href="#">CSCsz23786</a> | Crash observed with simultaneous access to standby nvram and switchover.   |
| <a href="#">CSCsz36328</a> | Cable modems remain in online (pk) and expired states after <b>cable privacy mandatory</b> command is executed.  |
| <a href="#">CSCta16724</a> | Users with level 15 privilege and a "view" cannot perform Secure Copy (SCP) operation on a router running Cisco IOS Release 12.4(24)T.   |
| <a href="#">CSCtb46194</a> | A Cisco router may report memory leaks on the active RP when <b>cable igmp static-group</b> command is executed during OIR of the cable line card on a Cisco uBR7200 series router.  |
| <a href="#">CSCtb79237</a> | No syslog or SNMP trap is generated when Common Open Policy Service (COPS) process is used causing PacketCable to fail.  |
| <a href="#">CSCtc27601</a> | Unable to set session-range for source specific multicast (SSM) group configuration.   |
| <a href="#">CSCtc58334</a> | The output of the <b>show cable qos enforce-rule</b> command displays only the first nine characters of the service class names.   |
| <a href="#">CSCtc63102</a> | When IPv6 CPE gets dual-stack online and the CPE network interface is disabled and enabled frequently, the show CPE command on the CMTS for the CPE may not show the IPv4 portion of the dual-stack CPE.                                     |
| <a href="#">CSCtc97468</a> | The multicast service flow (SF) is not generated for static multicast sessions on a Cisco UBR-MC20X20V cable interface line card when the shutdown and no shutdown commands are executed on the cable interface of the card without a delay. |
| <a href="#">CSCtd04983</a> | The Network Processing Engine (NPE) crashes at cmts_bundle_find_mcst_mac when a large number of IPv4 CPE clients rapidly join and leave the multicast groups.  |
| <a href="#">CSCtd12628</a> | The multicast QoS (MQoS) service flows are not created with subinterface configuration when the service class associated with the DOCSIS Set-Top Gateway (DSG) tunnel and subinterface configuration are used.                               |
| <a href="#">CSCtd15349</a> | The <b>show cable subscriber-usage</b> command information is not displayed for a cable modem when it is moved to another interface through load balancing.  |
| <a href="#">CSCtd48609</a> | The <b>ccm ipv6_address rcs-counts</b> command clears all the rcs-counts of all the cable modems instead of clearing the ipv6_address specified for the cable modem rcs-counts.  |
| <a href="#">CSCtd57276</a> | The rcs-status of the cable modem is not updated when IGMP triggers Dynamic Bonding Channel (DBC).   |
| <a href="#">CSCtd69497</a> | Static groups and sessions are not created when static multicast groups and source addresses exist in a cable modem configuration file.  |
| <a href="#">CSCtd71335</a> | Memory leak is observed on a Cisco uBR10012 and a Cisco uBR7200 series router when the cable modem is reset after a reservation is created using Resource Reservation Protocol (RSVP).   |
| <a href="#">CSCtd90685</a> | Modems cannot move out of penalty using the Subscriber Traffic Management (STM) enforce rule when the parameters configured in the modem configuration file override the reg service class of the STM.                                       |

| Bug ID     | Description  |
|------------|--|
| CSCtd90790 | The line card crashes when a cable modem configuration file with the Nominal-GrantInterval value is set to less than 1000.   |
| CSCte05596 | A false alarm is generated when the CPU utilization is very high.  |
| CSCte09146 | PRC_CONFIG_CHANGE is returned instead of PRC_CONFIG_NO_CHANGE when the <b>cable admission-control ds-bandwidth</b> and <b>cable admission-control us-bandwidth</b> commands are executed.  |
| CSCte10266 | The fiber node upstream frequency status remains unchanged when the upstream connector is either configured or unconfigured.   |
| CSCte11273 | Incomplete CCN messages are displayed on a Cisco uBR7200 series router for the integrated cable interface on the Cisco UBR-MC88V cable interface line card, and the bundle interface on the Cisco MC28U line card in configure mode. |
| CSCte12235 | Rollback check fails for the <b>cable metering ipdr-d3 session type</b> command.   |
| CSCte14940 | The Cisco CMTS displays "Invalid nominator" warning messages while walking the docsQoSServiceFlowStatsTable.   |
| CSCte34179 | Some service flows cannot be retrieved using SNMP tools when the cable modem configuration file includes the service class name.   |
| CSCte36746 | The "ARP-3-STCKYARPOVR: Attempt to overwrite Sticky ARP entry" is logged at a higher severity level of ERROR instead of LOG_NOTICE.  |
| CSCte36979 | MDF-enabled modems do not receive multicast traffic when the clear ip mroute command is executed.  |
| CSCte37300 | Spurious memory access and tracebacks are observed when <b>clear cable modem all reset</b> command is executed.  |
| CSCte37779 | The multicast-sessions are not created for a bundle interface.   |
| CSCte42924 | When the <b>show tech</b> command is executed, the line card is powered off if the Onboard Failure Logging (OBFL) feature is disabled.   |
| CSCte42955 | The SNMP query on the "cefAdjEntry" table is trapped into a dead loop when "Lex interface" is configured on the Cisco CMTS.  |
| CSCte45430 | The CMTS forwards traffic when all the cable modems are deleted when static multicast is provisioned via a modem configuration file.   |
| CSCte49359 | When two multicast traffic are sent with the same session range in two group configuration (GC) but without the TOS in both GCs, the <b>show interface wide-band-cable service flow counter</b> command displays incorrect output.   |
| CSCte51580 | The CMTS forwards traffic when static multicast is provisioned via a modem configuration.  |
| CSCte52393 | The rf-channel stacking sub CLI of integrated-controller is shown in the output of the <b>show run</b> command with the default value set to 4.  |
| CSCte57944 | The results of the <b>verify /md5</b> command return inconsistent results when the image is saved on an external flash disk.   |
| CSCte61597 | CPEs in the same IGMPv3 group do not receive multicast.  |
| CSCte74898 | The DOCSIS MAC Infrastructure upstream_channel_id safety net performs some false checks.   |
| CSCte77114 | The wideband CM number shown in the <b>show cable mac-domain Cx/y/z rcc</b> command output is incorrect.   |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCte79637</a> | The CMTS may not reject the REG-REQ, which includes invalid DOCSIS QoS classifiers, when a cable modem configuration file contains both the IPv4 fields and the IPv6 fields in one DOCSIS QoS classifier.  |
| <a href="#">CSCte89399</a> | The Get ENTITY-MIB object shows wrong PIDs for power supply.   |
| <a href="#">CSCte91857</a> | A ping request fails when the MIB TekReset is set to 1 and the line card is in high availability (HA) mode.  |
| <a href="#">CSCte97814</a> | Memory leak is observed on the Cisco CMTS during bootup. This is observed on the Border Gateway Protocol table.  |
| <a href="#">CSCtf29062</a> | When a new IPv4 multicast host is created on the CMTS, the error cleanup is not performed properly.  |
| <a href="#">CSCtf37762</a> | The CM does not receive multicast encryption traffic since the Dynamic Bonding Channel (DBC) request for a multicast encryption session from a CM is rejected by the CMTS.   |
| <a href="#">CSCtf37919</a> | A Dynamic Bonding Channel (DBC) request is rejected by the cable modem.  |
| <a href="#">CSCtf51515</a> | AES keys are incorrectly read while the hardware and software information is incorrectly displayed.  |
| <a href="#">CSCtf53889</a> | The Cisco uBR7225VXR router was unable to identify the PWR-UBR7225-AC-E power supply through SNMP polling.   |
| <a href="#">CSCtf55375</a> | Video was not displayed when the VDOC broadcast feature was enabled on the CMTS.   |
| <a href="#">CSCtf56634</a> | Sporadic unreliability was observed in the CMTS client database for IPv6.  |
| <a href="#">CSCtf59785</a> | The output of the <b>show interface sid counter verbose</b> command does not display the correct status (reset) of the codeword counter while the output of the <b>show cable modem verbose</b> command displays that the codeword counter is reset. |
| <a href="#">CSCtf68413</a> | The downstream service flow counter is cleared when a modem drops offline even if the Cisco CMTS is configured with the <b>cable primary-sflow-qos11 keep all</b> command.   |
| <a href="#">CSCtf85427</a> | Memory leak is observed when more than 21 profiles are configured in a policy map.   |
| <a href="#">CSCtf95826</a> | An aggregate-address nvgens (nonvolatile generation) the wrong mask for a non-contiguous or an incorrect mask.   |
| <a href="#">CSCtg00460</a> | The cable filter matching behavior is different between the route processor and the toaster.   |
| <a href="#">CSCtg01063</a> | Static ARP entries not displayed in the running configuration of the Cisco uBR7246XR router.   |
| <a href="#">CSCtg10082</a> | TFTP fails for a dual-stacked cable modem when the Dynamic Message Integrity Check (DMIC) feature is enabled on the CMTS with the lock option.   |
| <a href="#">CSCtg14992</a> | When a cable modem sends the ICMPv6 echo request with zero hop limit to a cable interface, the ICMPv6 echo reply is returned.  |
| <a href="#">CSCtg25392</a> | IPv4 TCP/UDP packets matches the downstream classifier that is used for IPv6 TCP/UDP packets.  |
| <a href="#">CSCtg32833</a> | Incorrect classification of Business Services over DOCSIS (BSoD) traffic was observed in the downstream service flows, based on the dot1q encapsulation.   |



| Bug ID                     | Description   |
|----------------------------|---|
| <a href="#">CSCtg37017</a> | Unexpected end of configuration file message is seen during bootup or reset of line card on the Cisco uBR10012 and the Cisco uBR7200 router.                            |
| <a href="#">CSCtg49121</a> | Tracebacks are seen from the AToM Manager when the clock is set to an earlier time and date while unprovisioning the virtual channel.                                   |
| <a href="#">CSCtg52567</a> | The <b>show running-config</b> command displays the <b>penalty-period 10080</b> command when the default value of 10080 is configured.                                  |
| <a href="#">CSCtg60350</a> | The IPv6 entries for the client is not deleted when a modem or CPE is deleted from the CMTS.  |
| <a href="#">CSCtg67108</a> | The <b>show license</b> commands fail to execute on the Route Processor.  |
| <a href="#">CSCtg71590</a> | Traceroute does not include differentiated services code point (DSCP)/TOS precedence bits in all routing configurations.  |
| <a href="#">CSCtg83560</a> | Invalid Upstream Channel ID traceback is observed on Cisco CMTS.  |
| <a href="#">CSCth19658</a> | Dynamic Host Configuration Protocol (DHCP) packets are dropped when using L2TPoIPsec.   |
| <a href="#">CSCth24131</a> | The <b>show context summary</b> command always reports null crashes when there are crashes on the cable line card.  |
| <a href="#">CSCth25966</a> | The static multicast configuration on the integrated-cable interface on slot 1 of the line card is missing after an OIR.  |
| <a href="#">CSCth27142</a> | The “%ALIGN-3-SPURIOUS” error was seen at cmts_adjust_eae_bpi_bond_index during a Cisco CMTS bootup.  |
| <a href="#">CSCth29978</a> | The Cisco uBR-MC8X8V line card unexpectedly reloads when unconfiguring the MAC domain configured on a wrong port number.  |
| <a href="#">CSCth37607</a> | The Cisco uBR-MC8X8V line card CPU utilization is high and admission control fail messages are repeatedly displayed.  |
| <a href="#">CSCth49196</a> | ARP replies to the customer premises equipment (CPE) are dropped by Cisco CMTS causing the CPEs to be unreachable.  |
| <a href="#">CSCth59880</a> | The Cisco uBR7200 series router crashes when docsQos3ParamSetPeakTrafficRate is queried.  |
| <a href="#">CSCth61850</a> | Memory leak is observed on the router with multicast service flows configured.  |
| <a href="#">CSCth63676</a> | The primary downstream channel does not get synchronized when Dynamic Channel Change (DCC) uses unitization techniques 1-4 on the Cisco UBR-MC8X8 line card.            |
| <a href="#">CSCth63706</a> | On the Cisco uBR-MC88V cable line card, modems go offline on the integrated cable interface when unconfiguring the MAC domain configuration with the wrong port number. |
| <a href="#">CSCth64226</a> | Error messages are being repeatedly displayed when each IPv6 address is removed from the bundle interface.  |
| <a href="#">CSCth66177</a> | The standby route processor (RP) triggers an active RP crash.   |
| <a href="#">CSCth71637</a> | SNMP query on empty docsQosPktClassEntry/docsQos3PktClassEntry/docsLetfQosPktClassEntry takes a long time to return results.  |
| <a href="#">CSCth71754</a> | Call-home XML message has incorrect format.   |
| <a href="#">CSCth73636</a> | Memory leaks by common Crypto functions.  |

| Bug ID     | Description   |
|------------|---|
| CSCth77470 | Error messages are displayed in the debug log when the “debug cable hqf” command is turned on.  |
| CSCth84596 | The single step ISSU is stuck when using the <b>issu linecard changeversion</b> command.  |
| CSCth87649 | Unable to block specific CPE MAC addresses on the Cisco CMTS.   |
| CSCth89308 | There is a delay of Cisco uBR10012 route processor or cable line card to detect a IPC keepalive timeout condition, which in turn causes the delay of IPC recovery actions that are triggered by the detect. |
| CSCti02678 | Cisco's Express Forwarding (CEF) technology for IP (IP CEF) can be disabled on the Cisco uBR 7200 series routers.   |
| CSCti04149 | The line card does not revert to the previous image version after using the <b>issu linecard abortversion</b> command.  |
| CSCti07521 | The Cisco uBR7200 network processing engine crashes during bootup.  |
| CSCti09242 | The "input error" counter under cable interface increases rapidly.  |
| CSCti22081 | The (*,G) entry is generated while configuring Source Specific Multicast (SSM) mapping.   |
| CSCti24985 | "pppoe enable" has no effect on an Integrated Cable (IC) interface.   |
| CSCti25014 | The "pppoe max-sessions" configuration on the cable interface is not added to the running-config.   |
| CSCti25027 | Difference in the pppoe limit max value between vpdn-group and bba-group results in an error.   |
| CSCti27231 | The Internet Protocol Detail Record XML (IPDR.xml) file does not use the MAC address of the source interface.   |
| CSCti56829 | Fiber-node status in <b>show cable fiber-node</b> command output is not updated after associating a new bundle interface to the wideband interface.   |
| CSCti61148 | The IPDR document ID is not consistent with the MAC address of the source interface.  |
| CSCti61284 | dsgIfClassIncludeInDCD always displays the value as true(1) which is incorrect.   |
| CSCti77209 | CPUHOG messages may be seen when SNMP polling is performed with loadbalancing enabled.  |
| CSCti87411 | The router crashes when the route processor is reloaded using <b>issu commitversion</b> command.  |
| CSCti95777 | Non-Cisco cable modems are stuck in reject(pk) mode if the Cisco uBR-MC88V cable interface line card rejects the certificate.   |
| CSCtj06301 | The Cisco uBR-MC88V cable interface line card may crash on cmts_mc88u_handle_pre_reg_us_data.   |
| CSCtj17588 | The default entry “duration 360 avg-rate 400000 sample-interval 15 up” is not present in the <b>show running-config all</b> command output.   |
| CSCtj23797 | Cable modems might come online in reject(pk) mode due to a timer delay set in the crypto initialization routine.  |
| CSCtj33148 | The Service Independent Intercept (SII) MAC tap counter fails on the cable interface line card.   |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCtj74026</a> | Dual-stack CPE is denied IPv6 address acquisition when max-cpe is set to 1 on the CMTS.  |
| <a href="#">CSCtj86115</a> | IOS mroute entry may not be deleted even when the last CPE member has “left”.  |
| <a href="#">CSCtj87847</a> | Phy static-mcast should be configured on fwd_intf for static-mcast TLV.  |
| <a href="#">CSCtk04949</a> | A Customer Premise Equipment (CPE), behind DOCSIS 2.0 or MDF-0 cable modem, does not receive any traffic.                                      |
| <a href="#">CSCtk46915</a> | Tracebacks are observed when the online insertion and removal (OIR) of a Cisco uBR-MC28U line card is performed.                               |
| <a href="#">CSCtk94751</a> | Default multicast sf MIR is not working as per the specified multicast QoS parameters when the default mqos is un-configured and reconfigured. |
| <a href="#">CSCtn84967</a> | CNiR measurements are not consistent across cable line cards and platforms.  |

## Resolved Caveats—Cisco IOS Release 12.2(33)SCC7

| Bug ID                     | Description   |
|----------------------------|---|
| <a href="#">CSCsg92743</a> | Cisco CMTS router crashes when the <b>show buffers usage</b> command is executed repeatedly.  |
| <a href="#">CSCso99283</a> | A Cisco router or switch may experience a crash when running commands with large output through a Command Scheduler (KRON) policy job.  |
| <a href="#">CSCsw77313</a> | The <b>login</b> command, in exec configuration mode, allows an already logged in user to change the username that is reported for the active session.  |
| <a href="#">CSCta57942</a> | Cable line card crashes if it is initializing (due to OIR or reset via the CLI) while a BPI online Cable Modem is requesting a join for an encrypted multicast session.   |
| <a href="#">CSCtc22435</a> | The MIB object docsQoSServiceFlowLogTable returns a null value.   |
| <a href="#">CSCtc49858</a> | Users with lower privilege levels than enable access may not be able to execute some <b>show cable</b> command options.   |
| <a href="#">CSCtf29066</a> | The CMTS will not perform the cleanup operation effectively during an HA or DHCPv4 Lease Query host verification operation when the MAXHOST error is encountered during the creation of a new host.   |
| <a href="#">CSCth25634</a> | Password is prompted twice for authentication when login authentication has the line password as fallback and RADIUS as primary.  |
| <a href="#">CSCth69364</a> | Cisco IOS Software contains a memory leak vulnerability in the Data-Link Switching (DLSw) feature that could result in a device reload when processing crafted IP Protocol 91 packets.<br><br>Cisco has released free software updates that address this vulnerability.<br><br>This advisory is posted at <a href="http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20110928-dlsw">http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20110928-dlsw</a> . |
| <a href="#">CSCti09814</a> | Continuous query for spectrum data through CBT or SNMP returns fftbusy.   |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCti25339</a> | Cisco IOS device may experience a device reload when the Cisco IOS device is configured for SNMP and receives certain SNMP packets from an authenticated user.           |
| <a href="#">CSCtj44598</a> | A cable modem is unable to register online if an unknown TLV is included in the registration request.  |
| <a href="#">CSCtj56019</a> | Mibwalk dot1dBridge using mst context does not return correct info.  |
| <a href="#">CSCtl04405</a> | The CMTS assigns cable modems to Restricted Load Balance Groups (RLBGs) to which the cable modem is not physically connected to.   |
| <a href="#">CSCtl57115</a> | RTP loss or audio quality problem is observed with PacketCable MultiMedia (PCMM) PRI over DOCSIS solution with two stage commit and when more than 50000 calls are made. |
| <a href="#">CSCtl81115</a> | Incorrect information is logged in SAMIS log file.   |

## Open Caveats—Cisco IOS Release 12.2(33)SCC6

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCeh33888</a> | A Cisco uBR7246VXR router may reload with the configurations set during the last watchdog reset.   |
| <a href="#">CSCsi75761</a> | Rate-limiting of ICMP unreachable messages is larger than configured when Parallel Express Forwarding (PXF) is configured on the Cisco CMTS router.  |
| <a href="#">CSCsl50133</a> | The Cisco uBR7246VXR router with UBR7200-NPE-G1 reloads.   |
| <a href="#">CSCsz36328</a> | Cable modems remain in online (pk) and expired states after cable privacy mandatory command is executed.   |
| <a href="#">CSCta16724</a> | Users with level 15 privilege and a "view" cannot perform Secure Copy (SCP) operation on a router running Cisco IOS Release 12.4(24)T.   |
| <a href="#">CSCtb46194</a> | A Cisco router may report memory leaks on the active RP when <b>cable igmp static-group</b> command is executed during OIR of the cable line card on a Cisco uBR7200 series router.  |
| <a href="#">CSCtb79237</a> | No syslog or SNMP trap is generated when Common Open Policy Service (COPS) process is used causing PacketCable to fail.  |
| <a href="#">CSCtc27601</a> | Unable to set session-range for source specific multicast (SSM) group configuration.   |
| <a href="#">CSCtc58334</a> | The output of the <b>show cable qos enforce-rule</b> command displays only the first nine characters of the service class names.   |
| <a href="#">CSCtc63102</a> | When IPv6 CPE gets dual-stack online and the CPE network interface is disabled and enabled frequently, the show CPE command on the CMTS for the CPE may not show the IPv4 portion of the dual-stack CPE.                                     |
| <a href="#">CSCtc97468</a> | The multicast service flow (SF) is not generated for static multicast sessions on a Cisco UBR-MC20X20V cable interface line card when the shutdown and no shutdown commands are executed on the cable interface of the card without a delay. |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCtd04983</a> | The Network Processing Engine (NPE) crashes at <code>cmts_bundle_find_mcast_mac</code> when a large number of IPv4 CPE clients rapidly join and leave the multicast groups.  |
| <a href="#">CSCtd12628</a> | The multicast QoS (MQoS) service flows are not created with subinterface configuration when the service class associated with the DOCSIS Set-Top Gateway (DSG) tunnel and subinterface configuration are used.                       |
| <a href="#">CSCtd15349</a> | The <b>show cable subscriber-usage</b> command information is not displayed for a cable modem when it is moved to another interface through load balancing.  |
| <a href="#">CSCtd48609</a> | The <b>ccm ipv6_address rcs-counts</b> command clears all the rcs-counts of all the cable modems instead of clearing the <code>ipv6_address</code> specified for the cable modem rcs-counts.   |
| <a href="#">CSCtd57276</a> | The rcs-status of the cable modem is not updated when IGMP triggers Dynamic Bonding Channel (DBC).   |
| <a href="#">CSCtd69497</a> | Static groups and sessions are not created when static multicast groups and source addresses exist in a cable modem configuration file.  |
| <a href="#">CSCtd71335</a> | Memory leak is observed on a Cisco uBR10012 and a Cisco uBR7200 series router when the cable modem is reset after a reservation is created using Resource Reservation Protocol (RSVP).   |
| <a href="#">CSCtd90685</a> | Modems cannot move out of penalty using the Subscriber Traffic Management (STM) enforce rule when the parameters configured in the modem configuration file override the reg service class of the STM.                               |
| <a href="#">CSCtd90790</a> | The line card crashes when a cable modem configuration file with the <code>Nominal-GrantInterval</code> value is set to less than 1000.  |
| <a href="#">CSCtd97055</a> | Tracebacks occur while toggling IPv6 on and off on the customer premises equipment (CPE).  |
| <a href="#">CSCte05596</a> | A false alarm is generated when the CPU utilization is very high.  |
| <a href="#">CSCte09146</a> | PRC_CONFIG_CHANGE is returned instead of PRC_CONFIG_NO_CHANGE when the <b>cable admission-control ds-bandwidth</b> and <b>cable admission-control us-bandwidth</b> commands are executed.  |
| <a href="#">CSCte10266</a> | The fiber node upstream frequency status remains unchanged when the upstream connector is either configured or unconfigured.   |
| <a href="#">CSCte11273</a> | Incomplete CCN messages are displayed on a Cisco uBR7200 series router for the integrated cable interface on the Cisco UBR-MC88V cable interface line card, and the bundle interface on the Cisco MC28U line card in configure mode. |
| <a href="#">CSCte12235</a> | Rollback check fails for the <b>cable metering ipdr-d3 session type</b> command.   |
| <a href="#">CSCte14940</a> | The Cisco CMTS displays "Invalid nominator" warning messages while walking the <code>docsQosServiceFlowStatsTable</code> .   |
| <a href="#">CSCte34179</a> | Some service flows cannot be retrieved using SNMP tools when the cable modem configuration file includes the service class name.   |
| <a href="#">CSCte36746</a> | The "ARP-3-STCKYARPOVR: Attempt to overwrite Sticky ARP entry" is logged at a higher severity level of ERROR instead of LOG_NOTICE.  |
| <a href="#">CSCte36979</a> | MDF-enabled modems do not receive multicast traffic when the <code>clear ip mroute</code> command is executed.   |

| Bug ID     | Description  |
|------------|--|
| CSCte37300 | Spurious memory access and tracebacks are observed when <b>clear cable modem all reset</b> command is executed.  |
| CSCte37779 | The multicast-sessions are not created for a bundle interface.   |
| CSCte42924 | When the <b>show tech</b> command is executed, the line card is powered off if the Onboard Failure Logging (OBFL) feature is disabled.   |
| CSCte42955 | The SNMP query on the "cefAdjEntry" table is trapped into a dead loop when "Lex interface" is configured on the Cisco CMTS.  |
| CSCte45430 | The CMTS forwards traffic when all the cable modems are deleted when static multicast is provisioned via a modem configuration file.   |
| CSCte49359 | When two multicast traffic are sent with the same session range in two group configuration (GC) but without the TOS in both GCs, the <b>show interface wide-band-cable service flow counter</b> command displays incorrect output. |
| CSCte51580 | The CMTS forwards traffic when static mulitcast is provisioned via a modem configuration.  |
| CSCte52393 | The rf-channel stacking sub CLI of integrated-controller is shown in the output of the show run command with the default value set to 4.   |
| CSCte57944 | The results of the command <b>verify /md5</b> return inconsistent results when the image is saved on an external flash disk.   |
| CSCte61597 | CPEs in the same IGMPv3 group do not receive multicast.  |
| CSCte74898 | The DOCSIS MAC Infrastructure upstream_channel_id safety net performs some false checks.   |
| CSCte79637 | The CMTS may not reject the REG-REQ, which includes invalid DOCSIS QoS classifiers, when a cable modem configuration file contains both the IPv4 fields and the IPv6 fields in one DOCSIS QoS classifier.                          |
| CSCte89399 | The Get ENTITY-MIB object shows wrong PIDs for power supply.   |
| CSCte91857 | A ping request fails when the MIB TekReset is set to 1 and the line card is in high availability (HA) mode.  |
| CSCte97814 | Memory leak is observed on the Cisco CMTS during bootup. This is observed on the Border Gateway Protocol table.  |
| CSCtf29062 | When a new IPv4 multicast host is created on the CMTS, the error cleanup is not performed properly.  |
| CSCtf29066 | The CMTS will not perform the cleanup operation effectively during an HA or DHCPv4 Lease Query host verification operation when the MAXHOST error is encountered during the creation of a new host.                                |
| CSCtf37762 | The CM does not receive multicast encryption traffic since the Dynamic Bonding Channel (DBC) request for a multicast encryption session from a CM is rejected by the CMTS.   |
| CSCtf37919 | A Dynamic Bonding Channel (DBC) request is rejected by the cable modem.  |
| CSCtf51515 | AES keys are incorrectly read while the hardware and software information is incorrectly displayed.  |
| CSCtf53889 | The Cisco uBR7225VXR router was unable to identify the PWR-UBR7225-AC-E power supply through SNMP polling.   |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCtf55375</a> | Video was not displayed when the VDOC broadcast feature was enabled on the CMTS.   |
| <a href="#">CSCtf56634</a> | Sporadic unreliability was observed in the CMTS client database for IPv6.  |
| <a href="#">CSCtf59785</a> | The output of the <b>show interface sid counter verbose</b> command does not display the correct status (reset) of the codeword counter while the output of the <b>show cable modem verbose</b> command displays that the codeword counter is reset. |
| <a href="#">CSCtf68413</a> | The downstream service flow counter is cleared when a modem drops offline even if the Cisco CMTS is configured with the <b>cable primary-sflow-qos11 keep all</b> command.   |
| <a href="#">CSCtf78545</a> | IPv6 does not work on multiple CMTS bundle subinterfaces.  |
| <a href="#">CSCtf85427</a> | Memory leak is observed when more than 21 profiles are configured in a policy map.   |
| <a href="#">CSCtf95826</a> | An aggregate-address nvgens (nonvolatile generation) the wrong mask for a non-contiguous or an incorrect mask.   |
| <a href="#">CSCtg00460</a> | The cable filter matching behavior is different between the route processor and the toaster.   |
| <a href="#">CSCtg01063</a> | Static ARP entries not displayed in the running configuration of the Cisco uBR7246XR router.   |
| <a href="#">CSCtg10082</a> | TFTP fails for a dual-stacked cable modem when the Dynamic Message Integrity Check (DMIC) feature is enabled on the CMTS with the lock option.   |
| <a href="#">CSCtg14992</a> | When a cable modem sends the ICMPv6 echo request with zero hop limit to a cable interface, the ICMPv6 echo reply is returned.  |
| <a href="#">CSCtg25392</a> | IPv4 TCP/UDP packets matches the downstream classifier that is used for IPv6 TCP/UDP packets.  |
| <a href="#">CSCtg32833</a> | Incorrect classification of Business Services over DOCSIS (BSoD) traffic was observed in the downstream service flows, based on the dot1q encapsulation.   |
| <a href="#">CSCtg37017</a> | Unexpected end of configuration file message is seen during bootup or reset of line card on the Cisco uBR10012 and the Cisco uBR7200 router.   |
| <a href="#">CSCtg49121</a> | Tracebacks are seen from the AToM Manager when the clock is set to an earlier time and date while unprovisioning the virtual channel.  |
| <a href="#">CSCtg52567</a> | The <b>show running-config</b> command displays the <b>penalty-period 10080</b> command when the default value of 10080 is configured.   |
| <a href="#">CSCtg60350</a> | The IPv6 entries for the client is not deleted when a modem or CPE is deleted from the CMTS.   |
| <a href="#">CSCtg67108</a> | The <b>show license</b> commands fail to execute on the Route Processor.   |
| <a href="#">CSCtg83560</a> | Invalid Upstream Channel ID traceback is observed on Cisco CMTS.   |
| <a href="#">CSCth19658</a> | Dynamic Host Configuration Protocol (DHCP) packets are dropped when using L2TPoIPsec.  |
| <a href="#">CSCth24131</a> | The show context summary command always reports null crashes when there are crashes on the cable line card.  |
| <a href="#">CSCth25966</a> | The static multicast configuration on the integrated-cable interface on slot 1 of the line card is missing after an OIR.   |



| Bug ID                        | Description  |
|-------------------------------|--|
| <a href="#">CSCth27142</a>    | The “%ALIGN-3-SPURIOUS” error was seen at cmts_adjust_eae_bpi_bond_index during a Cisco CMTS bootup.   |
| <a href="#">CSCth29978</a>    | The UBR-MC8X8V line card unexpectedly reloads when unconfiguring the MAC domain configured on a wrong port number.   |
| <a href="#">CSCth37607</a>    | The Cisco UBR-MC8X8V line card CPU utilization is high and admission control fail messages are repeatedly displayed.   |
| <a href="#">CSCth49196</a>    | ARP replies to the customer premises equipment (CPE) are dropped by Cisco CMTS causing the CPEs to be unreachable.   |
| <a href="#">CSCth59880</a>    | The Cisco uBR7200 series router crashes when docsQos3ParamSetPeakTrafficRate is queried.   |
| <a href="#">CSCth61850</a>    | Memory leak is observed on the router with multicast service flows configured.   |
| <a href="#">CSCth63676</a>    | The primary downstream channel does not get synchronized when Dynamic Channel Change (DCC) uses unitization techniques 1-4 on the Cisco UBR-MC8X8 line card.             |
| <a href="#">CSCth63706</a>    | On the Cisco UBR-MC8X8V cable line card, modems go offline on the integrated cable interface when unconfiguring the MAC domain configuration with the wrong port number. |
| <a href="#">CSCth64226</a>    | Error messages are being repeatedly displayed when each IPv6 address is removed from the bundle interface.   |
| <a href="#">CSCth66177</a>    | The standby route processor (RP) triggers an active RP crash.  |
| <a href="#">CSCth71637</a>    | SNMP query on empty docsQosPktClassEntry/docsQos3PktClassEntry/docsIetfQosPktClassEntry takes a long time to return results.   |
| <a href="#">CSCth73636</a>    | Memory leaks by common Crypto functions.   |
| <a href="#">CSCth77470</a>    | Error messages are displayed in the debug log when the “debug cable hqf” command is turned on.   |
| <a href="#">CSCth78149</a>    | Unable to set the downstream description for wideband cable interfaces on the Cisco uBR7246VXR router.   |
| <a href="#">CSCth84596</a>    | The single step ISSU is stuck when using the <b>issu linecard changeversion</b> command.   |
| <a href="#">CSCth87649</a>    | Unable to block specific CPE MAC addresses on the Cisco CMTS.  |
| <a href="#">CSCti02678</a>    | Cisco's Express Forwarding (CEF) technology for IP (IP CEF) can be disabled on the Cisco uBR 7200 series router.   |
| <a href="#">CSCti04149</a>    | The line card does not revert to the previous image version after using the <b>issu linecard abortversion</b> command.   |
| <a href="#">CSCti07521</a>    | The Cisco uBR7200 network processing engine crashes during bootup.   |
| <a href="#">CSCti09242</a>    | The "input error" counter under cable interface increases rapidly.   |
| <a href="#">CSCti09814</a>    | Continuous query for spectrum data through CBT or SNMP returns fftbusy.  |
| <a href="#">CSCti22081</a>    | The (*,G) entry is generated while configuring Source Specific Multicast (SSM) mapping.  |
| <a href="#">CSCti24985The</a> | The "pppoe enable" has no effect on an Integrated Cable (IC) interface.  |
| <a href="#">CSCti25014</a>    | The "pppoe max-sessions" configuration on the cable interface is not added to the running-config.  |



| Bug ID                     | Description   |
|----------------------------|---|
| <a href="#">CSCti25027</a> | Difference in the pppoe limit max value between vpdn-group and bba-group results in an error.   |
| <a href="#">CSCti27231</a> | The Internet Protocol Detail Record XML (IPDR.xml) file does not use the MAC address of the source interface.                                       |
| <a href="#">CSCti35425</a> | A unicast packet is overflowed when the bundle lookup for the packet fails.   |
| <a href="#">CSCti56829</a> | Fiber-node status in <b>show cable fiber-node</b> command output is not updated after associating a new bundle interface to the wideband interface. |
| <a href="#">CSCti61148</a> | The IPDR document ID is not consistent with the MAC address of the source interface.  |
| <a href="#">CSCti61284</a> | dsgIfClassIncludeInDCD always displays the value as true(1) which is incorrect.   |
| <a href="#">CSCti87411</a> | The active RP crashes, if the system is reloaded using the <b>ISSU commitversion</b> command.   |
| <a href="#">CSCti95777</a> | Non-Cisco cable modems are stuck in reject(pk) mode if the Cisco uBR-MC88V cable interface line card rejects the certificate.                       |
| <a href="#">CSCtj00942</a> | Physical index of line cards on the Cisco uBR7200 series routers is changed after the Online Insertion and Removal (OIR) of the line cards.         |
| <a href="#">CSCtj04334</a> | Cannot access FastEthernet interface with default startup IOS configuration.  |
| <a href="#">CSCtj06301</a> | The Cisco uBR-MC88V cable interface line card may crash on cmts_mc88u_handle_pre_reg_us_data.   |
| <a href="#">CSCtj17588</a> | The default entry "duration 360 avg-rate 400000 sample-interval 15 up" is not present in the <b>show running-config all</b> command output.         |
| <a href="#">CSCtj23797</a> | Cable modems might come online in reject(pk) mode due to a timer delay set in the crypto initialization routine.                                    |
| <a href="#">CSCtj33148</a> | The Service Independent Intercept (SII) MAC tap counter fails on the cable interface line card.   |
| <a href="#">CSCtj44598</a> | A cable modem is unable to register online if an unknown TLV is included in the registration request.   |
| <a href="#">CSCtj52348</a> | The Network Processing Engine (NPE) crashes when you boot up the Cisco uBR7200 series router with a Cisco uBR-MC28U line card.                      |

## Resolved Caveats—Cisco IOS Release 12.2(33)SCC6

| Bug ID                     | Description   |
|----------------------------|---|
| <a href="#">CSCsv21109</a> | High capacity (HC) counters for the member links of port channels are missing in the IF-MIB.  |
| <a href="#">CSCsw63003</a> | Memory increase occurs in 'BGP Router' process due to BGP path attributes. Memory used by this process increases constantly and so do the BGP path attributes while the number of routes does not increase. |
| <a href="#">CSCsw92379</a> | The active and standby route processors crash when DHCP snooping bindings are released after a line card OIR.   |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCta49529</a> | An unusual "ALIGN-3-SPURIOUS" error message is displayed when the CMTS is reloaded after running the write erase command.  |
| <a href="#">CSCtc04113</a> | The Signal Noise (SN) ratio is always displayed as 0.0 for a Cisco DPC3000 modem as it does not support the current SNMP OID docsIfSigQSignalNoise to query the SN ratio.  |
| <a href="#">CSCtc50579</a> | Modems do not come online on the downstream port.  |
| <a href="#">CSCtc84331</a> | The docsIfCmtsChannelUtUtilization attribute provides only half the real value for physical channels that have two logical channels configured.  |
| <a href="#">CSCtd25669</a> | When a secondary rf-channel shutdown/no shutdown is performed on a Cisco uBR-MC8X8 cable interface line card, the wideband CM reports primary-channel QAM failure/recovery.  |
| <a href="#">CSCtd39716</a> | The Cisco CMTS router crashes after executing the <b>no license agent default authenticate none</b> command.   |
| <a href="#">CSCtd62264</a> | The cable modem is not reset and remains in w-online state When all non-primary DS channels are inactive and an RF channel is removed from the bonding group.  |
| <a href="#">CSCtd86909</a> | After Dynamic Channel Change (DCC) is performed to change the upstream channel of a cable modem, the output of the <b>show cable modem rcs-status</b> command does not display the entry for a cable modem that is w-online. |
| <a href="#">CSCte20061</a> | An IPv4 packet is classified as an IPv6 service flow when a cable modem has both IPv4 and IPv6 classifiers.  |
| <a href="#">CSCte71997</a> | When call volume is high, and numerous stop records are being generated by CMTS, it is observed that an invalid XML file gets generated occasionally.  |
| <a href="#">CSCte97922</a> | The hardware version, software version and serial number are not displayed for UBR10-FAN-ASSY, UBR10-PWR-DC and UBR10-PWR-AC modules.  |
| <a href="#">CSCtf14490</a> | The docsIf3CmtsSpectrumAnalysisMeasEntry data is not updated on a Cisco uBR7200 series router or Cisco uBR10012 router.  |
| <a href="#">CSCtf26531</a> | IPDR reports two counters in the DS-UTIL counters record as zero.  |
| <a href="#">CSCtf33251</a> | The <b>show hccp</b> command does not return any result though HCCP redundancy is configured in the running-configuration.   |
| <a href="#">CSCtf57509</a> | The license modify priority command does not enable the evaluation license.  |
| <a href="#">CSCtf81039</a> | The CPE entries are displayed even after the CPE is disconnected from the cable modem.   |
| <a href="#">CSCtf89823</a> | The SNMP query, ccwbRFChannelMpegPkts, for downstream RF channels does not return any result.  |
| <a href="#">CSCtf96525</a> | The cable filter group for the multimedia terminal adapter (MTA) does not match with the device class after an RP switchover.  |
| <a href="#">CSCtg07854</a> | Packets are assigned to wrong queues when the policy-map configuration is modified.  |
| <a href="#">CSCtg16637</a> | SAMIS and IPDR generate duplicate records for each deleted multicast service flow.   |
| <a href="#">CSCtg21793</a> | Maximum Transmission Unit (MTU) size is not inherited by the subinterfaces on the Gigabit Ethernet VLAN.   |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCtg26495</a> | The Dynamic Channel Change (DCC) and the Dynamic Bonding Channel (DBC) statistics counter of docsQos(3)DynamicServiceStatsTable get reset after executing the "clear counter" command. |
| <a href="#">CSCtg37467</a> | The docsLoadbal3GrpStatusChgOverSuccess counters cannot be increased in DOCSIS 3.0 General Load Balancing Group (GLBG).  |
| <a href="#">CSCtg46662</a> | Alignment traceback is seen when the <b>show cable fiber association</b> command is executed.  |
| <a href="#">CSCtg61986</a> | Traceback is observed during the Cisco uBR7246VXR router bootup.   |
| <a href="#">CSCtg64597</a> | Active RP crashes due to bad chunk reference count.  |
| <a href="#">CSCtg79921</a> | InterProcess Communication (IPC) sending fails when IP security is configured.   |
| <a href="#">CSCtg80103</a> | High memory consumption by IPDR_EXP_PROC process when Internet Protocol Data Records (IPDR) is configured and an unknown collector tries to connect.                                   |
| <a href="#">CSCtg80187</a> | The cable modem failed to switch to non-mtc mode, when the tx power on the reference channel is at the peak level and has a ranging power greater than 2dBmV.                          |
| <a href="#">CSCtg83868</a> | Modular interface on a DOCSIS load balance group is not added or removed by the docsLoadBalChannelStatus MIB when the rf-channel number is greater than 7.                             |
| <a href="#">CSCtg92199</a> | The Support for IfMIB is added for CMTS bundle IPv6 subinterface.  |
| <a href="#">CSCth22572</a> | The ccsSpectrumDataPower MIB object always returns the power data for the same upstream for a UB modem.  |
| <a href="#">CSCth36030</a> | System Event Archive (SEA) process accesses the boot disk even when it is disabled.  |
| <a href="#">CSCti00484</a> | The wrong ARP entry is removed.  |
| <a href="#">CSCti03293</a> | ifSpeed returns actual data instead of raw data on the integrated-cable interface/modular-cable interface.   |
| <a href="#">CSCti19280</a> | The FFT engine is not updated with the CNR threshold values if a change is made either in the CLI or the SNMP interface to the CNR threshold profile for a given upstream.             |
| <a href="#">CSCti58738</a> | The Cisco CMTS router crashes after getting the doubly-linked list corruption message.   |
| <a href="#">CSCti81896</a> | When the ingress cancellation feature is enabled, all modems on an upstream may momentarily go offline and then recover within minutes.  |
| <a href="#">CSCtj61027</a> | Continuous traceback observed after booting the Cisco uBR7246VXR router with the Cisco IOS Release 12.2(33)SCC6.   |

## Open Caveats—Cisco IOS Release 12.2(33)SCC5

| Bug ID                     | Description   |
|----------------------------|---|
| <a href="#">CSCeh33888</a> | A Cisco uBR7246VXR router may reload with the configurations set during the last watchdog reset.  |
| <a href="#">CSCsi75761</a> | Rate-limiting of ICMP unreachable messages is larger than configured when Parallel Express Forwarding (PXF) is configured on the Cisco CMTS router. |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCsl50133</a> | The Cisco uBR7246VXR router with UBR7200-NPE-G1 reloads.   |
| <a href="#">CSCsz36328</a> | Cable modems remain in online (pk) and expired states after cable privacy mandatory command is executed.   |
| <a href="#">CSCta16724</a> | Users with level 15 privilege and a "view" cannot perform Secure Copy (SCP) operation on a router running Cisco IOS Release 12.4(24)T.   |
| <a href="#">CSCta49529</a> | An unusual "ALIGN-3-SPURIOUS" error message is displayed when the CMTS is reloaded after running the write erase command.  |
| <a href="#">CSCtb46194</a> | A Cisco router may report memory leaks on the active RP when <b>cable igmp static-group</b> command is executed during OIR of the cable line card on a Cisco uBR7200 series router.  |
| <a href="#">CSCtb79237</a> | No syslog or SNMP trap is generated when Common Open Policy Service (COPS) process is used causing PacketCable to fail.  |
| <a href="#">CSCtc04113</a> | The Signal Noise (SN) ratio is always displayed as 0.0 for a Cisco DPC3000 modem as it does not support the current SNMP OID docsIfSigQSignalNoise to query the SN ratio.  |
| <a href="#">CSCtc27601</a> | Unable to set session-range for source specific multicast (SSM) group configuration.   |
| <a href="#">CSCtc50579</a> | Modems do not come online on the downstream port.  |
| <a href="#">CSCtc58334</a> | The output of the <b>show cable qos enforce-rule</b> command displays only the first nine characters of the service class names.   |
| <a href="#">CSCtc63102</a> | When IPv6 CPE gets dual-stack online and the CPE network interface is disabled and enabled frequently, the show CPE command on the CMTS for the CPE may not show the IPv4 portion of the dual-stack CPE.                                     |
| <a href="#">CSCtc97468</a> | The multicast service flow (SF) is not generated for static multicast sessions on a Cisco UBR-MC20X20V cable interface line card when the shutdown and no shutdown commands are executed on the cable interface of the card without a delay. |
| <a href="#">CSCtd04983</a> | The Network Processing Engine (NPE) crashes at <code>cmts_bundle_find_mcast_mac</code> when a large number of IPv4 CPE clients rapidly join and leave the multicast groups.  |
| <a href="#">CSCtd12628</a> | The multicast QoS (MQoS) service flows are not created with subinterface configuration when the service class associated with the DOCSIS Set-Top Gateway (DSG) tunnel and subinterface configuration are used.                               |
| <a href="#">CSCtd15349</a> | The <b>show cable subscriber-usage</b> command information is not displayed for a cable modem when it is moved to another interface through load balancing.  |
| <a href="#">CSCtd48609</a> | The <b>ccm ipv6_address rcs-counts</b> command clears all the rcs-counts of all the cable modems instead of clearing the <code>ipv6_address</code> specified for the cable modem rcs-counts.   |
| <a href="#">CSCtd57276</a> | The rcs-status of the cable modem is not updated when IGMP triggers Dynamic Bonding Channel (DBC).   |
| <a href="#">CSCtd62264</a> | The cable modem is not reset and remains in w-online state When all non-primary DS channels are inactive and an RF channel is removed from the bonding group.  |
| <a href="#">CSCtd69497</a> | Static groups and sessions are not created when static multicast groups and source addresses exist in a cable modem configuration file.  |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCtd71335</a> | Memory leak is observed on a Cisco uBR10012 and a Cisco uBR7200 series router when the cable modem is reset after a reservation is created using Resource Reservation Protocol (RSVP).   |
| <a href="#">CSCtd90685</a> | Modems cannot move out of penalty using the Subscriber Traffic Management (STM) enforce rule when the parameters configured in the modem configuration file override the reg service class of the STM.                               |
| <a href="#">CSCtd90790</a> | The line card crashes when a cable modem configuration file with the NominalGrantInterval value is set to less than 1000.  |
| <a href="#">CSCtd97055</a> | Tracebacks occur while toggling IPv6 on and off on the customer premises equipment (CPE).  |
| <a href="#">CSCte05596</a> | A false alarm is generated when the CPU utilization is very high.  |
| <a href="#">CSCte09146</a> | PRC_CONFIG_CHANGE is returned instead of PRC_CONFIG_NO_CHANGE when the <b>cable admission-control ds-bandwidth</b> and <b>cable admission-control us-bandwidth</b> commands are executed.  |
| <a href="#">CSCte10266</a> | The fiber node upstream frequency status remains unchanged when the upstream connector is either configured or unconfigured.   |
| <a href="#">CSCte11273</a> | Incomplete CCN messages are displayed on a Cisco uBR7200 series router for the integrated cable interface on the Cisco UBR-MC88V cable interface line card, and the bundle interface on the Cisco MC28U line card in configure mode. |
| <a href="#">CSCte12235</a> | Rollback check fails for the <b>cable metering ipdr-d3 session type</b> command.   |
| <a href="#">CSCte14940</a> | The Cisco CMTS displays "Invalid nominator" warning messages while walking the docsQosServiceFlowStatsTable.   |
| <a href="#">CSCte20061</a> | An IPv4 packet is classified as an IPv6 service flow when a cable modem has both IPv4 and IPv6 classifiers.  |
| <a href="#">CSCte34179</a> | Some service flows cannot be retrieved using SNMP tools when the cable modem configuration file includes the service class name.   |
| <a href="#">CSCte36746</a> | The "ARP-3-STCKYARPOVR: Attempt to overwrite Sticky ARP entry" is logged at a higher severity level of ERROR instead of LOG_NOTICE.  |
| <a href="#">CSCte36979</a> | MDF-enabled modems do not receive multicast traffic when the clear ip mroute command is executed.  |
| <a href="#">CSCte37300</a> | Spurious memory access and tracebacks are observed when <b>clear cable modem all reset</b> command is executed.  |
| <a href="#">CSCte37779</a> | The multicast-sessions are not created for a bundle interface.   |
| <a href="#">CSCte42924</a> | When the <b>show tech</b> command is executed, the line card is powered off if the Onboard Failure Logging (OBFL) feature is disabled.   |
| <a href="#">CSCte42955</a> | The SNMP query on the "cefAdjEntry" table is trapped into a dead loop when "Lex interface" is configured on the Cisco CMTS.  |
| <a href="#">CSCte45430</a> | The CMTS forwards traffic when all the cable modems are deleted when static multicast is provisioned via a modem configuration file.   |
| <a href="#">CSCte49359</a> | When two multicast traffic are sent with the same session range in two group configuration (GC) but without the TOS in both GCs, the <b>show interface wide-band-cable service flow counter</b> command displays incorrect output.   |
| <a href="#">CSCte51580</a> | The CMTS forwards traffic when static mulitcast is provisioned via a modem configuration.  |

| Bug ID     | Description   |
|------------|---|
| CSCte52393 | The rf-channel stacking sub CLI of integrated-controller is shown in the output of the show run command with the default value set to 4.  |
| CSCte57944 | The results of the command <b>verify /md5</b> return inconsistent results when the image is saved on an external flash disk.  |
| CSCte61597 | CPEs in the same IGMPv3 group do not receive multicast.   |
| CSCte71997 | When call volume is high, and numerous stop records are being generated by CMTS, it is observed that an invalid XML file gets generated occasionally.   |
| CSCte74898 | The DOCSIS MAC Infrastructure upstream_channel_id safety net performs some false checks.  |
| CSCte79637 | The CMTS may not reject the REG-REQ, which includes invalid DOCSIS QoS classifiers, when a cable modem configuration file contains both the IPv4 fields and the IPv6 fields in one DOCSIS QoS classifier. |
| CSCte89399 | The Get ENTITY-MIB object shows wrong PIDs for power supply.  |
| CSCte97814 | Memory leak is observed on the Cisco CMTS during bootup. This is observed on the Border Gateway Protocol table.   |
| CSCte97922 | The hardware version, software version and serial number are not displayed for UBR10-FAN-ASSY, UBR10-PWR-DC and UBR10-PWR-AC modules.   |
| CSCtf14490 | The docsIf3CmtsSpectrumAnalysisMeasEntry data is not updated on a Cisco uBR7200 series router or Cisco uBR10012 router.   |
| CSCtf26531 | IPDR reports two counters in the DS-UTIL counters record as zero.   |
| CSCtf29062 | When a new IPv4 multicast host is created on the CMTS, the error cleanup is not performed properly.   |
| CSCtf29066 | The CMTS will not perform the cleanup operation effectively during an HA or DHCPv4 Lease Query host verification operation when the MAXHOST error is encountered during the creation of a new host.       |
| CSCtf32861 | The <b>cable metering ipdr session</b> command does not configure successfully if "usage-based billing" and "streaming of billing records" is already configured to an external server.                   |
| CSCtf37762 | The CM does not receive multicast encryption traffic since the Dynamic Bonding Channel (DBC) request for a multicast encryption session from a CM is rejected by the CMTS.                                |
| CSCtf37919 | A Dynamic Bonding Channel (DBC) request is rejected by the cable modem.   |
| CSCtf49834 | Inconsistent MIB values were observed in SAMIS records for DOCSIS1.0 and DOCSIS2.0 modems.  |
| CSCtf51515 | AES keys are incorrectly read while the hardware and software information is incorrectly displayed.   |
| CSCtf53889 | The Cisco uBR7225VXR router was unable to identify the PWR-UBR7225-AC-E power supply through SNMP polling.  |
| CSCtf55375 | Video was not displayed when the VDOC broadcast feature was enabled on the CMTS.  |
| CSCtf56634 | Sporadic unreliability was observed in the CMTS client database for IPv6.   |
| CSCtf57509 | The license modify priority command does not enable the evaluation license.   |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCtf59785</a> | The output of the <b>show interface sid counter verbose</b> command does not display the correct status (reset) of the codeword counter while the output of the <b>show cable modem verbose</b> command displays that the codeword counter is reset. |
| <a href="#">CSCtf68413</a> | The downstream service flow counter is cleared when a modem drops offline even if the Cisco CMTS is configured with the <b>cable primary-sflow-qos11 keep all</b> command.   |
| <a href="#">CSCtf78545</a> | IPv6 does not work on multiple CMTS bundle subinterfaces.  |
| <a href="#">CSCtf81039</a> | The CPE entries are displayed even after the CPE is disconnected from the cable modem.   |
| <a href="#">CSCtf85427</a> | Memory leak is observed when more than 21 profiles are configured in a policy map.   |
| <a href="#">CSCtf89823</a> | The SNMP query, ccwBRFChannelMpegPkts, for downstream RF channels does not return any result.  |
| <a href="#">CSCtf95826</a> | An aggregate-address nvgens (nonvolatile generation) the wrong mask for a non-contiguous or an incorrect mask.   |
| <a href="#">CSCtf96525</a> | The cable filter group for the multimedia terminal adapter (MTA) does not match with the device class after an RP switchover.  |
| <a href="#">CSCtg00460</a> | The cable filter matching behavior is different between the route processor and the toaster.   |
| <a href="#">CSCtg01063</a> | Static ARP entries not displayed in the running configuration of the Cisco uBR7246XR router.   |
| <a href="#">CSCtg07854</a> | Packets are assigned to wrong queues when the policy-map configuration is modified.  |
| <a href="#">CSCtg10082</a> | TFTP fails for a dual-stacked cable modem when the Dynamic Message Integrity Check (DMIC) feature is enabled on the CMTS with the lock option.   |
| <a href="#">CSCtg14992</a> | When a cable modem sends the ICMPv6 echo request with zero hop limit to a cable interface, the ICMPv6 echo reply is returned.  |
| <a href="#">CSCtg16637</a> | SAMIS and IPDR generate duplicate records for each deleted multicast service flow.   |
| <a href="#">CSCtg25392</a> | IPv4 TCP/UDP packets matches the downstream classifier that is used for IPv6 TCP/UDP packets.  |
| <a href="#">CSCtg26495</a> | The Dynamic Channel Change (DCC) and the Dynamic Bonding Channel (DBC) statistics counter of docsQos(3)DynamicServiceStatsTable get reset after executing the "clear counter" command.   |
| <a href="#">CSCtg32833</a> | Incorrect classification of Business Services over DOCSIS (BSoD) traffic was observed in the downstream service flows, based on the dot1q encapsulation.   |
| <a href="#">CSCtg37017</a> | Unexpected end of configuration file message is seen during bootup or reset of line card on the Cisco uBR10012 and the Cisco uBR7200 router.   |
| <a href="#">CSCtg37467</a> | The docsLoadbal3GrpStatusChgOverSuccess counters cannot be increased in DOCSIS 3.0 General Load Balancing Group (GLBG).  |
| <a href="#">CSCtg46662</a> | Alignment traceback is seen when the <b>show cable fiber association</b> command is executed.  |
| <a href="#">CSCtg49121</a> | Tracebacks are seen from the AToM Manager when the clock is set to an earlier time and date while unprovisioning the virtual channel.  |



| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCtg52567</a> | The <b>show running-config</b> command displays the <b>penalty-period 10080</b> command when the default value of 10080 is configured.                                   |
| <a href="#">CSCtg60350</a> | The IPv6 entries for the client is not deleted when a modem or CPE is deleted from the CMTS.   |
| <a href="#">CSCtg64597</a> | The active RP crashes due to bad chunk reference count.  |
| <a href="#">CSCtg67108</a> | The <b>show license</b> commands fail to execute on the Route Processor.   |
| <a href="#">CSCtg79921</a> | InterProcess Communication (IPC) sending fails when IP security is configured.   |
| <a href="#">CSCtg80103</a> | High memory consumption by IPDR_EXP_PROC process when Internet Protocol Data Records (IPDR) is configured and an unknown collector tries to connect.                     |
| <a href="#">CSCtg83560</a> | Invalid Upstream Channel ID" traceback is observed on Cisco CMTS.  |
| <a href="#">CSCtg83868</a> | Modular interface on a DOCSIS load balance group is not added or removed by the docsLoadBalChannelStatus MIB when the rf-channel number is greater than 7.               |
| <a href="#">CSCtg92199</a> | The Support for IfMIB is added for CMTS bundle IPv6 subinterface.  |
| <a href="#">CSCth22572</a> | The ccsSpectrumDataPower MIB object always returns the power data for the same upstream for a UB modem.  |
| <a href="#">CSCth24131</a> | The show context summary command always reports null crashes when there are crashes on the cable line card.  |
| <a href="#">CSCth25966</a> | The static multicast configuration on the integrated-cable interface on slot 1 of the line card is missing after an OIR.   |
| <a href="#">CSCth27142</a> | The “%ALIGN-3-SPURIOUS” error was seen at cmts_adjust_eae_bpi_bond_index during a Cisco CMTS bootup.   |
| <a href="#">CSCth29978</a> | The Cisco UBR-MC8X8V line card unexpectedly reloads when unconfiguring the MAC domain configured on a wrong port number.   |
| <a href="#">CSCth36030</a> | System Event Archive (SEA) process accesses the boot disk even when it is disabled.  |
| <a href="#">CSCth37607</a> | The Cisco UBR-MC8X8V line card CPU utilization is high and admission control fail messages are repeatedly displayed.   |
| <a href="#">CSCth49196</a> | ARP replies to the customer premises equipment (CPE) are dropped by Cisco CMTS causing the CPEs to be unreachable.   |
| <a href="#">CSCth61850</a> | Memory leak is observed on the Cisco uBR10012 router with multicast service flows configured.  |
| <a href="#">CSCth63676</a> | The primary downstream channel does not get synchronized when Dynamic Channel Change (DCC) uses unitization techniques 1-4 on the Cisco UBR-MC8X8V line card.            |
| <a href="#">CSCth63706</a> | On the Cisco UBR-MC8X8V cable line card, modems go offline on the integrated cable interface when unconfiguring the MAC domain configuration with the wrong port number. |
| <a href="#">CSCth64226</a> | Error messages are being repeatedly displayed when each IPv6 address is removed from the bundle interface.   |
| <a href="#">CSCth71637</a> | SNMP query on empty docsQosPktClassEntry/docsQos3PktClassEntry/docsIetfQosPktClassEntry takes a long time to return results.   |
| <a href="#">CSCth73636</a> | Memory leaks by common Crypto functions.   |



| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCth77470</a> | Error messages are displayed in the debug log when the “debug cable hqf” command is turned on.   |
| <a href="#">CSCth86475</a> | The Cisco UBR-MC8X8V cable line card does not use optimal preamble and guardtime lengths when the modulation profile assigned is in 4x/14x/24x range.                      |
| <a href="#">CSCth87649</a> | Unable to block specific CPE MAC addresses on the Cisco CMTS.  |
| <a href="#">CSCti00484</a> | The wrong ARP entry is removed.  |
| <a href="#">CSCti02678</a> | Cisco's Express Forwarding (CEF) technology for IP (IP CEF) can be disabled on the Cisco uBR7200 series router.  |
| <a href="#">CSCti03293</a> | ifSpeed returns actual data instead of raw data on the integrated-cable interface/modular-cable interface.   |
| <a href="#">CSCti07521</a> | The Cisco uBR7200 network processing engine crashes during bootup.   |
| <a href="#">CSCti09242</a> | The "input error" counter under cable interface increases rapidly.   |
| <a href="#">CSCti09814</a> | Continuous query for spectrum data through CBT or SNMP returns fftbusy.  |
| <a href="#">CSCti11470</a> | The Cisco UBR-MC8X8V cable line card crashes.  |
| <a href="#">CSCti17023</a> | The "average percent contention slots" field does not display the actual values.   |
| <a href="#">CSCti19280</a> | The FFT engine is not updated with the CNR threshold values if a change is made either in the CLI or the SNMP interface to the CNR threshold profile for a given upstream. |
| <a href="#">CSCti24985</a> | "pppoe enable" has no effect on an Integrated Cable (IC) interface.  |
| <a href="#">CSCti25014</a> | The "pppoe max-sessions" configuration on the cable interface is not added to the running-config.  |
| <a href="#">CSCti25027</a> | Difference in the pppoe limit max value between vpdn-group and bba-group results in an error.  |
| <a href="#">CSCti56829</a> | Fiber-node status in <b>show cable fiber-node</b> command output is not updated after associating a new bundle interface to the wideband interface.                        |

## Resolved Caveats—Cisco IOS Release 12.2(33)SCC5

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCtd86472</a> | The Cisco IOS Software Network Address Translation functionality contains three denial of service (DoS) vulnerabilities. The first vulnerability is in the translation of Session Initiation Protocol (SIP) packets, the second vulnerability in the translation of H.323 packets and the third vulnerability is in the translation of H.225.0 call signaling for H.323 packets. |
| <a href="#">CSCtg80187</a> | The cable modem failed to switch to non-mtc mode, when the tx power on the reference channel is at the peak level and has a ranging power greater than 2dBmV.  |
| <a href="#">CSCth95931</a> | The Cisco CMTS may crash after a MAXHOST error message when cable modem max-cpe is configured, or when the <b>cable modem IP max-hosts</b> command is executed for a cable modem.  |

## Open Caveats—Cisco IOS Release 12.2(33)SCC4

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCeh33888</a> | A Cisco uBR7246VXR router may reload with the configurations set during the last watchdog reset.   |
| <a href="#">CSCsi75761</a> | Rate-limiting of ICMP unreachable messages is larger than configured when Parallel Express Forwarding (PXF) is configured on the Cisco CMTS router.  |
| <a href="#">CSCsl50133</a> | The Cisco uBR7246VXR router with UBR7200-NPE-G1 reloads.   |
| <a href="#">CSCsr40529</a> | Corrupted output is displayed when the standby disk is formatted during an In-Service Software Upgrade (ISSU) of the CMTS router running Cisco IOS Release 12.2(33)SCB4.   |
| <a href="#">CSCsz36328</a> | Cable modems remain in online (pk) and expired states after cable privacy mandatory command is executed.   |
| <a href="#">CSCta16724</a> | Users with level 15 privilege and a "view" cannot perform Secure Copy (SCP) operation on a router running Cisco IOS Release 12.4(24)T.   |
| <a href="#">CSCta49529</a> | An unusual "ALIGN-3-SPURIOUS" error message is displayed when the CMTS is reloaded after running the write erase command.  |
| <a href="#">CSCta77009</a> | A Cisco router may report memory leaks with 319 dual-stack CPE devices, each running the FTP GET and FTP PUT requests.   |
| <a href="#">CSCtb79237</a> | No syslog or SNMP trap is generated when Common Open Policy Service (COPS) process is used causing PacketCable to fail.  |
| <a href="#">CSCtb99555</a> | IPDR output document may report redundant information if the corresponding fiber node has not been changed.  |
| <a href="#">CSCtc04113</a> | The Signal Noise (SN) ratio is always displayed as 0.0 for a Cisco DPC3000 modem as it does not support the current SNMP OID docsIfSigQSignalNoise to query the SN ratio.  |
| <a href="#">CSCtc27601</a> | Unable to set session-range for source specific multicast (SSM) group configuration.   |
| <a href="#">CSCtc58334</a> | The output of the <b>show cable qos enforce-rule</b> command displays only the first nine characters of the service class names.   |
| <a href="#">CSCtc63102</a> | When IPv6 CPE gets dual-stack online and the CPE network interface is disabled and enabled frequently, the show CPE command on the CMTS for the CPE may not show the IPv4 portion of the dual-stack CPE.                                     |
| <a href="#">CSCtc97468</a> | The multicast service flow (SF) is not generated for static multicast sessions on a Cisco UBR-MC20X20V cable interface line card when the shutdown and no shutdown commands are executed on the cable interface of the card without a delay. |
| <a href="#">CSCtd04983</a> | The Network Processing Engine (NPE) crashes at <code>cmts_bundle_find_mcast_mac</code> when a large number of IPv4 CPE clients rapidly join and leave the multicast groups.  |
| <a href="#">CSCtd12628</a> | The multicast QoS (MQoS) service flows are not created with subinterface configuration when the service class associated with the DOCSIS Set-Top Gateway (DSG) tunnel and subinterface configuration are used.                               |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCtd15349</a> | The <b>show cable subscriber-usage</b> command information is not displayed for a cable modem when it is moved to another interface through load balancing.  |
| <a href="#">CSCtd48609</a> | The <b>ccm ipv6_address rcs-counts</b> command clears all the rcs-counts of all the cable modems instead of clearing the ipv6_address specified for the cable modem rcs-counts.  |
| <a href="#">CSCtd57276</a> | The rcs-status of the cable modem is not updated when IGMP triggers Dynamic Bonding Channel (DBC).   |
| <a href="#">CSCtd58868</a> | CPUHOG and traceback are observed with multicast traffic on a Cisco uBR7200 series router.   |
| <a href="#">CSCtd62264</a> | The cable modem is not reset and remains in w-online state When all non-primary DS channels are inactive and an RF channel is removed from the bonding group.  |
| <a href="#">CSCtd69497</a> | Static groups and sessions are not created when static multicast groups and source addresses exist in a cable modem configuration file.  |
| <a href="#">CSCtd71335</a> | Memory leak is observed on a Cisco uBR10012 and a Cisco uBR7200 series router when the cable modem is reset after a reservation is created using Resource Reservation Protocol (RSVP).   |
| <a href="#">CSCtd75934</a> | The Service Independent Intercept (SII) MAC intercepts include management packets on the Cisco uBR7200 series router.  |
| <a href="#">CSCtd77944</a> | Legacy (non-DOCSIS 3.0) cable modems may fail to get online on the CMTS if the MAC Domain Descriptor (MDD) Ip-Init Type Length Value (TLV) is configured for IPv6 or dual-stack mode.  |
| <a href="#">CSCtd86909</a> | After Dynamic Channel Change (DCC) is performed to change the upstream channel of a cable modem, the output of the <b>show cable modem rcs-status</b> command does not display the entry for a cable modem that is w-online.         |
| <a href="#">CSCtd90685</a> | Modems cannot move out of penalty using the Subscriber Traffic Management (STM) enforce rule when the parameters configured in the modem configuration file override the reg service class of the STM.                               |
| <a href="#">CSCtd90790</a> | The line card crashes when a cable modem configuration file with the Nominal-GrantInterval value is set to less than 1000.   |
| <a href="#">CSCtd91634</a> | The number of customer premises equipment (CPEs) displayed in the <b>show cable modem</b> command output is incorrect when IPv6 is enabled on the CPE.   |
| <a href="#">CSCtd97055</a> | Tracebacks occur while toggling IPv6 on and off on the customer premises equipment (CPE).  |
| <a href="#">CSCte05596</a> | A false alarm is generated when the CPU utilization is very high.  |
| <a href="#">CSCte09146</a> | PRC_CONFIG_CHANGE is returned instead of PRC_CONFIG_NO_CHANGE when the <b>cable admission-control ds-bandwidth</b> and <b>cable admission-control us-bandwidth</b> commands are executed.  |
| <a href="#">CSCte09156</a> | The <b>clear cable modem reset</b> command removes an existing CPE in ip-init APM mode on Cisco uBR7200 series routers.  |
| <a href="#">CSCte10266</a> | The fiber node upstream frequency status remains unchanged when the upstream connector is either configured or unconfigured.   |
| <a href="#">CSCte11273</a> | Incomplete CCN messages are displayed on a Cisco uBR7200 series router for the integrated cable interface on the Cisco UBR-MC88V cable interface line card, and the bundle interface on the Cisco MC28U line card in configure mode. |

| Bug ID                     | Description   |
|----------------------------|---|
| <a href="#">CSCte12235</a> | Rollback check fails for the <b>cable metering ipdr-d3 session type</b> command.  |
| <a href="#">CSCte14940</a> | The Cisco CMTS displays "Invalid nominator" warning messages while walking the docsQoSServiceFlowStatsTable.  |
| <a href="#">CSCte20061</a> | An IPv4 packet is classified as an IPv6 service flow when a cable modem has both IPv4 and IPv6 classifiers.   |
| <a href="#">CSCte34179</a> | Some service flows cannot be retrieved using SNMP tools when the cable modem configuration file includes the service class name.  |
| <a href="#">CSCte36746</a> | The "ARP-3-STCKYARPOVR: Attempt to overwrite Sticky ARP entry" is logged at a higher severity level of ERROR instead of LOG_NOTICE.   |
| <a href="#">CSCte36979</a> | MDF-enabled modems do not receive multicast traffic when the clear ip mroute command is executed.   |
| <a href="#">CSCte37300</a> | Spurious memory access and tracebacks are observed when <b>clear cable modem all reset</b> command is executed.   |
| <a href="#">CSCte37779</a> | The multicast-sessions are not created for a bundle interface.  |
| <a href="#">CSCte42924</a> | When the <b>show tech</b> command is executed, the line card is powered off if the Onboard Failure Logging (OBFL) feature is disabled.  |
| <a href="#">CSCte42955</a> | The SNMP query on the "cefAdjEntry" table is trapped into a dead loop when "Lex interface" is configured on the Cisco CMTS.   |
| <a href="#">CSCte45430</a> | The CMTS forwards traffic when all the cable modems are deleted when static multicast is provisioned via a modem configuration file.  |
| <a href="#">CSCte49359</a> | When two multicast traffic are sent with the same session range in two group configuration (GC) but without the TOS in both GCs, the <b>show interface wide-band-cable service flow counter</b> command displays incorrect output.          |
| <a href="#">CSCte51580</a> | The CMTS forwards traffic when static multicast is provisioned via a modem configuration.   |
| <a href="#">CSCte52393</a> | The rf-channel stacking sub CLI of integrated-controller is shown in the output of the show run command with the default value set to 4.  |
| <a href="#">CSCte52394</a> | When multicast service flow admission control fails on an integrated-cable (IC) interface, the IC admission control reject counter is not updated on Cisco uBR7200 series and Cisco uBR10012 routers running Cisco IOS Release 12.2(33)SCC. |
| <a href="#">CSCte61597</a> | CPEs in the same IGMPv3 group do not receive multicast.   |
| <a href="#">CSCte71997</a> | When call volume is high, and numerous stop records are being generated by CMTS, it is observed that an invalid XML file gets generated occasionally.   |
| <a href="#">CSCte74898</a> | The DOCSIS MAC Infrastructure upstream_channel_id safety net performs some false checks.  |
| <a href="#">CSCte79637</a> | The CMTS may not reject the REG-REQ, which includes invalid DOCSIS QoS classifiers, when a cable modem configuration file contains both the IPv4 fields and the IPv6 fields in one DOCSIS QoS classifier.                                   |
| <a href="#">CSCte89399</a> | The Get ENTITY-MIB object shows wrong PIDs for power supply.  |
| <a href="#">CSCte89797</a> | The SAMIS and IPDR record displays junk value for the field CMTSupIfName for the multicast service flow.  |
| <a href="#">CSCte92761</a> | SAMIS and IPDR records are not generated for deleted multicast service flows.   |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCte97814</a> | Memory leak is observed on the Cisco CMTS during bootup. This is observed on the Border Gateway Protocol table.  |
| <a href="#">CSCtf14490</a> | The doesIf3CmtsSpectrumAnalysisMeasEntry data is not updated on a Cisco uBR7200 series router or Cisco uBR10012 router.  |
| <a href="#">CSCtf26531</a> | IPDR reports two counters in the DS-UTIL counters record as zero.  |
| <a href="#">CSCtf29062</a> | When a new IPv4 multicast host is created on the CMTS, the error cleanup is not performed properly.  |
| <a href="#">CSCtf29066</a> | The CMTS will not perform the cleanup operation effectively during an HA or DHCPv4 Lease Query host verification operation when the MAXHOST error is encountered during the creation of a new host.  |
| <a href="#">CSCtf32861</a> | The <b>cable metering ipdr session</b> command does not configure successfully if "usage-based billing" and "streaming of billing records" is already configured to an external server.  |
| <a href="#">CSCtf37762</a> | The CM does not receive multicast encryption traffic since the Dynamic Bonding Channel (DBC) request for a multicast encryption session from a CM is rejected by the CMTS.   |
| <a href="#">CSCtf37919</a> | A Dynamic Bonding Channel (DBC) request is rejected by the cable modem.  |
| <a href="#">CSCtf39293</a> | A traceback was observed on the Cisco uBR7200 router when the cable modem failed to register.  |
| <a href="#">CSCtf41553</a> | CMTS PEAK-OFFPEAK STATS memory leak is observed in the line card.  |
| <a href="#">CSCtf49834</a> | Inconsistent MIB values were observed in SAMIS records for DOCSIS1.0 and DOCSIS2.0 modems.   |
| <a href="#">CSCtf51515</a> | AES keys are incorrectly read while the hardware and software information is incorrectly displayed.  |
| <a href="#">CSCtf53889</a> | The Cisco uBR7225VXR router was unable to identify the PWR-UBR7225-AC-E power supply through SNMP polling.   |
| <a href="#">CSCtf55375</a> | Video was not displayed when the VDOC broadcast feature was enabled on the CMTS.   |
| <a href="#">CSCtf56634</a> | Sporadic unreliability was observed in the CMTS client database for IPv6.  |
| <a href="#">CSCtf56958</a> | Bandwidth is not shared evenly between the DOCSIS 2.0 cable modems and the DOCSIS 3.0 cable modems.  |
| <a href="#">CSCtf57059</a> | Unexpected values are observed in the activity-based Weighted Fair Queuing (WFQ) aggregated throughput.  |
| <a href="#">CSCtf57391</a> | Loss of records is observed when the Internet Protocol Data Records (IPDR) data amount is large.   |
| <a href="#">CSCtf59785</a> | The output of the <b>show interface sid counter verbose</b> command does not display the correct status (reset) of the codeword counter while the output of the <b>show cable modem verbose</b> command displays that the codeword counter is reset. |
| <a href="#">CSCtf68413</a> | The downstream service flow counter is cleared when a modem drops offline even if the Cisco CMTS is configured with the <b>cable primary-sflow-qos11 keep all</b> command.   |
| <a href="#">CSCtf69260</a> | A cable modem failed to register when upstream traffic congestion was observed.  |
| <a href="#">CSCtf78545</a> | IPv6 does not work on multiple CMTS bundle subinterfaces.  |

| Bug ID                     | Description   |
|----------------------------|---|
| <a href="#">CSCtf81039</a> | The CPE entries are displayed even after the CPE is disconnected from the cable modem.  |
| <a href="#">CSCtf85427</a> | Memory leak is observed when more than 21 profiles are configured in a policy map.  |
| <a href="#">CSCtf86322</a> | When the ccqmCmtsEnfRuleRelTimeMonitorOn object of a Subscriber Traffic Management (STM) enforce-rule is set to false through SNMP, the same is not reflected in the Cisco CMTS router. |
| <a href="#">CSCtf89462</a> | Though <b>SNMP walk</b> or <b>get</b> commands function correctly for the docsIfCmtsCm-StatusEntry parent MIB object, the following error message is displayed: No Such instance.       |
| <a href="#">CSCtf95388</a> | The show cable modem partial-mode command does not work for IPv6 cable modems.  |
| <a href="#">CSCtf96525</a> | The cable filter group for the multimedia terminal adapter (MTA) does not match with the device class after an RP switchover.   |
| <a href="#">CSCtg00460</a> | The cable filter matching behavior is different between the route processor and the toaster.  |
| <a href="#">CSCtg01063</a> | Static ARP entries not displayed in the running configuration of the Cisco uBR7246XR router.  |
| <a href="#">CSCtg07854</a> | Packets are assigned to wrong queues when the policy-map configuration is modified.   |
| <a href="#">CSCtg14992</a> | When a cable modem sends the ICMPv6 echo request with zero hop limit to a cable interface, the ICMPv6 echo reply is returned.   |
| <a href="#">CSCtg16637</a> | SAMIS and IPDR generate duplicate records for each deleted multicast service flow.  |
| <a href="#">CSCtg25392</a> | IPv4 TCP/UDP packets matches the downstream classifier that is used for IPv6 TCP/UDP packets.   |
| <a href="#">CSCtg26495</a> | The Dynamic Channel Change (DCC) and the Dynamic Bonding Channel (DBC) statistics counter of docsQos(3)DynamicServiceStatsTable get reset after executing the "clear counter" command.  |
| <a href="#">CSCtg31445</a> | A mismatch between the sequence number in blaze memory and the route processor packet count.  |
| <a href="#">CSCtg32833</a> | Incorrect classification of Business Services over DOCSIS (BSoD) traffic was observed in the downstream service flows, based on the dot1q encapsulation.                                |
| <a href="#">CSCtg37017</a> | Unexpected end of configuration file message is seen during bootup or reset of line card on the Cisco uBR10012 and the Cisco uBR7200 router.  |
| <a href="#">CSCtg37467</a> | The docsLoadbal3GrpStatusChgOverSuccess counters cannot be increased in DOCSIS 3.0 General Load Balancing Group (GLBG).   |
| <a href="#">CSCtg46662</a> | Alignment traceback is seen when the <b>show cable fiber association</b> command is executed.   |
| <a href="#">CSCtg52567</a> | The <b>show running-config</b> command displays the <b>penalty-period 10080</b> command when the default value of 10080 is configured.  |
| <a href="#">CSCtg60350</a> | The IPv6 entries for the client is not deleted when a modem or CPE is deleted from the CMTS.  |
| <a href="#">CSCtg61986</a> | Traceback observed during bootup of the Cisco uBR7246VXR router.  |

| Bug ID                     | Description   |
|----------------------------|---|
| <a href="#">CSCtg67108</a> | The <b>show license</b> commands fail to execute on the Route Processor.  |
| <a href="#">CSCtg80187</a> | The cable modem failed to switch to non-mtc mode, when the tx power on the reference channel is at the peak level and has a ranging power greater than 2dBmV. |
| <a href="#">CSCtg83560</a> | Invalid Upstream Channel ID" traceback is observed on Cisco CMTS.   |
| <a href="#">CSCth04894</a> | The cable modem is treated as a host when the Cisco CMTS is configured to parse option-60. This cause the cable modems to get a wong IP address.              |
| <a href="#">CSCth22572</a> | The ccsSpectrumDataPower MIB object always returns the power data for the same upstream for a UB modem.   |
| <a href="#">CSCth24131</a> | The show context summary command always reports null crashes when there are crashes on the cable line card.   |
| <a href="#">CSCth25966</a> | The static multicast configuration on the integrated-cable interface on slot 1 of the line card is missing after an OIR.                                      |
| <a href="#">CSCth27142</a> | The “%ALIGN-3-SPURIOUS” error was seen at cmts_adjust_eae_bpi_bond_index during a Cisco CMTS bootup.  |
| <a href="#">CSCth29978</a> | The UBR-MC8X8V line card unexpectedly reloads when unconfiguring the MAC domain configured on a wrong port number.  |
| <a href="#">CSCth36030</a> | System Event Archive (SEA) process accesses the boot disk even when it is disabled.   |
| <a href="#">CSCth37607</a> | The Cisco UBR-MC8X8V line card CPU utilization is high and admission control fail messages are repeatedly displayed.  |
| <a href="#">CSCth49196</a> | ARP replies to the customer premises equipment (CPE) are dropped by Cisco CMTS causing the CPEs to be unreachable.  |
| <a href="#">CSCth61850</a> | Memory leak is observed on the Cisco CMTS router with multicast service flows configured.   |
| <a href="#">CSCth63676</a> | The primary downstream channel does not get synchronized when Dynamic Channel Change (DCC) uses unitization techniques 1-4 on the Cisco UBR-MC8X8 line card.  |
| <a href="#">CSCth64226</a> | Error messages are being repeatedly displayed when each IPv6 address is removed from the bundle interface.  |
| <a href="#">CSCth77470</a> | Error messages are displayed in the debug log when debug cable hqf command is turned on.  |
| <a href="#">CSCth95931</a> | The Cisco CMTS may crash after a MAXHOST error message is displayed when cable modem max-cpe command is configured.   |

## Resolved Caveats—Cisco IOS Release 12.2(33)SCC4

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCsr96042</a> | Router crashes when the VPN Routing and Forwarding (VRF) configuration is changed.                                   |
| <a href="#">CSCsx33622</a> | Flapping BGP sessions occur in the network when a Cisco IOS application sends full-length segments with TCP options. |



| Bug ID     | Description  |
|------------|--|
| CSCtb73450 | Start-Control-Connection-Request (SCCRQ) packets may cause tunnel to reset after digest failure.   |
| CSCtc44253 | The cable modem's accumulated timing-offset goes to a negative value and the error message “%UBR10000-4-BADTXOFFSET: Bad timing offset -182443 detected for cable modem 000a.73cc.c7b7.” is displayed at the CMTS.   |
| CSCtc73759 | The H.323 implementation in Cisco IOS Software contains two vulnerabilities that may be exploited remotely to cause a denial of service (DoS) condition on a device that is running a vulnerable version of Cisco IOS Software.  |
| CSCtc95495 | The <b>show cable modem service-flow verbose</b> command incorrectly displays the MAC Rewrite Indices (MRI) that exceed 64 K. Subsequent information displayed by this command is also incorrect because it is dependent on the MRI.   |
| CSCtd20979 | The error message “%UBR7200-3-WB_BPI_ERR: reman_bpi_upd_tek_reg(): reman_ucast_key is NULL” is observed on the Cisco uBR7200 router.   |
| CSCtd30379 | The SNMP MIB Object ifStackTable does not list entries for the wideband, integrated cable interfaces and bundle interfaces if these interfaces have no low-layer interfaces.   |
| CSCtd49777 | Using the SNMP walk or getnext options generates a wrong value for the MIB object docsQos3GrpPktClassGrpConfigId.  |
| CSCtd54108 | A VDOC memory leak is observed on Route Processor (RP) and Network Processing Engine (NPE).  |
| CSCtd56821 | The Cisco uBR7225VXR universal broadband router may crash after running the <b>show packetcable gate summary</b> command.  |
| CSCtd57007 | The carrier-to-noise ratio (CNR) value goes down with added noise. Even if the noise is removed the value continues to remain the same.  |
| CSCtd60182 | Although the secondary wideband interface is down, it can still be selected as a multicast forwarding interface.   |
| CSCtd60220 | Invalid input is detected for upstream threshold CNR profiles when booting with a saved configuration.   |
| CSCtd65929 | A memory leak is observed on the Route Processor (RP)/ Network Processing Engine (NPE) when the VDOC rsvp session qos parameter is changed.  |
| CSCtd71119 | The output of the <b>show running-config</b> and <b>show running-config all</b> commands does not display rf-power value.  |
| CSCtd71814 | Dynamic load balancing does not work on DOCSIS 3.0 wideband-capable modems.  |
| CSCtd75033 | Cisco IOS Software is affected by NTP mode 7 denial-of-service vulnerability.  |
| CSCtd83463 | The DOCSIS 3.0 cable modem goes offline after the <b>test cable dcc</b> command is executed with a ranging technique of 1.   |
| CSCtd84099 | New cable modem resource is not assigned. When both the upstream and downstream are congested, and the Load Balancer (LB) tries to move a modem by using DCC init technique 1 to 4, an error message is displayed either on the Network Processing Engine (NPE) or Route Processor (RP). |
| CSCtd87704 | Some Subscriber Account Management Interface Specification (SAMIS)/ IP Detail Record (IPDR) processes are incorrectly killed. This may cause memory leaks on the Route Processor (RP)/Network Processing Engine (NPE).   |



| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCtd93151</a> | The network is shut down by the IOS and the voltage from voltage monitor chip is about 10 percent less than normal value.  |
| <a href="#">CSCtd94571</a> | The IPv6 input process has high CPU utilization.   |
| <a href="#">CSCtd98329</a> | INVALID_US_CHID error messages and tracebacks may appear after the <b>test cable dcc</b> command is executed.  |
| <a href="#">CSCte07576</a> | After the AAA server and the Record Keeping Server (RKS) server are configured, the PacketCable QoS reserve and QoS commit event are not sent out.   |
| <a href="#">CSCte09545</a> | Multicast service flows are not created for DOCSIS Set-Top Gateway (DSG) tunnels when the MAC address of the tunnel is changed after the service class name is associated with a tunnel and the service flows are created in all the interfaces.   |
| <a href="#">CSCte09546</a> | Multicast service flows are not created for DOCSIS Set-Top Gateway (DSG) tunnels when either the status DSG tunnel or the DSG configuration is disabled, and then enabled.   |
| <a href="#">CSCte01674</a> | The default multicast service flow cannot be configured on the wideband interface as admission control fails.  |
| <a href="#">CSCte14603</a> | A vulnerability in the Internet Group Management Protocol (IGMP) version 3 implementation of Cisco IOS Software and Cisco IOS XE Software allows a remote unauthenticated attacker to cause a reload of an affected device. Repeated attempts to exploit this vulnerability could result in a sustained denial of service (DoS) condition. Cisco has released free software updates that address this vulnerability. |
| <a href="#">CSCte17479</a> | All cable modems under a single upstream unexpectedly move to expire (pt) state on the Cisco CMTS router.  |
| <a href="#">CSCte20181</a> | The NPE crashes while polling the MIB object cefFESelectionEntry after configuring the IP address and the other parameters for the bundle interface.   |
| <a href="#">CSCte20216</a> | Some cable modems, such as the DPC2505 cable modem report QAM/FEC lock failure (event type 2) when a secondary RF-channel is down, and report an MDD recovery (event type 4) when the RF-channel is UP, instead of reporting a QAM/FEC recovery.   |
| <a href="#">CSCtf21795</a> | The CMTS does not send an override message when the MAC domain port number is not zero. This is seen when the downstream override facility RF topology is setup on the Cisco UBR10-MC20X20 line card.  |
| <a href="#">CSCtf31850</a> | The Downstream Frequency Overriding (DFO) debug messages are not displayed in the log, even though the RF topology is configured for DFO. This issue is observed on the a Cisco uBR-MC20X20V line card.  |
| <a href="#">CSCte34527</a> | For the cable modems in w-online state, the output of the <b>show cable modem verbose</b> command displays both Upstream Power (dBmV) and Reported Transmit Power (dBmV), which is redundant and confusing. Also, the output of the <b>show cable modem phy</b> command displays USPwr of all upstreams as 0.0 even if remote query is not enabled.  |
| <a href="#">CSCte48051</a> | Legacy Set Top Boxes (STB) with IOS release prior to 12.2, fail to work with IOS Release 12.2. IOS releases prior to 12.2 used "openCable2.0" for STB Virtual channel Identifier (VCI). In release 12.2, IOS changed STB VCI to "OpenCable2.0" to follow OpenCable's standard. This resulted in compatibility issues with legacy STBs.   |

| Bug ID                     | Description   |
|----------------------------|---|
| <a href="#">CSCte53032</a> | The modulation profile's preamble length for internal usage code (IUC) types, station, and initial becomes very large.  |
| <a href="#">CSCte60712</a> | The Cisco CMTS router sends out the wrong Type Value in the diaglog data records when the Cisco DPC3000 modem is w-online, and is rebooted from the CMTS console. As per DOCSIS 3.0, the Type Value should be 8 for dhcpv6complete. |
| <a href="#">CSCte83897</a> | The output of the MIB object docsDiag is not complete when the number of CMs in error state is greater than 30.   |
| <a href="#">CSCte91760</a> | Simulating an intermediate session routing (ISR) watchdog using a busy-loop delay in an ISR, results in an incorrect traceback. Further, an infinite loop in the ISR results in no ISR watchdog functionality at all.               |
| <a href="#">CSCte94013</a> | When the diagnostic log feature is active and cable modems are flapping, some of the cable modem records are not obtained by an SNMP query command such as <b>snmpwalk docsDiagMib</b> .  |
| <a href="#">CSCte99323</a> | The secondary RP is reset due to parser return error after the secondary collector associate on the IPDR config is added or deleted.  |
| <a href="#">CSCtf05943</a> | Cable modem subscribers experience one-way RTP traffic.   |
| <a href="#">CSCtf17357</a> | The Cisco uBR7200 router may hang after the cable Upstream privilege configuration CLI is executed.   |
| <a href="#">CSCtf21117</a> | A cpe start ipdr record is generated when only the device-class is updated for a CPE entry.   |
| <a href="#">CSCtf21795</a> | The Cisco CMTS router does not send an override message when the MAC domain port number is not 0.   |
| <a href="#">CSCtf26777</a> | The <b>RecType</b> field is set to a wrong value when the template is DIAGLOG-DETAIL, and the session type is event.  |
| <a href="#">CSCtf31850</a> | On a Cisco uBR-MC20X20V LC, Downstream Frequency Overriding (DFO) debug messages are not displayed in the log, even though the RF topology is configured for DFO.   |
| <a href="#">CSCtf49848</a> | The serviceOctecPassed value does not match with docsIfCmtsServiceInOctets when <b>clear cable modem xxx reset</b> command is executed or when dynamically set service flows are observed.  |
| <a href="#">CSCtf61012</a> | The Cisco CMTS router crashes when the SNMP client queries the docsIf3CmtsCmRegStatusEntry MIB object.  |
| <a href="#">CSCtf74537</a> | There are alignment issues in the envmib_temperature_trap().  |
| <a href="#">CSCtf77798</a> | Output of <b>show cable modem &lt;interface&gt; offline</b> command does not display information about the cable modems.  |
| <a href="#">CSCtf89656</a> | The Cisco CMTS router is unable to complete downstream movement for DOCSIS 1.0 cable modems.  |
| <a href="#">CSCtf95986</a> | The Internet Protocol Detail Record (IPDR) topology schema does not work correctly.   |
| <a href="#">CSCtg14022</a> | The embedded multimedia terminal adapters (eMTAs) are unable to get configuration files from the TFTP server.   |
| <a href="#">CSCtg34604</a> | The Cisco UBR-MC20X20V cable interface line cards in multiple slots allow only 50 per cent of traffic load.   |

| Bug ID                     | Description  |
|----------------------------|--|
| <a href="#">CSCtg39286</a> | Cable line card crashes because of IP header (IPH) length error check.   |
| <a href="#">CSCtg61243</a> | The PacketCable Multimedia (PCMM) voice calls may fail intermittently with error message DSX_MSG_ERROR being displayed and error code 0 after more than 16000 calls are performed. |

## Open Caveats—Cisco IOS Release 12.2(33)SCC3

- [CSCeh33888](#)

Symptoms: A Cisco uBR7246VXR router may reload with the configurations set during the last watchdog reset.

Conditions: This issue occurs on a Cisco uBR7246VXR router having a Cisco uBR7200-NPE-G1 processor board and running Cisco IOS Release 12.3(9a)BC.

Workaround: There is no workaround.
- [CSCsl50133](#)

Symptoms: The Cisco uBR7246VXR router reloads with following message:

```
No crashinfo
No tracebacks
Last reload reason: Unknown reason
Last reset from watchdog reset
```

Conditions: This issue occurs on a Cisco uBR7246VXR (UBR7200-NPE-G1) router running Cisco IOS Release 12.3(17b)BC4.

Workaround: There is no workaround.
- [CSCtb74904](#)

Symptoms: The service flow counter displays the value 0.

Conditions: This issue occurs during an RP switchover. However, the right service flow is used to forward the packets, and the packets reach the CPEs as well.

Workaround: There is no workaround.
- [CSCtc04113](#)

Symptoms: The Signal Noise (SN) ratio is always displayed as 0.0 for a Cisco DPC3000 modem.

Conditions: This issue occurs in a Cisco DPC3000 modem because it does not support the current SNMP OID docsIfSigQSignalNoise to query the SN ratio.

Workaround: There is no workaround.
- [CSCtc05097](#)

Symptoms: The NPE-G2 cannot load an image.

Conditions: This issue occurs when an image size is greater than 62 MB.

Workaround: There is no workaround.
- [CSCtc19959](#)

Symptoms: The Cisco CMTS forwards traffic when all the cable modems are deleted.

Conditions: This issue occurs when provisioning a static multicast route via a modem configuration file.

Workaround: There is no workaround.

- CSCtc22435

Symptoms: The MIB object docsQoSServiceFlowLogTable returns a null value.

Conditions: This issue occurs on the Cisco uBR7200 universal broadband router with the Keep QoS11 CM primary service flows counters feature, when the **cable primary-sflow-qos11 keep all** command is executed.

Workaround: Unconfigure the feature by executing the **cable primary-sflow-qos11 keep all** command.

- CSCtc27601

Symptoms: Grouping of source specific multicast (SSM) group from any source to one group configuration is not possible. The Cisco CMTS treats the next session-range as any source multicast (ASM).

Conditions: This issue occurs in a multicast group configuration.

Workaround: Configure the correct group range with the valid mask. Map the SSM from any source configures as ASM. For example, session-range 239.50.0.0 255.255.0.0

- CSCtc55806

Symptoms: The 24th MAC Domain Downstream Service Group (MD-DS-SG) is missing in the output of the **show cable mac-domain downstream-service-group** command.

Conditions: This issue occurs when fiber node configuration has channels in a MAC domain belonging to 24 different fiber nodes.

Workaround: There is no workaround.

- CSCtc69216

Symptoms: An Any Transport over MPLS (AToM) L2VPN MPLS Peer Name TLV Parsing Logic, which causes a VCID error, occurs.

Conditions: This issue occurs when the AToM L2VPN on the CM configuration file is configured, and the MPLS Peer Name TLV(37) is followed by VCID TLV(38).

Workaround: There is no workaround.

- CSCtc75786

Symptoms: The MIB object docsDiagLogLastRegTime is incorrect.

Conditions: This issue occurs when the modem is powered off.

Workaround: There is no workaround.

- CSCtc80690

Symptoms: The cdxCmToCpeTable and cdxCpeToCmTable SNMP queries do not return entries for IPv6 CPEs.

Conditions: This issue occurs when the SNMP queries of cdxCmToCpeTable and cdxCpeToCmTable for IPv6 CPEs are performed.

Workaround: Use the **show cable modem cpe** command for querying the table.

- CSCtc89092

Symptoms: Admission control threshold counters for Wideband interfaces are not cleared by the **clear cable admission-control counters** command.

Conditions: This issue occurs on a Cisco uBR7200 VXR series router with the Cisco uBR-MC88V cable interface line card.

- Workaround: There is no workaround.
- CSCtc89799
 

Symptoms: The IOS image in the bootflash memory does not boot.

Conditions: This issue occurs on a Cisco uBR7200 series router.

Workaround: There is no workaround.
  - CSCtc89985
 

Symptoms: Upstream dynamic modulation downgrade and upgrade on the Cisco uBR7200 series router are not performed correctly.

Conditions: This issue occurs when the CNR value is negative because the noise in the upstream channel is greater than the carrier.

Workaround: There is no workaround.
  - CSCtc92414
 

Symptoms: A decrease in the rf-channel bandwidth percentage occurs.

Conditions: This issue occurs for modular cable and integrated cable interfaces in a PacketCable Multimedia (PCMM) setup.

Workaround: Shut down the interface before changing the rf-channel bandwidth.
  - CSCtc96569
 

Symptoms: The Cisco CMTS with SAMIS/IPDR configuration may crash when an image is copied to disk2: after the disk format operation.

Conditions: This issue occurs when the SAMIS/IPDR is configured and enabled. The Cisco CMTS may crash if an user either formats the file system where the sflog file is located or performs another write operation.

Workaround: There is no workaround.
  - CSCtc97181
 

Symptoms: The Cisco CMTS may not reject the REG-REQ request, which includes invalid DOCSIS QoS classifiers.

Conditions: This issue occurs when the cable modem configures a file containing both the IPv4 fields (other than the TCP or UDP source or destination ports) and the IPv6 fields in a DOCSIS QoS classifier.

Workaround: There is no workaround.
  - CSCtc97803
 

Symptoms: The NPE crashes after a line card crashes on the Cisco uBR7200 router.

Conditions: This issue occurs when copying a configuration to running configuration. When the NPE processes the configuration, the line card crashes. An OIR interrupt is generated when the line card crashes, causing the NPE to crash.

Workaround: There is no workaround.
  - CSCtc99292
 

Symptoms: When a dynamic upstream channel width change is configured, the upstream channel width gets downgraded when the channel condition worsens, but the channel width does not get upgraded when the channel condition improves.

Conditions: This issue occurs when spectrum management and dynamic upstream channel width are configured on the upstream. The available bandwidth in the spectrum management group is just wide enough to fit one upstream with the highest channel width. Therefore, the upstream channel condition worsens to cause channel width downgrade at one point.

Workaround: Do not configure either a dynamic channel width change or a wider frequency bandwidth under the spectrum management group.

- CSCtc99668

Symptoms: The set operation to remove the MIB object docsIf3BondingGrpCfgRowStatus needs to be performed twice.

Conditions: This issue occurs when a downstream bonding group (wideband interface) includes channels from two controllers.

Workaround: There is no workaround.

- CSCtd04983

Symptoms: The Cisco uBR7200 VXR series router crashes when a large number of IPv4 CPE clients rapidly join and leave the multicast groups.

Conditions: This issue occurs when there are many multicast CPEs.

Workaround: There is no workaround.

- CSCtd07390

Symptoms: The docsQos3ServiceFlowLogControl object cannot be set on the Cisco uBR7200 router.

Conditions: This issue occurs on a Cisco uBR7200 series router.

Workaround: Use the docsQosServiceFlowLogControl object instead.

- CSCtd15071

Symptoms: An admission control (AC) check cannot be done before load balancing is configured.

Conditions: This issue occurs when the target downstream channel is a legacy channel and the AC event is not configured. In Cisco IOS Release 12.2(33)SCC1, this issue occurs when the target downstream channel is the legacy channel or the target upstream channel has the maximum reserved bandwidth configured, and the AC event is not configured in the Cisco CMTS.

Workaround: Configure the AC event.

- CSCtd15349

Symptoms: The **show cable subscriber-usage** command information is not displayed for a cable modem.

Conditions: This issue occurs when a cable modem is moved to another interface through Load Balancing.

Workaround: Use the **dcc init-tec** command.

- CSCtd20979

Symptoms: The following error message is displayed on the Cisco uBR7200 router:

```
003207: SLOT 6: Nov 12 15:48:25.799: %UBR7200-3-WB_BPI_ERR: reman_bpi_upd_tek_reg():
reman_ucast_key is NULL : 0 8372 0
```

Conditions: This is seen on a Cisco uBR-MC88V line card on the Cisco uBR7200 router.

Workaround: There is no workaround.

- CSCtd30338
 

Symptoms: Updation of modulation profiles for dynamic modulation configurations are not guaranteed when moving from the DOCSIS 3.0 global modulation profile numbering scheme to the legacy modulation profile scheme.

Conditions: This issue occurs when two or three modulation profiles are assigned to a single upstream, and dynamic modulation is configured. The modulation profile configuration scheme is changed from global to legacy using the **no cable modulation-profile global-scheme** command. This affects both the basic and advanced dynamic modulation configurations.

Workaround: For each upstream that undergoes a configuration change, a warning message is displayed. In the running configuration, verify the configuration manually for correctness. This includes checking for duplication of profile IDs and whether the IDs are sorted left to right from the highest performance to the most robust.
- CSCtd30379
 

Symptoms: The ifStackTable does not list entries for the wideband, integrated cable interfaces and bundle interfaces if these interfaces have no low-layer interfaces.

Conditions: This issue occurs on a Cisco uBR7200 VXR series router with a Cisco uBR-MC88V cable interface line card.

Workaround: There is no workaround.
- CSCtd35207
 

Symptoms: The Fast Ethernet interface on the Cisco uBR7200 router has identical entries in the SNMP output.

Conditions: This issue occurs on the Cisco uBR7200 router with NPE-G2. The issue occurs in the Get ENTITY-MIB objects in the SNMP client.

Workaround: There is no workaround.
- CSCtd35401
 

Symptoms: The cable modem changes its video stream from multicast group 1 to group 2, and matches into a wrong RCC template.

Conditions: This issue occurs when VDOC is configured and two multicast video streams are in different secondary bonding groups.

Workaround: Delete the wrong RCC template.
- CSCtd39812
 

Symptoms: The DOCSIS 3.0 cable modem gets stuck in the reject(c) state in the second logical channel when mtc-mode is enabled on the cable modem.

Conditions: This issue occurs when primary downstreams are associated with upstreams that have a second logical channel enabled. A DOCSIS 3.0 cable modem may get stuck in the reject(c) state because the Cisco CMTS fails to find an Upstream Bonding Group (USBG) for the cable modem.

Workaround: Disable the MTC mode on the cable modem or associate physical upstream channels with primary downstreams.
- CSCtd39818
 

Symptom: The **show cab hop threshold** command displays the CNR value even when the upstream channel is shut down or the connector is removed.

Conditions: This issue occurs when the spectrum group is configured for the upstream channel.

Workaround: There is no workaround.

- CSCtd48001
 

Symptoms: The Cisco uBR7200 router crashes at `wb_mcast_rp_igmp_join_reg` after sending IPv4 multicast join requests to 319 clients.

Conditions: This issue occurs when a multicast client is configured to join the multicast group.

Workaround: There is no workaround.
- CSCtd48609
 

Symptoms: The `ccm ipv6_address rcs-counts` command clears all the rcs-counts of all the cable modems instead of clearing the `ipv6_address` specified for the cable modem rcs-counts.

Workaround: Use the `ccm mac_address rcs-counts` command.
- CSCtd49777
 

Symptoms: Using the SNMP walk or getnext options generates a wrong value for the MIB object `docsQos3GrpPktClassGrpConfigId`.

Conditions: This issue occurs on a Cisco uBR7200 series router.

Workaround: Use the SNMP `getone` option to obtain the correct values.
- CSCtd50018
 

Symptoms: The modem goes online unexpectedly when the `no cable dynamic-secret exclude modem` command is executed after the modem downloads the configuration file and before the REG-REQ request is received by the Cisco CMTS.

Conditions: This issue occurs when the `no cable dynamic-secret exclude modem` command is executed.

Workaround: Reset the modem.
- CSCtd57007
 

Symptoms: The CNR value gets reduced with added noise, and remains the same even after the noise is removed.

Conditions: This issue occurs after the noise is removed and 75% of the traffic is utilized on a robust modulation profile.

Workaround: Reduce the traffic.
- CSCtd58868
 

Symptoms: CPUHog and traceback occur with multicast traffic.

Conditions: This issue occurs on a Cisco uBR7200 series router.

Workaround: There is no workaround.
- CSCtd60220
 

Symptoms: Invalid input is detected for upstream threshold CNR profiles when booting with a saved configuration.

Conditions: This issue occurs when the threshold CNR profiles for an upstream are bypassed by configuring them as 0 in the startup configuration.

Workaround: Configure the threshold CNR profiles to 0 again after booting.
- CSCtd65664
 

Symptom: A traceback occurs on the Cisco uBR7200 router.

Conditions: This issue occurs during a line card OIR.



Workaround: There is no workaround.

- CSCtd71814

Symptoms: Dynamic load balancing does not work on DOCSIS 3.0 wideband-capable modems.

Conditions: This issue occurs when the **cable service attribute ds-bonded downstream-type bonding-enabled** command is executed. All the wideband-capable modems are skipped even if they are in an online state.

Workaround: Do not use the **cable service attribute ds-bonded downstream-type bonding-enabled** command.

- CSCtd98329

Symptoms: INVALID\_US\_CHID error messages and tracebacks may appear after the **test cable dcc** command is executed.

Conditions: This issue occurs when online cable modems are on the source interface.

Workaround: There is no workaround.

## Resolved Caveats—Cisco IOS Release 12.2(33)SCC3

- CSCtf21795

Symptoms: The CMTS does not send an override message when the MAC domain port number is not 0.

Conditions: This issue occurs when the Downstream Frequency Override (DFO) RF topology is set up on the Cisco UBR-MC20X20V cable interface line card.

Workaround: There is no workaround.

## Open Caveats—Cisco IOS Release 12.2(33)SCC2

- CSCeh33888

Symptoms: A Cisco uBR7246VXR router may reload with configurations set during the last watchdog reset.

Conditions: This issue occurs on a Cisco uBR7246VXR router having a Cisco uBR7200-NPE-G1 processor board and is running Cisco IOS Release 12.3(9a)BC.

Workaround: There is no workaround.

- CSCsl50133

Symptoms: The Cisco uBR7246VXR router reloads with following message:

```
No crashinfo
No tracebacks
Last reload reason: Unknown reason
Last reset from watchdog reset
```

Conditions: This issue was first observed on a Cisco uBR7246VXR (UBR7200-NPE-G1) router running Cisco IOS Release 12.3(17b)BC4.

Workaround: There is no workaround.

- CSCtb74904

Symptoms: During the RP switchover, the service flow counter displays the value 0.

Conditions: This issue occurs during an RP switchover. However, the right service flow is used to forward the packets and the packets reach the CPEs.

Workaround: There is no workaround.

- CSCtc04113

Symptoms: Signal Noise (SN) ratio always shows 0.0 for a Cisco DPC3000 modem.

Conditions: This issue occurs in a Cisco DPC3000 modem as it does not support the current SNMP OID **docsIfSigQSignalNoise** to query SN ratio.

Workaround: There is no workaround.

Workaround: There is no workaround.

- CSCtc05097

Symptoms: The NPE-G2 cannot load the image when the image size is greater than 62 MB.

Conditions: This issue occurs when the image size is greater than 62 MB.

Workaround: There is no workaround.

- CSCtc19959

Symptoms: The Cisco CMTS forwards traffic when all cable modems are deleted.

Conditions: This issue occurs when provisioning the static multicast via the modem configuration file.

Workaround: There is no workaround.

- CSCtc22435

Symptoms: The **docsQosServiceFlowLogTable** returns NULL.

Conditions: This issue occurs on the Cisco uBR7200 series universal broadband router with Keep QoS11 CM primary service flows counters feature while executing the **cable primary-sflow-qos11 keep all** command.

Workaround: Unconfigure the feature by executing the **cable primary-sflow-qos11 keep all** command.

- CSCtc27601

Symptoms: Grouping of source specific multicast (SSM) group from any source to one group configuration is not possible. The Cisco CMTS treats the next session-range as any source multicast (ASM).

Conditions: This issue occurs in a multicast group configuration.

Workaround: Configure the correct group range with the valid mask. Map the SSM from any source configure as ASM. For example, session-range 239.50.0.0 255.255.0.0

- CSCtc55806

Symptoms: The 24<sup>th</sup> MAC Domain Downstream Service Group (MD-DS-SG) is missing in the output of the **show cable mac-domain downstream-service-group** command.

Conditions: This issue occurs when the fiber-node configuration has channels in a MAC domain belonging to 24 different fiber-nodes.

Workaround: There is no workaround.

- CSCtc69216

Symptoms: There is an occurrence of a suspicious Any Transport over MPLS (AToM) L2VPN MPLS Peer Name TLV Parsing Logic, which causes the VCID error.

Conditions: This issue occurs when the AToM L2VPN on the CM configuration file is configured and the MPLS Peer Name TLV (37) is followed by VCID TLV (38).

Workaround: There is no workaround.

- CSCtc75786

Symptoms: The MIB object docsDiagLogLastRegTime is incorrect when the modem is powered off.

Conditions: This issue occurs when the modem is powered off.

Workaround: There is no workaround.

- CSCtc80690

Symptoms: The **cdxCmToCpeTable** and **cdxCpeToCmTable** does not return entries for IPv6 CPEs.

Conditions: This issue occurs when an SNMP query of **cdxCmToCpeTable** and **cdxCpeToCmTable** for IPv6 CPEs is performed.

Workaround: Use the **show cable modem cpe** command for querying the table.

- CSCtc89092

Symptoms: Admission control threshold counters for Wideband interfaces are not cleared by the **clear cable admission-control counters** command.

Conditions: This issue occurs when **clear cable admission-control counters** is executed.

Workaround: There is no workaround.

- CSCtc89799

Symptoms: The IOS image in the bootflash memory does not bootup.

Workaround: There is no workaround.

- CSCtc89985

Symptoms: Upstream dynamic modulation downgrade or upgrade on the Cisco uBR7200 series universal broadband router is not performed correctly.

Conditions: This issue occurs when the CNR value is negative as the noise in the upstream channel is greater than the carrier.

Workaround: There is no workaround.

- CSCtc92414

Symptoms: A decrease in the rf-channel bandwidth percentage is observed.

Conditions: This issue occurs on modular cable and integrated cable interfaces in a PacketCable Multimedia (PCMM) setup when changing the rf-channel bandwidth.

Workaround: Shutdown the interface before changing the rf-channel bandwidth.

- CSCtc96569

Symptoms: The Cisco CMTS with Subscriber Account Management Interface Specification (SAMIS) or Internet Protocol Detail Record (IPDR), or both configurations may crash when an image is copied to disk2: after the disk format operation.

Conditions: This issue occurs when SAMIS or IPDR, or both features configured and enabled performs, the Cisco CMTS may crash if the user formats the file system where the sflog file is located, or performs other write operations.

Workaround: There is no workaround.

- CSCtc97181

Symptom: The Cisco CMTS may not reject the registration request (REG-REQ), request which includes invalid DOCSIS QoS classifiers.

Conditions: This issue occurs when the cable modem configures the file containing both IPv4 fields (other than the TCP and UDP source and destination ports) and IPv6 fields in one DOCSIS QoS classifiers.

Workaround: There is no workaround.

- CSCtc97803

Symptoms: The NPE-G2 crashed after a line card crashed on the Cisco uBR7200 router.

Conditions: This issue occurs when copying the IPv4 and IPv6 configuration to the running configuration. The NPE was processing configurations when the line card crashed. An OIR interrupt was generated to fix the line card crash causing the NPE to crash.

Workaround: There is no workaround.

- CSCtc99292

Symptoms: When the dynamic upstream channel width change is configured, the upstream channel width downgrades when the channel condition worsens, but the channel width does not upgrade when channel condition improves.

Conditions: This issue occurs when the spectrum management and dynamic upstream channel width are configured on the upstream. The available bandwidth in the spectrum management group is just wide enough to fit one upstream with the highest channel width. The upstream channel condition worsens causing the channel width downgrade at one point.

Workaround: Do not configure the dynamic channel width change or configure a wider frequency bandwidth under the spectrum management group.

- CSCtc99668

Symptoms: When the downstream bonding group (wideband interface) includes channels from two controllers, the set operation to remove the MIB object **docsIf3BondingGrpCfgRowStatus** needs to be implemented twice.

Conditions: This issue occurs when the downstream bonding group (wideband interface) includes channels from two controllers.

Workaround: There is no workaround.

- CSCtd04983

Symptoms: The Cisco uBR7200 VXR series router crashes when a large number of IPv4 CPE clients rapidly join and leave the multicast groups.

Conditions: This issue occurs when there are many multicast CPEs.

Workaround: There is no workaround.

- CSCtd07390

Symptoms: The **docsQos3ServiceFlowLogControl** cannot be set on the Cisco uBR7200 router.

Conditions: This issue when the **docsQos3ServiceFlowLogControl** is set on the Cisco uBR7200 router.

Workaround: Use **docsQosServiceFlowLogControl** instead.

- CSCtd15071

Symptoms: The admission control (AC) check cannot be done before load balancing is configured.

Conditions: This issue occurs when the target downstream channel is the legacy channel and the AC event is not configured. In Cisco IOS Release 12.2(33)SCC1, this issue exists when the target downstream channel is the legacy channel or the target upstream channel has max-reserved-bandwidth configured, and the AC event is not configured in Cisco CMTS.

Workaround: Configure the AC event.

- CSCtd15349

Symptoms: The **show cable subscriber-usage** command does not display information for the cable modem.

Conditions: This issue occurs when the cable modem cm is moved to other another interface by load balancing.

Workaround: Use **dcc init-tec** command to view the cable modem information.

- CSCtd20979

Symptoms: The following error message is displayed on the Cisco uBR7200 router:

```
003207: SLOT 6: Nov 12 15:48:25.799: %UBR7200-3-WB_BPI_ERR: reman_bpi_upd_tek_reg():
reman_ucast_key is NULL : 0 8372 0
```

Conditions: This issue is observed on a Cisco uBR10-MC8X8V line card in the Cisco uBR7200 router.

Workaround: There is no workaround.

- CSCtd30338

Symptom: Modulation profiles for dynamic modulation configurations are not guaranteed to be updated properly when changing from the DOCSIS 3.0 global modulation profile numbering scheme to the legacy modulation profile scheme.

Conditions: This issue is seen when two or three modulation profiles are assigned to a single upstream, and the dynamic modulation is configured. The modulation profile configuration scheme is changed from global to legacy using the **no cable modulation-profile global-scheme** command. This affects both basic and advanced dynamic modulation configuration.

Workaround: For each upstream that has a configuration change, a warning message is displayed. Verify the configuration manually for correctness in the running configuration. This includes checking for duplication of profile IDs and whether the IDs are sorted left to right from highest performance to the most robust.

- CSCtd30379

Symptoms: The **ifStackTable** MIB object does not list entries for the wideband, integrated cable interfaces and bundle interfaces if those interfaces have no low layer interfaces.

Conditions: This issue occurs while performing the SNMP query on the **ifStackTable** MIB object.

Workaround: There is no workaround.

- CSCtd35207

Symptoms: The FastEthernet interface on the Cisco uBR7200 router has identical entries in the SNMP output.

Conditions: This issue occurs on the Cisco uBR7200 router with NPE-G2. The issue was seen in the Get ENTITY-MIB objects in SNMP client.

Workaround: There is no workaround.

- CSCtd35401
 

Symptoms: The cable modem changes its video stream from multicast group 1 to group 2 and matches into the wrong receive channel configuration (RCC) template.

Conditions: This issue occurs when video over DOCSIS (VDOC) is configured. Two multicast video streams are in different secondary bonding groups and the modem changes its multicast group.

Workaround: Delete the wrong RCC template.
- CSCtd39812
 

Symptoms: The DOCSIS 3.0 cable modems (CMs) get stuck in reject(c) state in the second logical channel when the mtc-mode is enabled on the cable modem.

Conditions: This issue occurs when primary downstreams are associated with upstreams which have a second logical channel enabled. The DOCSIS 3.0 CMs may get stuck in reject(c) state because the Cisco CMTS fails to find an Upstream Bonding Group (USBG) for the CMs.

Workaround: Disable the MTC mode on the CM or associate physical upstream channels with the primary downstreams.
- CSCtd39818
 

Symptom: The **show cab hop threshold** command displays the CNR value even when the upstream channel is shutdown or the connector is removed.

Conditions: This issue occurs when the spectrum group is configured for the upstream channel.

Workaround: There is no workaround.
- CSCtd48001
 

Symptoms: The Cisco uBR7200 router crashes at wb\_mcast\_rp\_igmp\_join\_reg after sending IPv4 multicast join requests to 319 clients.

Conditions: This issue occurs when a multicast client is configured to join the multicast group.

Workaround: There is no workaround.
- CSCtd48609
 

Symptoms: The **ccm ipv6\_address rcs-counts** command cleared all rcs-counts of all CMs instead of clearing the ipv6\_address specified in the cable modem rcs-counts.

Conditions: This issue occurs on execution of the **ccm ipv6\_address rcs-counts** command.

Workaround: Use the **ccm mac\_address rcs-counts** command to clear the specific ipv6\_address.
- CSCtd49777
 

Symptoms: Using SNMP walk or getnext obtains the wrong value of MIB object **docsQos3GrpPktClassGrpConfigId**.

Conditions: This issue occurs when using the SNMP walk or getnext requests.

Workaround: Use the SNMP getone request to obtain the values.
- CSCtd50018
 

Symptoms: The modem gets online unexpectedly when the **no cable dynamic-secret exclude modem** command is executed, after the modem downloads the configuration file and before the Cisco CMTS receives the REG-REQ request is received by Cisco CMTS.

Conditions: This issue occurs when the **no cable dynamic-secret exclude modem** command is executed.

Workaround: Reset the modem.

- CSCtd57007  
Symptoms: The CNR value goes low with added noise, and when the noise is removed, the CNR value remains the same when 75% of the traffic is utilized on a robust modulation profile.  
Conditions: This issue occurs when the noise is removed and the traffic utilization is 75%.  
Workaround: Reduce the traffic.  
Workaround: Reduce the traffic.
- CSCtd58868  
Symptoms: CPUHOG and traceback is observed on cable modems with multicast traffic.  
Conditions: This issue is seen on cable modems with multicast traffic.  
Workaround: There is no workaround.
- CSCtd60220  
Symptoms: Invalid input is detected for upstream threshold cnr-profiles when booting up with the saved configuration.  
Conditions: This issue occurs when the threshold cnr-profiles for an upstream is bypassed by configuring it as 0 in the startup configuration.  
Workaround: Configure the threshold cnr-profiles to 0 again after bootup.
- CSCtd65664  
Symptom: A traceback was observed on the Cisco uBR7200 router.  
Conditions: This issue was observed during a line card OIR.  
Workaround: There is no workaround.
- CSCtd71814  
Symptoms: Dynamic load balancing does not work on DOCSIS 3.0 wideband capable modems.  
Conditions: This issue occurs on DOCSIS 3.0 wideband capable modems and **cable service attribute ds-bonded downstream-type bonding-enabled** command is configured  
Workaround: Do not configure the **cable service attribute ds-bonded downstream-type bonding-enabled** command.
- CSCtd98329  
Symptoms: INVALID\_US\_CHID error messages and tracebacks may appear after the **test cable dcc** command is executed.  
Conditions: This issue occurs after the **test cable dcc** command is executed.  
Workaround: There is no workaround.

## Resolved Caveats—Cisco IOS Release 12.2(33)SCC2

- CSCta56424  
Symptoms: The NPE crashes while deleting files from a corrupted ATA disk.  
Conditions: This issue occurs on a Cisco uBR7200 series router when the ATA disk is corrupted and the “cluster chain broken on file” message is displayed.  
Workaround: There is no workaround.

- CSCte10747

Symptoms: The modem may register in partial mode. This is seen when the **show cable modem [mac] verbose | inc partial** command was executed. The DOCSIS 3.0 modem keeps cycling from offline to "UB init(t)" state, but is unable to register online.

Conditions: These issue occurs in the following conditions:

The PHYv3.0 section 6.2.19 Transmit Power Requirement contains the transmit power budget on per channel basis, derived from the modem transmit channel set, and each individual upstream channel parameters. The existing DOCSIS plant may be designed for single channel DOCSIS 1.x/2.0 modems, which has a much higher maximum transmit power level, comparing to DOCSIS 3.0 modem operating in MTC-mode and having 2 or more channels.

In such a case, the modem may range successfully prior to REGISTRATION, since the modem is still operating with a single channel, like legacy 2.0/1.x modem. As soon as it is transitions to MTC-mode during REG-RESP, its allowable maximum transmit power level is below the ranged reference channel power level, thus causing the above error condition, and modem stop any ranging attempts on the newly assigned channels. Eventually, it fails to register and goes offline. This cycle repeats. This case is only applicable if all upstream channels assigned to the modem channel set are exceeding the peak allowable transmit power level.

If all channel are not exceeding the peak transmit power level, then modem may register in partial mode. The modem may be able to continue to range successfully on the channel(s) that are still within the range, and transmitting data on those channel in partial-mode.

Workaround: For those modems having severe upstream signal lost, and are required to transmit at far beyond the PHY3.0 maximum per channel transmit power budget, they can be individually selected to register in non-bonded mode (non-MTC-mode), as in normal DOCSIS 2.0/1.x modem, for the upstream path. Use the cable modem (CM) config file with the bonded-bit set to off in CM-required-attribute via TLV 43.8 and 43.9; also make sure that the CMTS mtc-mode configuration is the default setting which would enforce the CM required-attribute bonded-bit checking to allow DOCSIS 3.0 modem to register in mtc-mode.

By disabling mtc-mode for these modems, they now have the same maximum transmit power budget as a DOCSIS 2.0/1.x modem would have.

- CSCte26014

Symptoms: A crash was observed on the line card at `cmts_crane_read_key`.

Conditions: This issue occurs when multicast service identifiers (SID)s are configured on the line card. This was seen while executing the `show interface cable key` command.

Workaround: Do not configure multicast SIDs on the line card.

- CSCte58329

Symptoms: Layer 2 VPN configuration with BPI configuration failed on the Cisco CMTS router.

Conditions: This issue occurs when both Layer 2 VPN and BPI are configured.

Workaround: There is no workaround.

## Open Caveats—Cisco IOS Release 12.2(33)SCC1

- CSCeh33888

Symptoms: The Cisco uBR7246VXR router may reload with configurations set during the last watchdog reset.



Conditions: This issue was first observed when the router runs the Cisco IOS Release 12.3 (9a)BC software with a Cisco uBR7200-NPE-G1 processor board.

Workaround: There is no workaround.

- CSCsl50133

Symptoms: The Cisco uBR7246VXR router reloads with following message:

```
No crashinfo
No tracebacks
Last reload reason: Unknown reason
Last reset from watchdog reset
```

Conditions: This issue was first observed on a Cisco uBR7246VXR (UBR7200-NPE-G1) router running Cisco IOS Release 12.3(17b)BC4.

Workaround: There is no workaround.

- CSCta03480

Symptoms: The configurations on the NPE-G1 processor and a line card do not synchronize.

Conditions: This issue occurs when there is excess load between the line card and the Cisco uBR7200-NPE-G1 processor board. The modem remains in reject(m) state.

Workaround: Execute the **cable dynamic-secret exclude oui** command to synchronize the configuration.

- CSCta45075

Symptoms: The **show interface multicast-session** command may show wrong multicast session instances.

Conditions: This issue occurs after the following steps:

1. An aggregate type GQC is created.
2. The IGMP join is sent to two sessions.
3. The IGMP leave is sent for Session 1 and after seven seconds to the Session 2.
4. Session 2 is rejoined immediately after Session 1 is deleted.

Workaround: There is no workaround.

- CSCtb74904

Symptoms: During the RP switchover, the service flow counter displays the value 0.

Conditions: This issue occurs during an RP switchover. However, the right service flow is used to forward the packets and the packets reach the CPEs.

Workaround: There is no workaround.

- CSCtb79237

Symptoms: No system log or SNMP traps are generated when the Common Open Policy Service (COPS) process for PacketCable fails..

Conditions: This issue occurs when the common open policy service (COPS) session fails in a PacketCable environment.

Workaround: There is no workaround.

- CSCtc04113

Symptoms: Signal Noise (SN) ratio always shows 0.0 for a Cisco DPC3000 modem.

Conditions: This issue occurs in a Cisco DPC3000 modem as it does not support the current SNMP OID **docsIfSigQSignalNoise** to query SN ratio.

Workaround: There is no workaround.

- CSCtc05097

Symptoms: The NPE-G2 cannot load the image when the image size is greater than 62 MB.

Conditions: This issue occurs when the image size is greater than 62 MB.

Workaround: There is no workaround.

- CSCtc19959

Symptoms: The Cisco CMTS forwards traffic when all cable modems are deleted.

Conditions: This issue occurs when provisioning the static multicast via the modem configuration file.

Workaround: There is no workaround.

- CSCtc22435

Symptoms: The **docsQosServiceFlowLogTable** returns NULL.

Conditions: This issue occurs on the Cisco uBR7200 series universal broadband router with Keep QoS11 CM primary service flows counters feature while executing the **cable primary-sflow-qos11 keep all** command.

Workaround: Unconfigure the feature by executing the **cable primary-sflow-qos11 keep all** command.

- CSCtc27601

Symptoms: Grouping of source specific multicast (SSM) group from any source to one group configuration is not possible. The Cisco CMTS treats the next session-range as any source multicast (ASM).

Conditions: This issue occurs in a multicast group configuration.

Workaround: Configure the correct group range with the valid mask. Map the SSM from any source configure as ASM. For example, session-range 239.50.0.0 255.255.0.0

- CSCtc55806

Symptoms: The 24<sup>th</sup> MAC Domain Downstream Service Group (MD-DS-SG) is missing in the output of the **show cable mac-domain downstream-service-group** command.

Conditions: This issue occurs when the fiber-node configuration has channels in a MAC domain belonging to 24 different fiber-nodes.

Workaround: There is no workaround.

- CSCtc69216

Symptoms: There is an occurrence of a suspicious Any Transport over MPLS (AToM) L2VPN MPLS Peer Name TLV Parsing Logic, which causes the VCID error.

Conditions: This issue occurs when the AToM L2VPN on the CM configuration file is configured and the MPLS Peer Name TLV (37) is followed by VCID TLV (38).

Workaround: There is no workaround.

- CSCtc75786

Symptoms: The MIB object **docsDiagLogLastRegTime** is incorrect when the modem is powered off.

Conditions: This issue occurs when the modem is powered off.

Workaround: There is no workaround.

- CSCtc80690

Symptoms: The **cdxCmToCpeTable** and **cdxCpeToCmTable** does not return entries for IPv6 CPEs.

Conditions: This issue occurs when an SNMP query of **cdxCmToCpeTable** and **cdxCpeToCmTable** for IPv6 CPEs is performed.

Workaround: Use the **show cable modem cpe** command for querying the table.

- CSCtc89092

Symptoms: Admission control threshold counters for Wideband interfaces are not cleared by the **clear cable admission-control counters** command.

Conditions: This issue occurs when **clear cable admission-control counters** is executed.

Workaround: There is no workaround.

- CSCtc89799

Symptoms: The IOS image in the bootflash memory does not bootup.

Workaround: There is no workaround.

- CSCtc89985

Symptoms: Upstream dynamic modulation downgrade or upgrade on the Cisco uBR7200 series universal broadband router is not performed correctly.

Conditions: This issue occurs when the CNR value is negative as the noise in the upstream channel is greater than the carrier.

Workaround: There is no workaround.

- CSCtc92414

Symptoms: A decrease in the rf-channel bandwidth percentage is observed.

Conditions: This issue occurs on modular cable and integrated cable interfaces in a PacketCable Multimedia (PCMM) setup when changing the rf-channel bandwidth.

Workaround: Shutdown the interface before changing the rf-channel bandwidth.

- CSCtc96569

Symptoms: The Cisco CMTS with Subscriber Account Management Interface Specification (SAMIS) or Internet Protocol Detail Record (IPDR), or both configurations may crash when an image is copied to disk2: after the disk format operation.

Conditions: This issue occurs when SAMIS or IPDR, or both features configured and enabled performs, the Cisco CMTS may crash if the user formats the file system where the sflog file is located, or performs other write operations.

Workaround: There is no workaround.

- CSCtc97181

Symptom: The Cisco CMTS may not reject the registration request (REG-REQ), request which includes invalid DOCSIS QoS classifiers.

Conditions: This issue occurs when the cable modem configures the file containing both IPv4 fields (other than the TCP and UDP source and destination ports) and IPv6 fields in one DOCSIS QoS classifiers.

Workaround: There is no workaround.

- CSCtc97803

Symptoms: The NPE-G2 crashed after a line card crashed on the Cisco uBR7200 router.

Conditions: This issue occurs when copying the IPv4 and IPv6 configuration to the running configuration. The NPE was processing configurations when the line card crashed. An OIR interrupt was generated to fix the line card crash causing the NPE to crash.

Workaround: There is no workaround.

- CSCtc99292

Symptoms: When the dynamic upstream channel width change is configured, the upstream channel width downgrades when the channel condition worsens, but the channel width does not upgrade when channel condition improves.

Conditions: This issue occurs when the spectrum management and dynamic upstream channel width are configured on the upstream. The available bandwidth in the spectrum management group is just wide enough to fit one upstream with the highest channel width. The upstream channel condition worsens causing the channel width downgrade at one point.

Workaround: Do not configure the dynamic channel width change or configure a wider frequency bandwidth under the spectrum management group.

- CSCtc99668

Symptoms: When the downstream bonding group (wideband interface) includes channels from two controllers, the set operation to remove the MIB object **docsIf3BondingGrpCfgRowStatus** needs to be implemented twice.

Conditions: This issue occurs when the downstream bonding group (wideband interface) includes channels from two controllers.

Workaround: There is no workaround.

- CSCtd04983

Symptoms: The Cisco 7200 VXR series router crashes at `cmts_bundle_find_mcast_mac`.

Conditions: This issue is observed after the CPE clients rapidly join and leave the multicast groups.

- CSCtd07390

Symptoms: The **docsQos3ServiceFlowLogControl** cannot be set on the Cisco uBR7200 router.

Conditions: This issue when the **docsQos3ServiceFlowLogControl** is set on the Cisco uBR7200 router.

Workaround: Use **docsQosServiceFlowLogControl** instead.

- CSCtd15071

Symptoms: The admission control (AC) check cannot be done before load balancing is configured.

Conditions: This issue occurs when the target downstream channel is the legacy channel and the AC event is not configured. In Cisco IOS Release 12.2(33)SCC1, this issue exists when the target downstream channel is the legacy channel or the target upstream channel has max-reserved-bandwidth configured, and the AC event is not configured in Cisco CMTS.

Workaround: Configure the AC event.

- CSCtd15349

Symptoms: The **show cable subscriber-usage** command does not display information for the cable modem.

Conditions: This issue occurs when the cable modem cm is moved to other another interface by load balancing.

Workaround: Use **dcc init-tec** command to view the cable modem information .

- CSCtd20979

Symptoms: The following error message is displayed on the Cisco uBR7200 router:

```
003207: SLOT 6: Nov 12 15:48:25.799: %UBR7200-3-WB_BPI_ERR: reman_bpi_upd_tek_reg():
reman_ucast_key is NULL : 0 8372 0
```

Conditions: This issue is observed on a Cisco uBR10-MC8X8V line card in the Cisco uBR7200 router.

Workaround: There is no workaround.

- CSCtd30338

Symptom: Modulation profiles for dynamic modulation configurations are not guaranteed to be updated properly when changing from the DOCSIS 3.0 global modulation profile numbering scheme to the legacy modulation profile scheme.

Conditions: This issue is seen when two or three modulation profiles are assigned to a single upstream, and the dynamic modulation is configured. The modulation profile configuration scheme is changed from global to legacy using the **no cable modulation-profile global-scheme** command. This affects both basic and advanced dynamic modulation configuration.

Workaround: For each upstream that has a configuration change, a warning message is displayed. Verify the configuration manually for correctness in the running configuration. This includes checking for duplication of profile IDs and whether the IDs are sorted left to right from highest performance to the most robust.

- CSCtd30379

Symptoms: The **ifStackTable** MIB object does not list entries for the wideband, integrated cable interfaces and bundle interfaces if those interfaces have no low layer interfaces.

Conditions: This issue occurs while performing the SNMP query on the **ifStackTable** MIB object.

Workaround: There is no workaround.

- CSCtd35207

Symptoms: The FastEthernet interface on the Cisco uBR7200 router has identical entries in the SNMP output.

Conditions: This issue occurs on the Cisco uBR7200 router with NPE-G2. The issue was seen in the **Get ENTITY-MIB** objects in SNMP client.

Workaround: There is no workaround.

- CSCtd35401

Symptoms: The cable modem changes its video stream from multicast group 1 to group 2 and matches into the wrong receive channel configuration (RCC) template.

Conditions: This issue occurs when video over DOCSIS (VDOC) is configured. Two multicast video streams are in different secondary bonding groups and the modem changes its multicast group.

Workaround: Delete the wrong RCC template.

- CSCtd39812

Symptoms: The DOCSIS 3.0 cable modems (CMs) get stuck in reject(c) state in the second logical channel when the mtc-mode is enabled on the cable modem.

Conditions: This issue occurs when primary downstreams are associated with upstreams which have a second logical channel enabled. The DOCSIS 3.0 CMs may get stuck in reject(c) state because the Cisco CMTS fails to find an Upstream Bonding Group (USBG) for the CMs.

Workaround: Disable the MTC mode on the CM or associate physical upstream channels with the primary downstreams.

- CSCtd39818

Symptom: The **show cab hop threshold** command displays the CNR value even when the upstream channel is shutdown or the connector is removed.

Conditions: This issue occurs when the spectrum group is configured for the upstream channel.

Workaround: There is no workaround.

- CSCtd48001

Symptoms: The Cisco uBR7200 router crashes at `wb_mcast_rp_igmp_join_reg` after sending IPv4 multicast join requests to 319 clients.

Conditions: This issue occurs when a multicast client is configured to join the multicast group.

Workaround: There is no workaround.

- CSCtd48609

Symptoms: The **ccm ipv6\_address rcs-counts** command cleared all rcs-counts of all CMs instead of clearing the `ipv6_address` specified in the cable modem rcs-counts.

Conditions: This issue occurs on execution of the **ccm ipv6\_address rcs-counts** command.

Workaround: Use the **ccm mac\_address rcs-counts** command to clear the specific `ipv6_address`.

- CSCtd49777

Symptoms: Using SNMP walk or getNext obtains the wrong value of MIB object **docsQos3GrpPktClassGrpConfigId**.

Conditions: This issue occurs when using the SNMP walk or getNext requests.

Workaround: Use the SNMP getone request to obtain the values.

- CSCtd50018

Symptoms: The modem gets online unexpectedly when the **no cable dynamic-secret exclude modem** command is executed, after the modem downloads the configuration file and before the Cisco CMTS receives the REG-REQ request is received by Cisco CMTS.

Conditions: This issue occurs when the **no cable dynamic-secret exclude modem** command is executed.

Workaround: Reset the modem.

- CSCtd57007

Symptoms: The CNR value goes low with added noise, and when the noise is removed, the CNR value remains the same when 75% of the traffic is utilized on a robust modulation profile.

Conditions: This issue occurs when the noise is removed and the traffic utilization is 75%.

Workaround: Reduce the traffic.

- CSCtd58868

Symptoms: CPUHOG and traceback is observed on cable modems with multicast traffic.

Conditions: This issue is seen on cable modems with multicast traffic.

Workaround: There is no workaround.

- CSCtd60220  
Symptoms: Invalid input is detected for upstream threshold cnr-profiles when booting up with the saved configuration.  
Conditions: This issue occurs when the threshold cnr-profiles for an upstream is bypassed by configuring it as 0 in the startup configuration.  
Workaround: Configure the threshold cnr-profiles to 0 again after bootup.
- CSCtd65664  
Symptom: A traceback was observed on the Cisco uBR7200 router.  
Conditions: This issue was observed during a line card OIR.  
Workaround: There is no workaround.
- CSCtd71814  
Symptoms: Dynamic load balancing does not work on DOCSIS 3.0 wideband capable modems.  
Conditions: This issue occurs on DOCSIS 3.0 wideband capable modems and **cable service attribute ds-bonded downstream-type bonding-enabled** command is configured  
Workaround: Do not configure the **cable service attribute ds-bonded downstream-type bonding-enabled** command.
- CSCtd98329  
Symptoms: INVALID\_US\_CHID error messages and tracebacks may appear after the **test cable dcc** command is executed.  
Conditions: This issue occurs after the **test cable dcc** command is executed.  
Workaround: There is no workaround.

## Resolved Caveats—Cisco IOS Release 12.2(33)SCC1

- CSCin79116  
Symptoms: Issuing **show** commands push the CPU utilization to 100%.  
Conditions: Long running **show** commands, such as **show running-config**, **show voice call summary**, and **show memory summary** commands affect voice call processing adversely, even if they are periodically suspended.  
Workaround: There is no workaround.
- CSCsy24676  
Symptoms: A false positive is returned on a file system failure, that is, a file operation is returned as successful even when it has failed.  
Conditions: This issue occurs when the file system device returns an error, but the code follows the path in the file system buffer cache where the error is masked and converts it to a success code. This issue may occur when there is a device error during the write session or due to bad media or an OIR of a line card.  
Workaround: There is no workaround.
- CSCsz45567  
A device running Cisco IOS Software, Cisco IOS XE Software, or Cisco IOS XR Software is vulnerable to a remote denial of service condition if it is configured for Multiprotocol Label Switching (MPLS) and has support for Label Distribution Protocol (LDP).

A crafted LDP UDP packet can cause an affected device running Cisco IOS Software or Cisco IOS XE Software to reload. On devices running affected versions of Cisco IOS XR Software, such packets can cause the device to restart the `mpls_ldp` process.

A system is vulnerable if configured with either LDP or Tag Distribution Protocol (TDP).

Cisco has released free software updates that address this vulnerability.

Workarounds that mitigate this vulnerability are available.

This advisory is posted at:

<http://www.cisco.com/warp/public/707/cisco-sa-20100324-ldp.shtml>

- CSCsz72591

Symptoms: The Cisco uBR7200 router crashes with an Address Error (load or instruction fetch) exception.

Conditions: This issue occurs when the router is configured as a dynamic host configuration protocol (DHCP) client.

Workaround: There is no workaround.

- CSCtb13491

A malformed Internet Key Exchange (IKE) packet may cause a device running Cisco IOS Software to reload. Only Cisco 7200 Series and Cisco 7301 routers running Cisco IOS software with a VPN Acceleration Module 2+ (VAM2+) installed are affected. Cisco has released free software updates that address this vulnerability.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20100324-ipsec.shtml>.

- CSCtb94400

Symptoms: During reboot, the multicast service flow for the tunnel is not established.

Conditions: This issue occurs during reboot if the **cable multicast group-qos default scn service-class-name aggregate** command is not configured.

Workaround: Configure the **cable multicast group-qos** command with *default scn service-class-name aggregate*.

- CSCtc09858

Symptoms: If the tunnel is disabled, the traffic does not stop. However, if the tunnel is disabled when a service class name is not defined for the tunnel, the traffic stops, but reenabling the tunnel does not restart traffic.

Conditions: This issue is observed when the service class name is defined for the tunnel.

Workaround: Stop and start the traffic, and remove and add the tunnel group to the interface.

- CSCtc16252

Symptoms: The **show inventory** command does not display the output until 15 minutes after bootup, if there is no line card on the system.

Conditions: This issue is observed on the Cisco uBR7200 series universal broadband router running Cisco IOS Release 12.2SC.

Workaround: There is no workaround.

- CSCtc43231

Symptoms: SNMP traps and informs on the source interface do not work.

Conditions: This issue occurs when the **snmp-server trap-source Loopback0** and **snmp-server source-interface informs Loopback0** commands are configured.



- Workaround: There is no workaround.
- CSCtc54549
 

Symptoms: The customer premises equipment (CPE) count of a single dual-stack host is greater than 1.

Conditions: This issue occurs when a dual-stack client is reset multiple times.

Workaround: Use the **clear cable host** command to clear the host from the Cisco CMTS and then let the host get online again.
  - CSCtc55893
 

Symptoms: The **Init-tech-ovr** in the load balancing group (LBG) does not function for the second logical channel.

Conditions: This issue occurs when the second logical channel is selected as the source channel.

Workaround: There is no workaround.
  - CSCtc60776
 

Symptoms: Layer 3 traffic cannot be forwarded by a Wideband CM in a non-MTC mode for a certain period of time after the Cisco CMTS has used the downstream channel change (DCC) to change its upstream with the initialization technique 1-4. The Wideband CM stays w-online.

Conditions: The issue occurs on wideband CMs. However, CMs running in non-MRC mode are not affected.

Workaround: Use UCC if the wideband supports it.
  - CSCtc60950
 

Symptoms: The Cisco uBR7225VXR router hangs due to SYS-3-CPUHOG, which is caused by the EnvMon process.

Conditions: This issue is observed on the Cisco uBR7225VXR router.

Workaround: Disable the EnvMon process using the **test c7200 envm off** command.
  - CSCtc61466
 

Symptoms: The **cable intercept** command on the cable interface is found missing after executing the following commands.

```
hw-module slot <x> stop, hw-module slot <x> start for MC28U card
```

Conditions: This issue is observed on the Cisco uBR7200 with Cisco uBR-MC28U card running Cisco IOS Release 12.2S or Cisco IOS Release 12.3.

Workaround: There is no workaround.
  - CSCtc65910
 

Symptoms: Memory leak in buffers from the header buffer pool may be observed.

Conditions: This issue occurs when heavy traffic is forwarded using Cisco Express Forwarding (CEF) on the RP. This issue is not specific to any particular type of interface or the RP.

Workaround: Reload or do a forced switchover to clear the memory buffer leak.
  - CSCtc68037
 

Symptoms: A Cisco IOS device may experience an unexpected reload.

Conditions: This issue occurs as a result of mtrace packet processing.

Workaround: Avoid using the mtrace functionality.

- CSCtc73787

Symptoms: The **clear counter** command does not clear the Any Transport over MPLS (AToM) L2VPN counters in the **show cable l2-vpn xconnect mpls-vc-map x.x.x.x verbose** command.

Conditions: This issue occurs under the following conditions:

1. Configure AToM L2vpn and send some traffic.
2. Run the **show cable l2-vpn xconnect mpls-vc-map x.x.x.x verbose** command.
3. Execute the **clear counters** command.

Workaround: There is no workaround.

- CSCtc74969

Symptoms: Unable to set the MIB object **docsIf3MdCfgMultTxChModeEnabled** to true.

Workaround: Use the **cable mtc-mode** command to set the MIB object **docsIf3MdCfgMultTxChModeEnabled** to true.

- CSCtc79306

Symptoms: After configuring the MAC address in the bundle interface, the MAC state of the Cisco DPC3000 cable modem is found to be w-online and not UB w-online.

Conditions: This issue occurs when the MAC address of the bundle interface is sent to the line card (LC) when configured under the LC cable interface. This causes the security association (SA) of the MAC Domain Descriptor (MDD) message and SA of the SYNC message to be different, which causes the Cisco DPC3000 cable modem to be w-online instead of UB w-online.

Workaround: There is no workaround.

- CSCtc85728

Symptoms: The Cisco Broadband Troubleshooter (CBT) 3.3 continuous sweep function fails when performed on the Cisco uBR10000 series universal broadband routers with PRE4 line cards.

Conditions: This issue is observed on the Cisco IOS Release 12.2(33)SCB4. This issue occurs when the **CISCO-CABLE-SPECTRUM-MIB::ccsSpectrumRequestTable - ccsSpectrumRequestOperState** MIB object returns a value of 10.

Workaround: There is no workaround.

- CSCtc86367

Symptoms: The Cisco CMTS crashes at "ExporterProtocol\_ConnectWaitWaitBestCollectorCallback" collector session.

Conditions: This issue occurs under the following conditions:

1. Configure two collectors for one session.
2. Stop the session by executing the **ipdr session <id> stop** command.
3. Connect the lower priority collector to the Cisco CMTS.
4. Remove the session by configuring the **no ipdr session <id>** command.

After about a minute, the CMTS crashes.

Workaround: Do one the following:

- Configure only one collector for one session
- If two collectors are configured, use the higher priority to export data.
- If the lower priority collector is connected to the Cisco CMTS, do not remove the session while the collector is connected.

- CSCtc89818  
Symptoms: The service-flow counter displayed in the **show cable load-balance load** command output is incorrect.  
Conditions: This issue occurs when the wideband modem with a secondary service flow is deleted.  
Workaround: There is no workaround.
- CSCtc92379  
Symptoms: Modems and service-flow counters update incorrectly.  
Conditions: This issue occurs when the CM instance is marked offline due to errors during the DCC rebuild.  
Workaround: There is no workaround.
- CSCtc93118  
Symptoms: DOCSIS load balance may incur unnecessary upstream changes for cable modems even if the upstream load is already balanced, that is, within the configured threshold. Consequently, the cable modems may accumulate on the least-loaded upstream.  
Conditions: This issue occurs when the upstream method is "utilization" and upstream traffic is low.  
Workaround: There is no workaround.
- CSCtc96090  
Symptoms: The polling of **IfHCInOctets** or **IfHCOutOctets** objects wrap at the 32-bit marker rather than the expected 64-bit marker.  
Conditions: This issue is observed in Cisco IOS Release 12.2(33)SCB4.  
Workaround: There is no workaround.
- CSCtd06258  
Symptoms: For spectrum management, ingress noise cancellation uses the carrier-to-noise (CNR) instead of signal-to-noise (SNR). This causes the advanced spectrum management on the Cisco UBR10-MC20X20 line cards to behave inconsistently.  
Conditions: This issue occurs when you configure the upstream channel with spectrum-group and INC.  
Workaround: There is no workaround.
- CSCtd07155  
Symptoms: The service flow is deleted from all the interfaces within the same bundle if a tunnel group is disabled.  
Conditions: This issue occurs when the same tunnel group is configured on different interfaces and if one tunnel group is disabled.  
Workaround: There is no workaround.
- CSCtd07912  
Symptoms: The group-qos is deleted from the group configuration, but the corresponding multicast DSID entry is not deleted.  
Conditions: This issue occurs on the Cisco uBR7200 series universal broadband router running the Cisco IOS Release 12.2(33)SCC.  
Workaround: There is no workaround.
- CSCtd18368

Symptoms: When the RF-channel 1 on one controller is shut down, RF-channel 1 on another controller also automatically shuts down.

Conditions: This issue occurs when the wideband resiliency and cross-controller bonding group are configured.

Workaround: There is no workaround.

- CSCtd19685

Symptoms: A DOCSIS 3.0 compliant cable modem may not get UB.

Conditions: This issue occurs only when fiber nodes are as configured.

Workaround: There is no workaround.

- CSCtd33099

Symptoms: The logical status of RF-channels in the **show cable rf-status** command may still be in the DOWN state, after executing the **shut** and **no shut** commands on those RF-channels.

Conditions: This issue occurs when the **shut** and **no shut** commands are executed on RF-channels of a bonding group in the IC controller.

Workaround: There is no workaround.

- CSCtd35119

Symptoms: There is two entries for each chassis slot container in the output of the SNMP.

Conditions: This issue occurs on the Cisco uBR7200 series universal broadband routers running the Cisco IOS releases and have the **Get entity** MIB Objects in the SNMP client.

Workaround: There is no workaround.

- CSCtd47982

Symptoms: Setting the **docsMcastCmtsGrpCfgRowStatus** MIB object with destroy(6) does not remove multicast group configure.

Conditions: None.

Workaround: To delete a multicast group, it should support values of all entry items.

- CSCtd53334

Symptoms: Memory leak is observed on executing the **show cable filter verbose** command.

Conditions: This issue occurs on the Cisco uBR7200VXR router.

Workaround: Do not execute the **show cable filter verbose** command on the Cisco uBR7200VXR router.

- CSCtd54841

Symptoms: The **show controller Integrated-cable card x all** command displays incorrect downstream physical (PHY) information.

Conditions: This issue occurs under normal conditions.

Workaround: There is no workaround.

## Open Caveats—Cisco IOS Release 12.2(33)SCC

- CSCeh33888

Symptoms: The Cisco uBR7246VXR router may reload with configurations set during the last watchdog reset.

Conditions: This issue occurs when the router runs the Cisco IOS Release 12.3 (9a)BC software with a Cisco uBR7200-NPE-G1 processor board.

Workaround: There is no workaround.

- CSCsl50133

Symptoms: The Cisco uBR7200 universal broadband router may reload.

Conditions: This issue occurs when Cisco uBR7246VXR series router runs Cisco IOS Release 123-17b.BC4 with UBR7200-NPE-G1 processor board.

Workaround: There is no workaround.

- CSCsi63649

Symptoms: All routers synchronized to one router show the following error every 10 seconds:

```
Apr 23 13:33:41.929: %SYS-3-TIMERNEG: Cannot start timer (0x7543D68) with negative
offset (-996736100). -Process= "TTY Background", ipl= 0, pid= 42
```

Conditions: This issue is observed on some Cisco Gigabit Switch Routers (GSR) running Cisco IOS Release 12.0(28)S, 12.0(31)S, 12.0(32)S, and 12.0(32)SY. The issue occurs when a telnet session is initiated on the router, and a new telnet session is initiated simultaneously to a different device from the same telnet session. The error message is displayed every 10 seconds when the **exec-timeout** does not disconnect the session and the timeout expires.

Workaround: Use the **show users** command to determine which users are connected via telnet. Then use **clear line x** to clear the line and disconnect the session to stop the error messages.

- CSCsy24676

Symptoms: The file system device returns a pseudo-positive value when the file system fails. This results in the file operation displayed as successful even though it failed.

Conditions: This issue occurs when the file system device displays an error, but the code follows the path in the file system buffer cache, where the error is masked. The device error could occur if the code was written on damaged media or during online insertion and removal (OIR) of a line card.

Workaround: There is no workaround.

- CSCta03480

Symptoms: The configurations on the NPE-G1 processor and a line card do not synchronize.

Conditions: This issue occurs when there is excess load between the line card and the Cisco uBR7200-NPE-G1 processor board. The modem remains in reject(m) state.

Workaround: Execute the **cable dynamic-secret exclude oui** command.

- CSCta28029

Symptoms: Flows with excess information rate (EIR) and maximum information rate (MIR) have higher throughput than expected.

Conditions: This issue occurs on the Cisco uBR7200 universal broadband router with congestion in the upstream.

Workaround: Ensure that the MIR is greater than EIR.

- CSCta45075
 

Symptoms: The **show interface multicast-session** command may show wrong multicast session instances.

Conditions: This issue occurs after the following steps:

  1. An aggregate type GQC is created.
  2. The igmp join is sent to two sessions.
  3. The igmp leave is sent for session 1 and after seven seconds to the session 2.
  4. Session 2 is rejoined immediately after session 1 is deleted.

Workaround: There is no workaround.
- CSCta77009
 

Symptoms: A Cisco uBR7200 series router may report memory leaks.

Conditions: This issue occurs when the dual stack CPE devices are each running FTP GET and FTP PUT application.

Workaround: There is no workaround.
- CSCtb20166
 

Symptoms: Temporary packet drop may be observed on the line cards in the chassis.

Conditions: This issue occurs due to OIR of a line card in the chassis.

Workaround: There is no workaround.
- CSCtb74904
 

Symptoms: The service flow counter shows 0.

Conditions: This issue occurs after the RP switchover.

Workaround: There is no workaround.
- CSCtb79237
 

Symptoms: No system log or SNMP traps are generated.

Conditions: This issue occurs when the common open policy service (COPS) session fails in a PacketCable environment.

Workaround: There is no workaround.
- CSCtb94400
 

Symptoms: The multicast service flow for the tunnel does not get established.

Conditions: This occurs during reboot if “cable multicast group-qos default scn def\_class aggregate” is not configured.

Workaround: Configure “cable multicast group-qos default scn def\_class aggregate”.
- CSCtc05600
 

Symptoms: The Cisco uBR7200 universal broadband router reloads.

Conditions: This issue occurs with Cisco uBR7200 universal broadband router running Cisco IOS Release 12.2(33)SCB3 and when SNMP accesses modem statistics information.

Workaround: Filter OID from the SNMP requests.

- CSCtc09858
 

Symptoms: Traffic does not stop when a tunnel is disabled and does not restart when the disabled tunnel is enabled.

Conditions: Traffic does not stop when the tunnel, which has a service class name defined, is disabled. Traffic stops when a service class name is not defined but the traffic does not start when the disabled tunnel is enabled.

Workaround: Remove the tunnel group from the interface and add it back again.
- CSCtc10117
 

Symptoms: Memory leak is observed with Pool manager process.

Conditions: This issue occurs on the Cisco uBR7200 universal broadband router with the QoS feature configured on it.

Workaround: There is no workaround.
- CSCtc10231
 

Symptoms: Upstream power adjustment indication may be seen after a cable modem goes online.

Conditions: This issue occurs once every hour when the **show cable modem flap** command is used.

Workaround: There is no workaround.
- CSCtc16252
 

Symptoms: The **show inventory** command does not display anything in the first 15 minutes after bootup.

Conditions: This issue occurs on a Cisco uBR7200 universal broadband router running Cisco IOS Release 12.2SC without a line card.

Workaround: Do not run the Cisco uBR7200 universal broadband router without a line card.
- CSCtc22435
 

Symptoms: The docsQosServiceFlowLogTable returns NULL.

Conditions: This issue occurs on the Cisco uBR7200 universal broadband router with Keep QoS11 CM primary service flows counters feature while executing the **cable primary-sflow-qos11 keep all** command.

Workaround: Unconfigure the feature by executing the **cable primary-sflow-qos11 keep all** command.
- CSCtc55893
 

Symptoms: The Init-tech-ovr in load balancing group (LBG) does not function for the second logical channel.

Conditions: This issue occurs when the second logical channel is selected as the source channel.

Workaround: There is no workaround.
- CSCtc60950
 

Symptoms: The Cisco uBR7225VXR router may hang due to SYS-3-CPUHOG:

```

ERROR: +1.2 V(MP NPE) read 0x0 out of range
(snip)
ERROR: -12 V(MP NPE) read 0x0 out of range
%SYS-3-LOGGER_FLUSHED: System was paused for 00:00:00 to ensure console
debugging output.
%SYS-3-CPUHOG: Task is running for (4924)msecs, more than (2000)msecs
(39/21),process = EnvMon.

```

```
%SYS-3-CPUHOG: Task is running for (4928)msecs, more than (2000)msecs
(39/21),process = EnvMon.
---
```

Conditions: This issue occurs on the Cisco uBR7225VXR router due to the EnvMon process.

Workaround: Disable the EnvMon process using the **test c7200 envm off** command.

- CSCtc74969

Symptoms: Cannot set “docsIf3MdCfgMultTxChModeEnabled” to true.

Conditions: This issue occurs on the Cisco uBR7200 universal broadband router.

Workaround: Set “cable mtc-mode” using CLI.

- CSCtc85728

Symptoms: Cisco Broadband Troubleshooter (CBT) 3.3 continuous sweep function fails.

Conditions: This issue occurs with Cisco IOS Release 12.2(33)SCB4 and PRE4 when CISCO-CABLE-SPECTRUM-MIB::ccsSpectrumRequestTable - ccsSpectrumRequestOperState MIB returns a value of 10.

Workaround: There is no workaround.

## Resolved Caveats—Cisco IOS Release 12.2(33)SCC

- CSCtc42632

Symptoms: The Cisco uBR7225VXR router may hang due to SYS-3-CPUHOG:

```
ERROR: +1.2 V(MP NPE) read 0x0 out of range
(snip)
ERROR: -12 V(MP NPE) read 0x0 out of range
%SYS-3-LOGGER_FLUSHED: System was paused for 00:00:00 to ensure console
debugging output.
%SYS-3-CPUHOG: Task is running for (4924)msecs, more than (2000)msecs
(39/21),process = EnvMon.
%SYS-3-CPUHOG: Task is running for (4928)msecs, more than (2000)msecs
(39/21),process = EnvMon.
---
```

Conditions: This issue occurs on the Cisco uBR7225VXR router due to the EnvMon process.

Workaround: Disable the EnvMon process using the **test c7200 envm off** command.

- CSCtc58147

Symptoms: The cable modem remains unchanged in the reject(c) state and **debug cable tlv** and **debug cable mac-address cm-mac verb** commands display the following message:

```
SLOT 4: Oct 15 13:16:23.379: Found Upstream Service Flow TLV SLOT 4: Oct 15
13:16:23.379: Service Flow Reference : 1 SLOT 4: Oct 15 13:16:23.379: Service Class
Name String Length 16, Exceeds Limit of 15 SLOT 4: Oct 15 13:16:23.379: PARSER-ERROR:
TLV 4 has bad length 16 SLOT 4: Oct 15 13:16:23.379: Primary CoS/Sflow encodings
missing. CoSs:0 Sflows[US, DS]: [1, 0] SLOT 4: Oct 15 13:16:23.379: Registration
failed for Cable Modem 001a.c3ff.d77e on interface Cable4/0/U1: CoS/Sflow/Cfr/PHS
failed in REG-REQ-MP
```

Conditions: This issue occurs when the cable modem configuration file contains a service class name longer than 15 bytes for both upstream and downstream service flows.

Workaround: Change the service class name to a string that is less than 15 bytes.



- CSCsv87997  
Symptoms: The DHCPv6 relay process crashes on the active route processor (RP).  
Conditions: The condition is unknown.  
Workaround: There is no workaround.
- CSCsw24542  
Symptoms: A crash occurs due to a bus error after displaying the following error message:  

```
%DATACORRUPTION-1-DATAINCONSISTENCY: copy error,  
%ALIGN-1-FATAL: Illegal access to a low address < isdn function decoded>
```

  
Conditions: This issue occurs on the Cisco 3825 running Cisco IOS Release 12.4(22)T with ISDN connections. At the time of the crash, the router was monitored using an SNMP Get program. After a few minutes the router reloaded by itself.  
Workaround: There is no workaround.
- CSCsx16152  
Symptoms: Erroneous routing prefixes are added to the routing table.  
Conditions: This issue occurs when the DHCPv6 relay feature is enabled and a router receives a normal DHCPv6 relay reply packet.  
Workaround: There is no workaround.
- CSCsx70889  
Cisco devices running affected versions of Cisco IOS Software are vulnerable to a denial of service (DoS) attack if configured for IP tunnels and Cisco Express Forwarding.  
Cisco has released free software updates that address this vulnerability.  
This advisory is posted at  
<http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20090923-tunnels>
- CSCsy07555  
Cisco IOS devices that are configured for Internet Key Exchange (IKE) protocol and certificate based authentication are vulnerable to a resource exhaustion attack. Successful exploitation of this vulnerability may result in the allocation of all available Phase 1 security associations (SA) and prevent the establishment of new IPsec sessions.  
Cisco has released free software updates that address this vulnerability.  
This advisory is posted at  
<http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20090923-ipsec>

