



Cisco uBR10012 Router Release Notes for Cisco IOS Release 12.2(33)SCD

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Cisco uBR10012 Router Release Notes for Cisco IOS Release 12.2(33)SCD
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Introduction

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

For software caveats that apply to the Cisco IOS Release 12.2(33)SCD on the Cisco uBR7200 series routers, see the corresponding release notes for Cisco uBR7200 Series 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.

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.

This chapter includes the following sections:

- [System Requirements, page 1](#)
- [New and Changed Information, page 10](#)
- [MIBs, page 23](#)
- [Limitations and Restrictions, page 23](#)
- [Important Notes, page 26](#)
- [Obtaining Documentation and Submitting a Service Request, page 29](#)

System Requirements

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

- [Memory Requirements, page 2](#)
- [Hardware Supported, page 2](#)
- [Verifying the Software Version, page 5](#)
- [Upgrading to a New Software Release, page 5](#)
- [Microcode Software, page 6](#)
- [Feature Support, page 7](#)

Memory Requirements

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


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 1-1 displays the memory recommendations for the Cisco uBR10012 universal broadband router with Cisco IOS Release 12.2(33)SCD feature sets.

Table 1-1 Memory Recommendations for the Cisco uBR10012 Router

Feature Set	Cisco uBR10012 Route Processor	Software Image	Recommended Flash Memory	Recommended DRAM Memory ¹	Runs From
DOCSIS Base 3 DES image and Lawful Intercept for Cisco PRE2 ²	PRE2	ubr10k2-k9p6u2-mz	128 MB	1.0 GB	RAM
DOCSIS Base 3 DES image and Lawful Intercept for Cisco PRE4	PRE4	ubr10k4-k9p6u2-mz	128 MB	2.0 GB	RAM
DOCSIS BPI and Lawful Intercept for Cisco PRE4	PRE4	ubr10k4-k8p6u2-mz	128 MB	2.0 GB	RAM

1. DRAM memory is not configurable on the Cisco uBR10012 router.
2. PRE = Performance Routing Engine

Hardware Supported

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

- [Cable Interface Line Cards Supported, page 2](#)
- [Microcode Software, page 6](#)
- [Other Hardware Supported, page 5](#)

Cable Interface Line Cards Supported

Table 1-2 provides information about the cable interface line cards supported in Cisco IOS Release 12.2(33)SCD.

Table 1-2 Cable Interface Line Cards Supported in Cisco IOS Release 12.2(33)SCD

Supported Cable Interface Line Card	Minimum Cisco IOS Release Required	Processor Engine
Cisco uBR10-MC5X20U/H—maximum 8	Cisco IOS Release 12.2SCA	PRE2/PRE4
Cisco UBR-MC20X20V—maximum 8	Cisco IOS Release 12.2SCC	PRE2/PRE4

OIR of Cable Interface Line Cards on the Cisco uBR10012 Universal Broadband Router

The Cisco uBR10012 series universal broadband routers support online insertion and removal (OIR) of cable interface line cards only when exchanging cable interface line cards of the same type.

Effective with Cisco IOS Release 12.2(33)SCC, OIR compatibility between the Cisco uBR10-MC5X20 and the Cisco UBR-MC20X20V line cards is supported. The OIR compatibility procedure translates the configuration from one format to another during the OIR process.

Prerequisites for Performing OIR

- Save the line card configuration before starting the OIR.
- Perform OIR when the CMTS is up and running.
- Change the standby card (if available) to HOT state.
- Save the startup configuration file before any reload of the system (if there is a need to reload), after a successful OIR.

Restrictions During OIR Process

- OIR upgrade cannot be performed when the standby PRE is being loaded.
- OIR downgrade from the Cisco UBR-MC20X20V line card to the Cisco uBR10-MC5X20 line card may fail in certain scenarios when the frequency and RF power settings on the Cisco UBR-MC20X20V line card are incompatible with the Cisco uBR10-MC5X20 card.

Performing an OIR of a Cable Interface Line Card

Step 1 In global configuration mode, enter the **cr10k card oir-compatibility** command for the cable interface line card to perform an OIR, as shown in the following example:

```
Router(config)# cr10k card 8/0 oir-compatibility
```

This command helps preserve the configuration and performs some internal synchronization to make sure that the OIR runs successfully.



Note Effective with Cisco IOS Release 12.2(33)SCC, OIR compatibility is automatically ON for all slots of the line cards.

Step 2 Save the configuration to ensure the transition, as shown in the following example:

```
Router# copy running-config startup-config
```

Step 3 Turn the power off to the line card using the **cable power off** command for the slot that is being replaced, as shown in the following example:

```
Router# cable power off 8/0  
Line Card 8/0 is POWERED OFF
```

This powers off the line card gracefully.

Step 4 Before removing the card, verify that the proper grounding instructions have been followed for the card.

For more information about preventing electrostatic discharge (ESD) damage, see:

<http://www.cisco.com/warp/public/109/cable-linecard-handling.pdf>

Step 5 Remove the line card.

Step 6 Replace it with the new line card in the slot.

Step 7 Enter the **cable power on** command to power up the line card, as shown in the following example:

```
Router# cable power on 8/0
```

Step 8 Enter the **show interface cable** command and verify that the card and line protocol is “up” as shown in the following example:

```
Router# show interface cable 8/0/0
```

```
Cable8/0/0 is up, line protocol is up
Hardware is BCM3210 ASIC, address is 000a.13e8.1ca8 (bia 000a.13e8.1a60)
Internet address is 10.1.1.3/24
MTU 1500 bytes, BW 27000 Kbit, DLY 1000 usec, rely 255/255, load 1/255
Encapsulation, loopback not set, keepalive not set
ARP type: ARPA, ARP Timeout 04:00:00
Last input 4d07h, output 00:00:00, output hang never
Last clearing of "show interface" counters never
Queuing strategy: fifo
Output queue 0/40, 0 drops; input queue 0/75, 0 drops
5 minute input rate 1834000 bits/sec, 2385 packets/sec
5 minute output rate 1982000 bits/sec, 2431 packets/sec
 24461542 packets input, 2348214388 bytes, 0 no buffer
Received 1979 broadcasts, 0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
24854257 packets output, 2536222931 bytes, 0 underruns
0 output errors, 0 collisions, 0 interface resets
0 output buffer failures, 0 output buffers swapped out
```

Step 9 Enter the **show controllers cable** command and verify the hardware status, as shown in the following example:

```
Router# show controllers cable 8/0/0
Cable8/0/0 JIB hardware status:
  JIB Downstream port  Enabled
  JIB Upstream  port 0  Enabled
  JIB Upstream  port 1  Enabled
  JIB Upstream  port 2  Enabled
  JIB Upstream  port 3  Enabled
Cable8/0/0 Upconverter is Enabled Output is Enabled
Model: 74-3153-02 Serial Number: 0WAV090200A1 CLEI Code: FFFFFFFF
HW Rev: PC2D0109 SW Rev: 203, NVRAM Rev: 021 ECI numb
```



Note To verify the hardware status of the Cisco UBRMC20X20V cable line cards, it is recommended that you run the **show controller integrated-cable 8/0/0 brief** command instead of the **show controllers cable** command.

Step 10 Verify the configuration with the **show running-configuration** command.

Cisco uBR10012 Universal Broadband Router Line Cards Supported

The Cisco uBR10012 universal broadband router supports up to four network line cards with any combination of the following cards:

- Cisco Half-Height Gigabit Ethernet (HHGE) line card
- Cisco uBR10012 OC-48 DPT/POS interface module



Note Cisco HHGE line card is supported only with PRE2.

Other Hardware Supported

Table 1-3 provides information about other hardware supported in Cisco IOS Release 12.2(33)SCD.

Table 1-3 Other Hardware Supported in This Cisco IOS Release

Hardware	Cisco uBR10012 Router	Minimum Cisco IOS Release
Cisco Wideband SIP and Cisco Wideband SPA	Yes	Cisco IOS Release 12.2(33)SCA
Cisco uBR10012 universal broadband router DTCC card	Yes	Cisco IOS Release 12.2(33)SCB
Cisco uBR10012 universal broadband router TCC+ card	Yes	Cisco IOS Release 12.2(33)SCA
Cisco 10000 Series SIP-600 and WAN SPAs (5-Port Gigabit Ethernet and the 1-Port 10 Gigabit Ethernet SPAs)	Yes	Cisco IOS Release 12.2(33)SCB
Cisco 10000 Series SIP-600 with the Cisco Wideband SPA	Yes	Cisco IOS Release 12.2(33)SCB

Verifying the Software Version

To determine 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, 10000 Software (UBR10K4-K9P6U2-M), Version 12.2(33)SCD
EXPERIMENTAL IMAGE ENGINEERING C10K_WEEKLY BUILD, synced to
MAYFLOWER_BASE_FOR_V122_33_SB_THROTTLE
Copyright (c) 1986-2010 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

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

For Cisco IOS upgrade ordering instructions, see:

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 Toolkit at the following URL:

<http://tools.cisco.com/Support/BugToolKit/action.do?hdnAction=searchBugs>

Microcode Software

This section describes microcode software that is supported for the Cisco uBR10012 router.

SPA FPD Image Packages for the Cisco uBR10012

The field-programmable device (FPD) image packages are used to update the shared port adapter (SPA) FPD images. If a discrepancy exists between a SPA FPD image and the Cisco IOS image that is running on the router, the SPA is deactivated until this discrepancy is resolved.


Note

The maximum time to upgrade the FPD image on one SPA is 2 minutes. The total FPD upgrade time depends on the number of SPAs.


Note

The FPD image package that is used to upgrade SPAs on a router that runs Cisco IOS Release 12.2(33)SCD is theubr10k-fpd-pkg.122-33.SCD pkg file.

Table 4 Shared Port Adapter FPD Image Package Contents

Supported SPAs	FPD ID	FPD Component Name	FPD Component Version	Minimum Required Hardware Version
5-Port Gigabit Ethernet SPA	1	I/O FPGA	1.10	0.0
1-Port 10-Gigabit Ethernet SPA	1	I/O FPGA	1.9	0.0
Cisco Wideband SPA	1	BLAZE FPGA	1285.1446	0.0

Upgrading from PRE2 to PRE4 Processors

A cold start of the router is required for an upgrade to a PRE4 from a PRE2 on a Cisco uBR10012 universal broadband router from a different release train, such as Cisco IOS Release 12.3(23)BC or other BC releases.

For more information, see *Cisco uBR10012 Universal Broadband Router Performance Routing Engine Module* at:

http://www.cisco.com/en/US/docs/interfaces_modules/cable/performance_routing_engine/installation/guide/pre5096.html

Upgrading from Cisco IOS Release 12.3BC or Earlier Cisco IOS Software Release

For more information, see the *Cisco uBR10012 Router Release Notes for Cisco IOS Release 12.2(33)SCA* at the following URL:

http://www.cisco.com/en/US/products/hw/cable/ps2209/prod_release_notes_list.html

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.

Cisco CMTS User Documentation References for Cisco IOS Release 12.2SC

Table 1-5 provides information about the important user guides in Cisco IOS Release 12.2SC.

Table 1-5 Important Guides in Cisco IOS Release 12.2SC

Guide	Description
Documentation Roadmap	Describes a set of Cisco CMTS documents and contains links to the referenced documents. Go to the following link to access this document: http://www.cisco.com/c/en/us/td/docs/cable/cmts/ubr10012/roadmap/u10krdmp.html
Command Reference	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. Go to the following link to access this document: http://www.cisco.com/c/en/us/td/docs/cable/cmts/cmd_ref/b_cmts_cable_cmd_ref.html
Design Guides	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. Go to the following link to access this document set: http://www.cisco.com/c/en/us/support/video/ubr10000-series-universal-broadband-routers/products-implementation-design-guides-list.html

Guide	Description
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: http://www.cisco.com/c/en/us/support/video/ubr10000-series-universal-broadband-routers/products-installation-guides-list.html</p> <p>Important guides in this section are:</p> <ul style="list-style-type: none"> • Cisco uBR10012 Universal Broadband Router Hardware Installation Guide • Cisco uBR10012 Universal Broadband Router SIP and SPA Hardware Installation Guide
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 set: http://www.cisco.com/en/US/products/hw/cable/ps2209/products_installation_and_configuration_guides_list.html</p> <p>Important guides in this section are:</p> <ul style="list-style-type: none"> • Cisco uBR10012 Universal Broadband Router SIP and SPA Software Configuration Guide • Cisco IOS CMTS Cable Software Configuration Guide, Release 12.2SC
Error and System Messages	<p>Lists error and system messages for a Cisco CMTS, including any recommended user action for each message.</p> <p>Go to the following link to access this document: http://www.cisco.com/en/US/docs/cable/cmts/system/message/uberrmes.html</p>
Troubleshooting Guides	<p>Provides problem-solving techniques for a Cisco CMTS, including methods to identify problems based on symptoms and recommended actions for resolution.</p> <p>Go to the following link to access this document set: http://www.cisco.com/en/US/products/hw/cable/ps2209/prod_troubleshooting_guides_list.html</p> <p>Important guides in this section are:</p> <ul style="list-style-type: none"> • http://www.cisco.com/c/en/us/td/docs/cable/cmts/ubr10012/troubleshooting/guide_SC_HW/u10trbk_SC.html • Online Offline Diagnostics - Field Diagnostics on Cisco uBR10012 Router User's Guide

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. 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 uBR10012 universal broadband routers in Cisco IOS Release 12.2(33)SCD:

- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCD8](#), page 11
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCD7](#), page 12
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCD6](#), page 12
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCD5](#), page 12
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCD4](#), page 12
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCD3](#), page 12
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCD2](#), page 12
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCD1](#), page 12
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCD](#), page 12
- [New Software Features in Cisco IOS Release 12.2\(33\)SCD8](#), page 13
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCD8](#), page 13
- [New Software Features in Cisco IOS Release 12.2\(33\)SCD7](#), page 13
- [New Software Features in Cisco IOS Release 12.2\(33\)SCD6](#), page 13
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCD6](#), page 13
- [New Software Features in Cisco IOS Release 12.2\(33\)SCD5](#), page 13
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCD5](#), page 15
- [New Software Features in Cisco IOS Release 12.2\(33\)SCD4](#), page 15
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCD4](#), page 15
- [New Software Features in Cisco IOS Release 12.2\(33\)SCD3](#), page 15
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCD3](#), page 16
- [New Software Features in Cisco IOS Release 12.2\(33\)SCD2](#), page 17
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCD2](#), page 20
- [New Software Features in Cisco IOS Release 12.2\(33\)SCD1](#), page 20
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCD1](#), page 20
- [New Software Features in Cisco IOS Release 12.2\(33\)SCD](#), page 20
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCD](#), page 21

New Hardware Features in Cisco IOS Release 12.2(33)SCD8

There are no new hardware features in Cisco IOS Release 12.2(33)SCD8.

Features Integrated into Cisco IOS Release 12.2(33)SCD8

The following features introduced in an earlier Cisco IOS Release are now supported in Cisco IOS Release 12.2(33)SCD8:

New Fan Assembly Module

A new fan Assembly Module (UBR10012-FAN-PLUS=) is introduced on the Cisco uBR10012 router. This fan assembly has nine internal fans that draw cooling air into the front of the chassis and directs it across the internal components. This fan assembly module provides:

- Increased cooling capability
- Higher redundancy in case of a failure
- Repositioned thermal sensor that detects the ambient temperature of the facility and adjusts the variable fan speeds
- PRODUCT ID LED /switch that helps the Cisco IOS software to identify the fan assembly as UBR10012-FAN-PLUS=

**Note**

The PRODUCT ID LED /switch feature is supported starting Cisco IOS Release 12.2(33)SCC7 and later.

For more information, see [Cisco uBR10012 Universal Broadband Router Fan Assembly Module](#).

New 3300 W AC Power Entry Module (AC PEM)

A new 3300 W AC PEM module (UBR10-PWR-AC-PLUS=) is introduced on the Cisco uBR10012 router which provides a power output of 3300 W with dual AC-input power connections. This AC PEM module provides:

- Increased power to the chassis
- Load shared power to the chassis (under normal conditions)
- PRODUCT ID LED/switch that helps the Cisco IOS software to identify the AC PEM module as UBR10-PWR-AC-PLUS=.

**Note**

The PRODUCT ID LED /switch feature is supported starting Cisco IOS Release 12.2(33)SCC7 and later.

For more information, see [3300 W AC PEM Module for Cisco UBR10012 Broadband Router Chassis](#).

New 3300 W DC Power Entry Module (DC PEM)

A new 3300 W DC PEM module (UBR10-PWR-DC-PLUS=) is introduced on the Cisco uBR10012 router which provides a power output of 3300 W with dual DC-input power connections. This DC PEM module provides:

- Increased power to the chassis
- Load shared power to the chassis (under normal conditions)

- PRODUCT ID LED/switch that helps the Cisco IOS software to identify the DC PEM module as UBR10-PWR-DC-PLUS

**Note**

The PRODUCT ID LED /switch feature is supported starting Cisco IOS Release 12.2(33)SCC7 and later.

For more information, see [3300 W DC PEM Module for Cisco UBR10012 Broadband Router Chassis](#).

New Hardware Features in Cisco IOS Release 12.2(33)SCD7

There are no new hardware features in Cisco IOS Release 12.2(33)SCD7.

New Hardware Features in Cisco IOS Release 12.2(33)SCD6

There are no new hardware features in Cisco IOS Release 12.2(33)SCD6.

New Hardware Features in Cisco IOS Release 12.2(33)SCD5

There are no new hardware features in Cisco IOS Release 12.2(33)SCD5.

New Hardware Features in Cisco IOS Release 12.2(33)SCD4

There are no new hardware features in Cisco IOS Release 12.2(33)SCD4.

New Hardware Features in Cisco IOS Release 12.2(33)SCD3

There are no new hardware features in Cisco IOS Release 12.2(33)SCD3.

New Hardware Features in Cisco IOS Release 12.2(33)SCD2

There are no new hardware features in Cisco IOS Release 12.2(33)SCD2.

New Hardware Features in Cisco IOS Release 12.2(33)SCD1

There are no new hardware features in Cisco IOS Release 12.2(33)SCD1.

New Hardware Features in Cisco IOS Release 12.2(33)SCD

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

New Software Features in Cisco IOS Release 12.2(33)SCD8

There are no new software features in Cisco IOS Release 12.2(33)SCD8.

Modified Software Features in Cisco IOS Release 12.2(33)SCD8

There are no modified software features in Cisco IOS Release 12.2(33)SCD8.

New Software Features in Cisco IOS Release 12.2(33)SCD7

Configurable DFO Retry Count

The Downstream Frequency Override (DFO) feature enables cable modems to register on a specific primary RF channel. Because of RF failure conditions and some cable modem types, the cable modem takes more time to register on a specific primary RF channel. In Cisco IOS Release 12.2(33)SCD7, the **cable dfo-retry-count**, a global configuration command, is introduced to enable you to configure the DFO retry count to reduce the cable modem registration time.

For more information about this command, see the *Cisco IOS CMTS Cable Command Reference* at: http://www.cisco.com/en/US/docs/ios/cable/command/reference/cbl_03_cable_d.html

New Software Features in Cisco IOS Release 12.2(33)SCD6

There are no new software features in Cisco IOS Release 12.2(33)SCD6.

Modified Software Features in Cisco IOS Release 12.2(33)SCD6

There are no modified software features in Cisco IOS Release 12.2(33)SCD6.

New Software Features in Cisco IOS Release 12.2(33)SCD5

This section lists the new features in Cisco IOS Release 12.2(33)SCD5. Some features may be new to Cisco IOS Release 12.2(33)SCD5 but were released in earlier Cisco IOS software releases.

Differential DHCP GIAddr Assignment

Starting with Cisco IOS Release 12.2(33)SCD5, a new **giaddr** option was added to the **cable dhcp-giaddr policy mta** command. This option changes the source IP address of the DHCP request so that the DHCP server can use different subnets to assign the right IP address depending on the types of CPE devices. This enables faster processing of IP addresses; and in case the IP address does not belong to the subnets on the DHCP server, there is minimal usage of CPU resources.

The following command was modified:

- **cable dhcp-giaddr policy mta**

For more information about this feature, see the *DHCP, ToD, and TFTP Services for the CMTS Routers* feature guide at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_services.html

DOCSIS 3.0 BPI+ Policy Enforcement

The DOCSIS 3.0 BPI+ Policy Enforcement feature was introduced in Cisco IOS Release 12.2(33)SCD5 to prevent cable modem MAC address cloning and theft of service. This feature enables a Cisco CMTS router to validate each cable modem MAC address. To enforce BPI+, configure one of the following enforcement policies for each MAC domain on the router:

- **1.1 Style Configuration File Parameters and Capability (Policy 1)**—The Cisco CMTS router enforces BPI+ on cable modems that register with a DOCSIS 1.1 configuration file with parameters indicating BPI+ is enabled with or without type, length, value (TLV) 29. The Privacy Support Modem Capability Modem TLV (type 5.6) in the configuration file must be set to BPI+ support.
- **1.1 Style Configuration File Parameters (Policy 2)**—The Cisco CMTS router enforces BPI+ on cable modems that register with a DOCSIS 1.1 style configuration file with parameters indicating BPI+ is enabled with or without TLV 29.
- **1.1 Style Configuration File (Policy 3)**—The Cisco CMTS router enforces BPI+ on cable modems that register with a DOCSIS 1.1 style configuration file. This means that if you provision a DOCSIS 1.1 configuration file with security disabled (privacy flag is not present in the configuration file), all DOCSIS 1.1 and 2.0 cable modems will be blocked. Only the DOCSIS 3.0 cable modems that have security enabled implicitly will pass this check if the privacy flag is not present in the configuration file.
- **Total (Policy 4)**—The Cisco CMTS router enforces BPI+ on all DOCSIS 1.0 and greater cable modems.

The following commands are new or modified:

- **cable privacy bpi-plus-policy**—This command replaced the cable privacy bpi-plus-enforce command in Cisco IOS Release 12.2(33)SCD5.
- **cable privacy bpi-plus-exclude**

For more information about this feature, see the *Cable Duplicate MAC Address Reject for the Cisco CMTS Router* feature guide at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_dup_macad_rj_ps2209_TSD_Products_Configuration_Guide_Chapter.html

DOCSIS 2.0 Multicast Enhancement for VDOC

This feature enables the customer to tune a DOCSIS 2.0 cable modem to a specific downstream and supports static multicast video forwarding on it.

The following commands are new or modified:

- **cable load-balance rule**

For more information about this feature, see the following guides:

Load Balancing and Dynamic Channel Change on the Cisco CMTS Routers at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_load-bal_dcc.html

Restricted/General Load Balancing and Narrowband Dynamic Bandwidth Sharing with Downstream Dynamic Load Balancing at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/UBR_RLBG_GLBG_support.html

DSG Rule/Classifier Enhancement

A new option **ignore** was added to the **in-dcd** keyword of the **cable dsg cfr** command in Cisco IOS Release 12.2(33)SCD5 to exclude DSG classifier information from the DCD message and enable the DSG rule regardless of the tunnel MAC address.

The following commands are new or modified:

- **cable dsg cfr**
- **show cable dsg tg**
- **show interface cable dsg downstream tg**

For more information about the DSG Rule/Classifier Enhancement, see the *Advanced-Mode DOCSIS Set-Top Gateway 1.2 for the Cisco CMTS Routers* feature guide at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_docsis_gw12.html

Upstream Minimum Reserved Traffic Rate Plus Excess Traffic Rate

Starting with Cisco IOS Release 12.2(33)SCD5, a service flow configured with the minimum reserved traffic rate, has a greater chance of receiving excess traffic rate bandwidth, if requested.

The following command was new:

- **cable rate-limit-algorithm min-plus-excess**

For more information about this feature, see the *Configuring Upstream Cable Interface Features on the Cisco CMTS Routers* feature guide at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_upstrm_if.html

Modified Software Features in Cisco IOS Release 12.2(33)SCD5

There are no modified features in Cisco IOS Release 12.2(33)SCD5.

New Software Features in Cisco IOS Release 12.2(33)SCD4

There are no new software features in Cisco IOS Release 12.2(33)SCD4.

Modified Software Features in Cisco IOS Release 12.2(33)SCD4

There are no modified features in Cisco IOS Release 12.2(33)SCD4.

New Software Features in Cisco IOS Release 12.2(33)SCD3

This section lists the new features in Cisco IOS Release 12.2(33)SCD3. Some of the features that were released in earlier Cisco IOS software releases are now supported in Cisco IOS Release 12.2(33)SCD3.

RF-Power Delta

The RF-Power Delta feature introduced in Cisco IOS Release 12.2(33)SCC4 is now supported in Cisco IOS Release 12.2(33)SCD3.

The RF power adjustment feature enables compensation of the extra power loss in the protect path of the Cisco RF Switch. This feature has been enhanced in the Cisco IOS Release 12.2(33)SCC4:

- The support for keywords **hccp-delta** and **hccp-override** is removed from the **cable downstream rf-power** command.
- The member subslot command is modified to add support for RF Power adjustment in redundancy mode. The following keywords have been added to this command:

1. **rf-power**
2. **rf-connector**
3. **hccp-delta**
4. **hccp-override**

The following commands are new or modified for this feature:

- **cable downstream rf-power**
- **member subslot**

For more information about the **member subslot** 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_13_i_to_p.html

Multicast DSID Forwarding Disabled Mode

For any application that needs the cable modem to perform IGMP Snooping, the Multicast DSID-based Forwarding (MDF) on the cable modem must be disabled. Cable modems registered in MDF-enable mode by the Cisco CMTS do not perform IGMP Snooping because MDF forwarding is based on the DSID filtering.

In Cisco IOS Release 12.2(33)SCD3, the **cable multicast mdf-disable** command is introduced in the global configuration mode to disable the MDF capability on the cable modem.

For more information about this feature, see the DOCSIS 3.0 Multicast Support on the CMTS Routers feature guide at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_d30_mcast_support_ps2209_TS_D_Products_Configuration_Guide_Chapter.html

Modified Software Features in Cisco IOS Release 12.2(33)SCD3

There are no modified software features in Cisco IOS Release 12.2(33)SCD3.

New Software Features in Cisco IOS Release 12.2(33)SCD2

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

DOCSIS 3.0 OSS IPDR/SP

DOCSIS 3.0 certification is extended to IPDR/SP feature in Cisco CMTS routers. IPDR Streaming Protocol is designed to address the need for a reliable, fast, efficient, and flexible export process of high volume data records such as billing, performance and diagnostic data.

Using the **ipdr type** command, you can configure the IPDR session type. The IPDR session types that can be defined using this command are event type, time-interval type, and the ad hoc type.

For detailed information about this feature, see the *IPDR Streaming Protocol on the Cisco CMTS Routers* document at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ipdr_feature.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

ISSU Single Step Upgrade Process

Single step upgrade process is the ability of the ISSU feature to upgrade the entire CMTS system using the new **issu changeversion** command. This process allows the networking device to inform the system that the networking device is performing a complete upgrade cycle automatically, and allows the state transitions to move to the next step automatically.

For detailed information about the ISSU single step upgrade process, see the *Cisco IOS In Service Software Upgrade Process* document at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_issu.html

Power and Thermal Monitoring on the Cisco CMTS Routers

The power and thermal monitoring feature provides monitoring options for the thermal and power consumption of the Cisco UBR-MC20X20V cable interface line card. The power and thermal monitoring facility monitors the line card at several different points to see whether it is overheating or drawing too much power.

For more information on this feature, see *Power and Thermal Monitoring on the Cisco CMTS Routers* document at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_env_monitor.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

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

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

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

Modified Software Features in Cisco IOS Release 12.2(33)SCD2

CMTS Line Card Software Licensing

The UBR-MC20X20V cable interface line card additionally supports 10 downstream and 15 downstream licenses.

For more information, see the *Configuring the Cisco UBR-MC20X20V Cable Interface Line Card* document at:

http://www.cisco.com/en/US/docs/interfaces_modules/cable/broadband_processing_engines/ubr_mc20x20v/configuration/guide/mc20x20v_cfg.html

New Software Features in Cisco IOS Release 12.2(33)SCD1

There are no new software features in Cisco IOS Release 12.2(33)SCD1.

Modified Software Features in Cisco IOS Release 12.2(33)SCD1

There are no modified software features in Cisco IOS Release 12.2(33)SCD1.

New Software Features in Cisco IOS Release 12.2(33)SCD

New CLI for Displaying Cable Modems Detected as Clones

The **hotlist** keyword has been added to the **show interface cable privacy** command to display the cable modem detected as clones.

For more details, see the *Cisco IOS CMTS Cable Command Reference* and *DOCSIS 1.1 for the Cisco CMTS Routers* documents at:

http://www.cisco.com/en/US/docs/ios/cable/command/reference/cbl_book.html

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_docsis11.html

New CLI for Clearing the RADIUS Server Entries

Incorrect RADIUS server entries can cause CMTS memory leak over an extended period of time. The **clear packetcable rks** command allows you to clear the record keeping server (RKS) entries when no calls are associated with it.

For more details, see the *Cisco IOS CMTS Cable Command Reference* and *PacketCable and PacketCable Multimedia for the Cisco CMTS Routers* documents at:

http://www.cisco.com/en/US/docs/ios/cable/command/reference/cbl_book.html

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_pktcable_mm.html

RF Channel Stacking for Cisco uBR-MC88V Downstream RF Interface Compliance

A new command, `rf-channel stacking`, was introduced in Cisco IOS Release 12.2(33)SCD to suppress a carrier or mute an RF channel on the Cisco uBR-MC88V line card. By default, the stacking number is configured as 4. If you change the default stacking number configuration, traffic loss may occur on the active channels. That is, if you change the stacking number from 4 to 2, traffic is interrupted on the RF channels 0 and 1.

For more details, see the *Cisco IOS CMTS Cable Command Reference* document at:

http://www.cisco.com/en/US/docs/ios/cable/command/reference/cbl_14_q_to_sg.html

Modified Software Features in Cisco IOS Release 12.2(33)SCD

The following software features were modified to add support in Cisco IOS Release 12.2(33)SCD:

DOCSIS 3.0 Downstream Channel Bonding

For detailed information about this feature, see the *Cisco DOCSIS 3.0 Downstream Solution Design and Implementation Guide* document at:

http://www.cisco.com/en/US/docs/cable/cmts/wideband/solution/guide/release_2.0/ds_solu.html

Upstream Channel Bonding

For detailed information about this feature, see the *Upstream Channel Bonding* document at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_uscb.html

DOCSIS 3.0 Downstream Peak Traffic Rate TLV Support for ERBA

For more information about this feature, see the *DOCSIS 1.1 for the Cisco CMTS Routers* document at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_docsis11_ps2209_TSD_Products_Configuration_Guide_Chapter.html

Cisco IOS Software Activation

For detailed information about these commands, see the *Cisco IOS Software Activation Command Reference* document at:

<http://www.cisco.com/en/US/docs/ios-xml/ios/csa/command/csa-cr-book.html>

Dynamic Bandwidth Sharing

For more information on the DBS, see the *Dynamic Bandwidth Sharing on the Cisco CMTS Router* document at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_dyn_bw_sharing.html

Wideband Modem Resiliency

For more information about this feature, see the *Wideband Modem Resiliency* document at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_wm_resiliency.html

DOCSIS 3.0 Downstream Bonding for Bronze Certification

For more information about this feature, see the *DOCSIS 3.0 Downstream Utility for Bronze Certification* document at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_ds_bonding.html

S-CDMA and Logical Channel Support

For more details on this feature, refer to *SCDMA and Logical Channel Support on the Cisco CMTS Routers* at the following location:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_d30_scdma_lc.html

DOCSIS 3.0 Multicast Compliance

For more details on this feature, refer to *DOCSIS 3.0 Multicast Support on the CMTS Routers* at the following location:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_d30_mcast_support.html

Configurable DOCSIS Downstream Weight

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

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_docsis_wfq_sch.html

DOCSIS 3.0 Multicast Support

For detailed information about this feature, see the *DOCSIS 3.0 Multicast Support on the CMTS Routers* document at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_d30_mcast_support.html

DOCSIS 3.0 CRL and OCSP

For more details on this feature, refer to *DOCSIS 3.0 CRL and OCSP on the Cisco CMTS Routers* at the following location:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_crl_ocsp.html

DOCSIS WFQ Scheduler

For detailed information about this feature, see the *DOCSIS WFQ Scheduler on the Cisco CMTS Routers* document at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_docsis_wfq_sch.html

Service Flow Admission Control for the Cisco CMTS Routers

For detailed information about this feature, see the *Service Flow Admission Control for the Cisco CMTS Routers* document at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_svflw_ad_ctl.html

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. 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)SCD

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

- CISCO-CABLE-WIDEBAND-MIB
- CISCO-CABLE-QOS-MONITOR-MIB
- DOCS-IF-MIB

Limitations and Restrictions

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

Unsupported Hardware

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

http://www.cisco.com/en/US/products/hw/cable/ps2209/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 a US 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 uses the primary DS and L2VPN unicast traffic is forwarded over the primary bonding group. The service flow attribute feature is available in Cisco IOS Release 12.2SCB.

DTI Card Configuration

The Cisco uBR10012 universal broadband router TCC card does not work as expected when the startup configuration contains the configuration for a Cisco uBR10012 universal broadband router TCC+ card. To fix this issue, use the **no card slot/subslot 2cable-tccplus** command and then configure the DTI card.

MIBs Restrictions

- 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.

PCMCIA

While performing an OIR of the PCMCIA disk on PRE2, the System Event Archive (SEA) application and other applications such as IPDR write details to the PCMCIA disk on PRE2.

Before performing the OIR, the multiple system operator (MSO) must disable the write access to the PCMCIA disk on PRE2 using the **cable filesystem [enable|disable]** command. For more information, see the [CSCsz77977](#).

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

- Longer dropout times (about 6 seconds) can occur when you use the OIR method to trigger a cable line card switchover on the Cisco uBR10012 router. To repair or maintain a cable line card and get better switchover performance, use the **redundancy linecard-group switchover** command to trigger the line card switchover instead.
- Although the software does not prevent it, preconfiguring 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 the 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 (MD) hosts sharing the wideband 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 occurs on cable line cards, the available CIR bandwidth gets partitioned and is 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 percentage configuration and traffic distribution, the overall link utilization of dynamic bandwidth sharing (DBS) can be as low as 85 percent. For example, this can occur if the traffic rate on a wideband interface is smaller than its configured bandwidth percentage, but the traffic rate on a modular-cable interface is much larger than its bandwidth percentage. The packet drops occur only on the modular-cable interface which has a larger amount of traffic than its bandwidth-percentage. To work around this scenario, configure a higher bandwidth percentage to the modular-cable interface, which is larger than or equal to its expected or average traffic rate.

Important Notes



Note

This section describes important changes in various Cisco IOS Releases that differ from support found in earlier software releases supported by the Cisco CMTS routers. 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 6 identifies some of the key changes that you should consider when running Cisco IOS Release 12.2(33)SCD.

Table 6 Important Changes in Cisco IOS Release 12.2SC

Change Description	Release Introduced
Clearing Address Resolution Protocol (ARP) Entries Using the clear arp command can take about 15 seconds to remove all ARP table entries.	12.2(33)SCA
Reverse Path Forwarding RPF on the Cisco uBR10012 router requires configuration of the ip verify unicast source reachable-via rx allow-default command to properly interpret default routes.	12.2(33)SCA
Scheduling Engine The DOCSIS Weighted Fair Queuing (WFQ) Scheduler replaces the Versatile Traffic Management System (VTMS) scheduler operation on the Cisco uBR10012 router. For more information, see the feature documentation at: http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr_docsis_wfq_sch.html	12.2(33)SCB
DOCSIS CM-STATUS messages are enabled by default.	12.2(33)SCB

Table 6 Important Changes in Cisco IOS Release 12.2SC (continued)

Change Description	Release Introduced
<p>SPA Interface Processor/Shared Port Adapters</p> <ul style="list-style-type: none"> New syntax is supported for the Cisco 10000 Series SIP-600 and shared port adapters (SPAs). In many commands, the <i>slot/subslot</i> indexes have been replaced by <i>slot/bay</i>. FPD images that might be loaded on a Cisco Wideband SPA from 12.3(21)BC-based software images are incompatible with Cisco IOS Release 12.2(33)SCA. The FPD images needed to support Cisco IOS Release 12.2(33)SCB must be loaded on the Cisco Wideband SPA for it to successfully load in Cisco IOS Release 12.2(33)SCB. If you should attempt to bring up a Cisco Wideband SPA in Cisco IOS Release 12.2(33)SCB without successfully updating the compatible FPD image for that release, the SPA fails to reload. If this is done with the Cisco Wideband SPA installed in a Cisco Wideband SIP, the SIP begins to upgrade the SPA and stops communicating with the PRE on the Cisco uBR10012 router. For more information, see the “Upgrading Field-Programmable Devices” chapter of the <i>Cisco uBR10012 Universal Broadband Router SIP and SPA Software Configuration Guide</i> at: http://www.cisco.com/en/US/docs/interfaces_modules/shared_port_adapters/configuration/ubr10012/12.3_23_bc/10fpd.html 	12.2(33)SCB
<p>Spatial Reuse Protocol (SRP)</p> <p>The Spatial Reuse Protocol (SRP) for the Cisco uBR10012 OC-48 line card is not supported.</p>	12.2(33)SCB
<p>Modular QoS CLI Change Between Cisco IOS Release 12.3BC and Cisco IOS Release 12.2SC and the DOCSIS WFQ Implementation</p> <p>The priority command does not have any arguments. You must use the police command to specify a guaranteed bandwidth.</p>	12.2(33)SCC

Table 6 Important Changes in Cisco IOS Release 12.2SC (continued)

Change Description	Release Introduced
<p>Logical Channel Support</p> <p>To support logical channel feature, the ordering of the "channel-width" and "docsis-mode" parameters have changed in the cable upstream docsis-mode and cable upstream channel-width commands. Because "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>http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_d30_scdma_lc.html</p>	12.2(33)SCC
<p>Behavior Change in DOCSIS Set-top Gateway Tunnel</p> <p>When the 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 following command:</p> <p>cable multicast group-qos default scn <i>service class name</i> aggregate</p> <p>where <i>service class name</i> is any service class name.</p> <p>Note that:</p> <ul style="list-style-type: none"> • 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. • 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. • 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. • 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. <p>This behavior is observed only when you toggle (enable/disable) the default MQoS.</p>	12.2(33)SCC1

Documentation Updates

This section describes important topics that might not be available in the customer documentation.

Command-Line Interface Changes and Notes

The following command-line interface (CLI) changes in Cisco IOS Release 12.2(33)SCB may not be available in the customer documentation:

- **clear arp**—The **clear arp** command has been modified to issue a prompt to the router console requesting confirmation of execution of the command due to potentially serious impact to CMTS router performance. The following is an example of the console prompt:

```
Router# clear arp
```

You are about to delete all ARP cache entries!

Severe impact on CMTS performance and temporary outages may result.

Consider 'clear ip arp' instead. Continue? (yes/[no]): **no**
- **show cable modem primary-channel**—The word “local” is shown in the Downstream RFID output field to indicate that the Cisco uBR10-MC5X20S/U/H local downstream is being used as a primary channel.
- **show controllers modular-cable**—This command will not provide crash dump information for the Cisco 10000 series SIP-600. Use the **show diag 1/0 crashdump** command to obtain this information for the Cisco 10000 Series SIP-600.
- **show hccp detail**—The output for this command has been modified to add “CMTS interface pre-critical config.”
- **show hw-module bay counters rf-channel**—The output for this command has been modified to include RF channel frame rate “MPEG bps” and “MPEG Mbps” fields.
- **show policy-map interface cable output class**—The “pkts output” field is always 0 even when packets are in the queue.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.



Caveat List for Cisco IOS Release 12.2(33)SCD

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.



Note

From Cisco IOS Release 12.2(33)SCD2 and later, the Caveats section only includes the bug ID and a short description of the bug. For details on the symptoms, conditions, and workaround for a particular bug you must use the Bug ToolKit. For more details, see [“Using the Bug Toolkit” procedure on page 2-1](#).

The bug IDs are sorted alphanumerically.



Note

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)SCD8

Bug ID	Description
CSCsm10121	IOS DHCP Client incorrectly populates message-type option in DHCP lease query. The message-type option is set to 0x0d (DHCPLEASEACTIVE) instead of being set to 0x0a (DHCPLEASEQUERY).
CSCsz77977	Online Insertion and Removal (OIR) of a PCMCIA flash disk can cause a watchdog reset of the PRE.
CSCtb52191	Uptime counters do not to work on certain combination cards.
CSCtc62096	Dynamic multicast service flow and reserved bandwidth exist even after the removal of the multicast QoS (MQoS) configuration from the second bonding group.
CSCtd97055	Tracebacks occur while toggling IPv6 on and off on the customer premises equipment (CPE).
CSCte42876	The CMTS may stop forwarding traffic when it receives a broadcast packet or a IP packet with multicast VPN (MVPN) multicast distribution tree (MDT) options set.
CSCte57149	The route processor crashes with an address error when the router is configured for Border Gateway Protocol (BGP).
CSCte67373	The router crashes after running the <code>ios_bgp_mtr1 TC 8</code> .
CSCte68994	After the line card switchover, the newly active line card takes a long time to come up.
CSCtf27303	The router sends Multiprotocol Unreachable Network Layer Reachability Information (MP_UNREACH_NLRI) in non-negotiated AF IPv6 unicast.
CSCtf40289	The BGP session configured for Nonstop Routing (NSR) fails to synchronize with the standby route processor.
CSCtf59785	The output of the <code>show interface sid counter verbose</code> command does not display the correct status (reset) of the codeword counter while the output of the <code>show cable modem verbose</code> command displays that the codeword counter is reset.
CSCtf64231	Inbound route-map change should not be immediately effective until a user exits the route-map configuration mode.
CSCtf85427	Memory leak occurs when more than 21 profiles are configured in a policy map.
CSCtf88832	Traceback occurs when a cable modem is reset.
CSCtg16155	A filesystem device does not display after the TEST_MULTIPLE_FUNCS.
CSCtg50212	CPU spike are observed on the Route Processor during FPD image upgrade.
CSCtg60088	Withdrawals are not generated when a VPN Routing and Forwarding (VRF) configuration is added or deleted.
CSCtg79258	Withdrawals are not generated when configuring the <code>no neighbor default-originate</code> command.
CSCtg90865	A non-primary Multicast (MC) interface is selected for multicast forwarding.
CSCtg93115	Tracebacks are seen when the <code>show pxf cable feature-table bundle x</code> command is executed.
CSCth00131	CMTS crashes when the <code>clear cable modem all delete</code> command is executed.

Bug ID	Description
CSCth30415	PROC_WATCHDOG does not work with the standby PRE on Cisco uBR10012 router.
CSCth59215	HCCP-3-CFG_FAIL error messages are observed on the active and standby PRE console. The static multicast packets have different service flows after a line card switchover.
CSCth66444	Cisco uBR10000 series router may experience packet drops during a line card switchover when the cable source-verify command is enabled.
CSCth72064	The wideband cable modems connected to the downstream bonding channel group with non-primary channel impairment are unreachable. The packet count does not increase in the PRE module.
CSCth79635	The following message is displayed: %SYS-3-INVMEMINT: Invalid memory action (free) at interrupt level.
CSCth84097	The PRE console hangs.
CSCth96329	The cable modems in Subscriber Traffic Management (STM) is not getting out of penalty after the PRE or line card switchover.
CSCth97868	Dynamic upstream service flows fail on the Cisco UBR-MC20X20V and Cisco uBR-MC88V line cards when Baseline Privacy Interface (BPI) and Service ID (SID) clusters are configured.
CSCti09825	The show cable multicast dsid command output contains entries with Duplicate Stat Indexes.
CSCti12590	Querying "getnext" with ipCidrRouteDest returns an OID that is not lexicographically larger than the queried OID.
CSCti28695	The ipv6ScopeZoneIndexTable shows null interface.
CSCti47001	The line card stops responding while monitoring the cable modem statistics.
CSCti48676	Minor multicast packet loss on a line card that is part of an Hot Connection to Connection Protocol (HCCP) group.
CSCti53112	When the Cisco CMTS acts as a TFTP proxy server for the CMs to download the configuration file, the CMTS should use IPv6 source address selection to determine the IPv6 source address for that transfer
CSCti65306	Online insertion and removal (OIR) of a shared port adapter (SPA) does not trigger call home events.
CSCti73720	The multicast service flow counters are incorrect after a PRE switchover when active guardian is different from the configured guardian.
CSCti77209	CPUHOG messages may be seen when SNMP polling is performed with load balancing enabled.
CSCti80386	During an ISSU-MS operation, many cable modems went offline after a stateful switchover (SSO) occurred.
CSCti82203	Some cable modems take a longer time to register with the CMTS running Cisco IOS Release 12.2(33)SCB8 with PRE2 and with more than twenty thousand CMs connected to it.
CSCti84775	The DTCC card in slot 2/1 does not reload after cable clock dti or no cable clock dti commands are executed.

Bug ID	Description
CSCti96127	The DHCP-Relay SOLICIT message from the CMTS to the DHCP server is sourced from the outgoing Gigabit Ethernet IPv6 IP address rather than the bundle IPv6 IP address.
CSCti96353	It is observed that EPC-3000 modems that use SPA DS as primary may be assigned with AES keys instead of 56DES.
CSCti97605	The input bytes counter displayed in the show interface cable command decrements, while the packet input increments; the 30 second input is consistent.
CSCtj01079	The DS-SG is lost when the wideband CM goes offline and comes back NB-online after a PRE switchover.
CSCtj04469	The Cisco uBR-MC20X20V line card crashed with following message in the crashdump: Unexpected exception to CPU :vector 300, PC = 0x50389C, LR = 0x50386C
CSCtj07700	Cable modems go offline when changing DOCSIS-mode from ATDMA to SCDMA or from SCDMA to ATDMA.
CSCtj11727	When a line card switchover is triggered, alignment tracebacks may occur on the new working line card.
CSCtj13148	Some UB cable modems (DPC3010) are assigned 56DES keys instead of AES keys on the line card interfaces even though they are not AES enabled.
CSCtj15176	The standby PRE4 crashes with an "Illegal access to a low address" message.
CSCtj17350	Traceback occurs when show depi tunnel command is configured without DEPI Control Plane.
CSCtj19301	The voice dropout duration is greater than expected for "hw-mod reset" and "cable power off".
CSCtj20099	Removal of the IPDR configuration causes a reboot of the standby PRE.
CSCtj25815	Multicast service flow counters fluctuate after a remote Guardian N+1 switchover.
CSCtj28614	The input queue drops are observed on the Cisco UBR-MC20X20V and Cisco uBR-MC3GX60V line cards.
CSCtj37469	Upstream utilization percentage in the show interface cable mac-sched command may be above 100.
CSCtj43383	DOCSIS load balance CM list is lost upon line card switchover and revertback.
CSCtj43578	Legacy load balancing group (LBG) should not coexist with DOCSIS LBG on the same MAC domain.
CSCtj47401	A Cisco uBR-MC5X20 line card that is running SNMP commands with traffic crashes.
CSCtj48567	Cable modems are getting wrongly registered with the integrated-cable interface on the Cisco uBR10-MC5X20H line card after a LC revertback from the Cisco uBR-MC20X20V line card.
CSCtj48852	The HCCP protect member is not found for the Cisco uBR10-MC5X20 line card.
CSCtj50102	The entAliasMappingIdentifier object does not return the ifIndex of the interfaces associated with the Cisco Wideband SPA.
CSCtj52597	Cable modems cannot register in the w-online state if the RF channel is configured with User Datagram Protocol (UDP) port.

Bug ID	Description
CSCtj60169	An intermediate session routing (ISR) watchdog timeout error is observed on the PRE forcing it to crash consequently.
CSCtj66429	Adding line card table entries to ccsFlapEntry and ccsCmFlapEntry is taking a longer time than expected.
CSCtj68730	The PCMM service flow is cleared on the Cisco CMTS; however the PS responds as "gate-set-ack" instead of "gate-set-error".
CSCtj69254	CPU HOG messages and traceback occur during a line card switchover.
CSCtj71869	The show memory command output displays the MAC domain name incorrectly.
CSCtj75483	Traceback is observed on the Cisco uBR10012 router after issuing the hw-module subslot shut command on the Cisco Wideband SPA.
CSCtj76460	Errors are reported on formatting of OBFL flash memory in the Cisco uBR-MC20x20V line card.
CSCtj77982	The dsGIfDownstreamEntry object identifier is not created for modular cable downstream interfaces.
CSCtj78901	Wideband cable modems that are downstream frequency override (DFO) by the Cisco load-balance fail to come online with the following error: UBR10000-4-REG_REQ_DS_SELECTION_FAIL: DS Selection failed for Cable Modem.
CSCtj79390	The byte counter values for the docsIfCmtsDownChnlCtrTotalBytes MIB object and IPDR DS-UTIL schema DsUtilTotalBytes, for the Cisco UBR-MC20x20V and Cisco uBR-MC88V integrated cable interface are different from the Cisco UBR10-MC5X20 line cards or SPAs.
CSCtj81955	The docsIfDownChannelFrequency MIB object cannot be configured to minimum value on SPA using SNMP.
CSCtj82288	If the configuration file of a cable modem with an IPv4 management address is changed to APM mode, the Cisco CMTS recognizes both IPv4 and IPv6 addresses. However, the cable modem releases the IPv4 address and becomes unpingable on that address.
CSCtj83717	The upstream bandwidth cannot be configured on the Cisco UBR-MC20X20 line card when cable monitor is configured.
CSCtj83877	The range of docsIfDownChannelPower MIB object set through SNMP is inconsistent with the range when configured using the rf-channel and rf power commands, for modular-cable and integrated-cable interfaces.
CSCtj83888	You can configure an illegal value for the docsIfDownChannelInterleave attribute when Annex is equal to A.
CSCtj84222	Tracebacks are observed while unconfiguring RCC-template from the Cisco UBR-MC20X20V cable interface line card.
CSCtj87104	The c10k_udi_info_table contains the PID for Cisco UBR-MC20X20V and Cisco uBR-MC3GX60V line cards as UBR10-MC20X20H and UBR10-MC3GX60V respectively. It must be changed to UBR-MC20X20V and UBR-MC3GX60V.
CSCtj87333	The non-default cable load-balance d30-ggrp-default xxxxx configuration is not reapplied to DOCSIS 3.0 General Load Balancing Group (GLBG), if the fiber node is removed and then reapplied.
CSCtj87847	Phy static-mcast should be configured on fwd_intf for static-mcast TLV.

Bug ID	Description
CSCtj88459	The DOCSIS load balancing algorithm uses a default interval of 10 seconds, which may cause modems to be moved unnecessarily.
CSCtj90049	Traceback occurs on the Cisco CMTS router when the docsIfCmtsCmStatusEntry attribute is queried for cable modems registered in IPv6 provisioning mode.
CSCtj90313	The show cable modem command output displays IPv4 addresses for single stack IPv6 cable modems after you change cable modems from IPv4 or dual stack provisioning mode.
CSCtj92331	The attributes docsIf3MdChCfgChId, docsIf3MdChCfgIsPriCapableDs and docsIf3MdChCfgSfProvAttrMask cannot be set through the MIB.
CSCtj94466	The acceptance range of some SNMP nodes of which the SYNTAX type is "BITS" is incorrect.
CSCtj95258	If TLV 56 is specified in the CM config file, the test cable dbc command is unable to add new channels after CM becomes online in MTC-Mode.
CSCtj96124	A few CPE addresses are not displayed in the cable modem database.
CSCtj96343	Some downstream channels appear to be missing in the fiber node after the hardware is reset in a Cisco UBR-MC20X20V working line card.
CSCtj96616	The attribute ccwbRFChannelStorageType cannot be set to value volatile(2).
CSCtk00147	An source specific multicast (SSM) entry is created instead of any source multicast (ASM) entry if the ip pim ssm default command is not configured and SSM groups are joined.
CSCtk02099	Drop in packets was observed when PXF was enabled on the Cisco uBR100012 router.
CSCtk05778	Cable modems that were marked offline after a line card switchover revert causing voice call drops.
CSCtk07058	Secondary DEPI sessions are not configurable with third-party Edge QAM when the CMTS and EQAM are configured for DEPI Path redundancy (DPR).
CSCtk12189	Line card crash is observed during LCSO.
CSCtk16053	DTCC card-specific tracebacks and error messages are seen while reloading the PRE-2 on a Cisco uBR10012 router.
CSCtk16375	The CMTS sends session type AVP in ICRQ message when DPR is configured on the CMTS and the EQAM does not support DEPI Path redundancy (DPR) but sends DPR-capable AVP in SCCRCP with capability bit 0.

Closed Caveats—Cisco IOS Release 12.2(33)SCD8

Bug ID	Description
CSCcec04534	The privilege exec level 1 show interfaces command causes CPU utilization at the show run and write memory commands.
CSCtc49858	Users with lower privilege levels than enable access may not be able to execute some show cable command options.

Bug ID	Description
CSCtg25471	Memory leaks are observed on Cisco UBR-MC20X20V protect line card although, line card switchover was not performed.
CSCtg99339	Cisco CMTS crashes due to memory corruption when BPI is enabled.
CSCth16715	Standby performance routing engine (PRE) may crash when UBR10K RP-CLC ISSU PROXY RF client fails to complete the RF_PROG_ISSU_NEGOTIATION progression.
CSCth18889	Multicast traffic is not received by the cable modem.
CSCth86397	Rate-limiting on the upstream channel is activated before the peak rate is reached leading to bandwidth requests being dropped prematurely on the Cisco UBR10-MC20X20 line card.
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.
CSCti07013	Upstream speed goes down and the Cyclic Redundancy Check (CRC) error counts increase with a Cisco uBR10-MC5X20U line card.
CSCti09257	The DOCSIS 3.0 PC call stops working after the media terminal adapter (MTA) goes into a partial mode of one downstream.
CSCti12998	The cable modem might lose IP connectivity. The cable modem stays connected to the Cisco CMTS, but no data frames go through the upstream.
CSCti15767	UBR10K-6-CM_INCONSISTENCY message is observed on new active PRE after a PRE switchover and after the standby PRE boots, some UBR10000-3-DOCSIS_SYNC_SF messages are printed.
CSCti30196	CMTS may crash when a SNMP query or any other event makes the CMTS to go through the list of ALL service-flows.
CSCti40837	Wideband modems do not go wideband online when a MAC domain has multiple MD-DS-SGs.
CSCti48483	<p>The Cisco IOS Software network address translation (NAT) feature contains multiple denial of service (DoS) vulnerabilities in the translation of the following protocols:</p> <ul style="list-style-type: none"> • NetMeeting Directory (Lightweight Directory Access Protocol, LDAP) • Session Initiation Protocol (Multiple vulnerabilities) • H.323 protocol <p>All the vulnerabilities described in this document are caused by packets in transit on the affected devices when those packets require application layer translation. Cisco has released free software updates that address these vulnerabilities. This advisory is posted at http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20110928-nat.</p>
CSCti85651	The docsIfCmtsCmStatusEntry object identifier takes longer time to access the associated MIBs.

Bug ID	Description
CSCti98219	<p>The Cisco IOS Software network address translation (NAT) feature contains multiple denial of service (DoS) vulnerabilities in the translation of the following protocols:</p> <ul style="list-style-type: none"> • NetMeeting Directory (Lightweight Directory Access Protocol, LDAP) • Session Initiation Protocol (Multiple vulnerabilities) • H.323 protocol <p>All the vulnerabilities described in this document are caused by packets in transit on the affected devices when those packets require application layer translation.</p> <p>Cisco has released free software updates that address these vulnerabilities.</p> <p>This advisory is posted at http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20110928-nat.</p>
CSCtj00656	The PRE crashes when the Internet Protocol Data Records (IPDR) session is reconfigured and when the IPDR exporter is started or stopped.
CSCtj14216	Line card crashes during bootup and machine check exception error is displayed.
CSCtj30579	On a Cisco UBR-MC20X20 LC, cable modems (with BPI enabled) having their primary service flow on a local downstream and a secondary unicast service flow on a SPA, may lose L3 IP connectivity on the secondary service flow.
CSCtj58426	External SNMP scripts take longer to complete when compared to Cisco UBR10-MC5X20H line cards.
CSCtj60160	The Downstream Channel Descriptor (DCD) counters for DSG do not increment after a line card failover.
CSCtj65972	MRI unlink error is seen on Cisco uBR10012 router.
CSCtj66911	When packet classifiers are configured with IPv6, the docsIetfQosPktClassEntry MIB does not show these configured values.
CSCtj70614	On Board Failure Logging (OBFL) Uptime application does not work on some Cisco uBR-MC3GX60V boards.
CSCtj76035	If a cable modem undergoes vacillating attenuation, it gets into a power average enable mode (where the "*" displays in the "show cable modem" next to the power level) and then gets stuck in that mode. Even though the cable modem is at maximum power, it continues to stay in power average enable mode and never falls offline. In most cases, this results in the cable modem losing layer 3 traffic entirely without giving any notification that the modem dropped offline.
CSCtj88593	The Cisco CMTS router continuously sends LEASEQUERIES for the IP addresses of the customer premises equipment (CPE), when the CPE is behind an offline cable modem.
CSCtj90337	Traceback observed on the Cisco UBR-MC20X20V and Cisco uBR-MC3GX60V line cards due to the Command Scheduler (KRON) configuration issue.
CSCtj93145	The downstream packet is dropped instead of being forwarded by primary service flow when the downstream classifier is configured for multiprotocol label switching (MPLS) L2VPN Business Services over DOCSIS (BSoD) cable modem and the downstream packet has exp value 0 but there is no matching classifier.
CSCtj99642	Error messages "ALIGN-3-SPURIOUS" or "ALIGN-3-TRACE" are observed when the debug cr10k-rp pkt conditional command is enabled on PRE.

Bug ID	Description
CSCtk01750	Inconsistent values are displayed for the cable cm-status enable configuration for the UBR-MC20X20V and uBR-MC3GX60V line cards.
CSCtk09023	Mismatch in secondary service flow between the route processor and the cable line card causes loss of traffic.
CSCtk11662	Spurious Push Button interrupts are detected by the DTCC card.
CSCtk14742	When debugging CA certificates or CM certificates, incorrect certificates are printed to the screen.
CSCtk15044	Layer 3 multicast module receive MLD report even if multicast authorization is denied at cable level.
CSCtk15892	High CPU utilization on the cable line card results in connectivity loss with the cable modem due to loss of IPC messages when writing encryption keys to the SPA card during high CPU utilization.
CSCtk48167	Cable modem with MDF 2 cannot receive encrypted multicast on Cisco UBR-MC20X20V line card wideband interface.
CSCtk53548	When severe attenuation is applied, CM remains online however L3 is not pingable.
CSCtk54576	PRE crashes when QoS enforce-rule is unconfigured.
CSCtk59482	Active PRE crashes when the redundancy force-switchover main-cpu command is executed on standby PRE.
CSCtk60992	Inconsistent per upstream and per CM CNR are observed on Cisco uBR-MC3GX60V line card.
CSCtk61463	Wideband cable modems go offline after line card switchover.
CSCtk64406	Downstream override is performed infinitely for narrowband cable modems.
CSCtk75107	Excessive number of "Config update master:Bundle...." console messages, such as "Config update master:Bundle1, slave:Cable6/0/2" are being displayed.
CSCtk84262	PRE crash is observed after several line card and PRE switchovers.
CSCtk98813	Wideband modems connected to a Cisco UBR-MC20X20V line card are not ping-able after protect line card and working line card are reset.
CSCtl03919	Wideband and narrowband association disappears causing wideband cable modems to go offline.
CSCtl03946	Delayed downstream traffic is observed.
CSCtl04405	The CMTS assigns cable modems to Restricted Load Balance Groups (RLBGs) to which the cable modem is not physically connected to.
CSCtl10779	Delay in exporting netflow traffic.
CSCtl12648	A wideband cable modem is detected as nonwideband-capable.
CSCtl18624	Route Processor (RP) crashes on multicast QoS routine.
CSCtl19597	Changing IGMP query Interval to higher interval causes the mroute to prematurely timeout.
CSCtl21246	The CMTS may crash when no ipdr collector is configured, collector is connected with IPDR exporter and CONNECT messages are sent, and the TCP connection is terminated by the collector.
CSCtl46150	The Cisco uBR10K PRE4 crashes when the upstream Cable x/y connector command is executed.

Bug ID	Description
CSCtl54753	Spurious memory loss may be observed after issu abortversion command is issued.
CSCtl60318	The line card that is not in HCCP group, does not revert back after ISSU abortversion .
CSCtl67187	The output of the show inventory command incorrectly identifies the DC power entry module as AC power entry module.
CSCtl70740	The US SF database of line card and route processor may be out of sync.
CSCtl79105	Traceback observed at <code>issu_get_msg_mtu</code> after issu linecard loadversion command was executed.
CSCtl81115	Incorrect information in logged in SAMIS log file.
CSCtl89896	Error Messages %UBR10000-4-SERVICE_FLOW_ZERO_BLAZE_INDEX_ERROR and %UBR10000-2-CMTS_INDEX_TABLE_FULL are observed on the CMTS.
CSCtl95449	When the whole chassis is reloaded, the downstream RF power is reset to 52 dBmV irrespective of what is configured under the controller. Downstream PHY error messages are also seen in the syslog.
CSCtn00931	IPv6 set-top box may not receive IPv6 control packets.
CSCtn03520	Cable Modems may get deleted by CMTS incorrectly after multiple number of key renewals. This is typically after 72 hours of being online for the modems affected.
CSCtn12920	The active line card resets during a static synchronization, when the number of upstream service flows on a single cable modem is greater than 35.
CSCtn38097	Many SNMP MIBs such as <code>cdxCmCpeTable</code> and CMTS commands such as show cable device access-group may not display the IPv6 cable modems or hosts in their output.
CSCtn41225	The IPC port disappears and error messages are displayed on the Cisco CMTS.
CSCtn42882	There is a drop in the link when the Cisco SFP and the RF gateway uses other vendor's SFPs.
CSCtn48919	The "GENERAL-2-CRITEVENT: Request CIR exceeds available link rate" error message is displayed on the Cisco CMTS after service flow admission requests are created.
CSCtn54966	The default IOFPGA region in the PRE processor module has no information.
CSCtn86863	DSG TG tunnels are not added to the line card cable interface. The following error message is displayed. Wont be able to enable the rule. There is a non-DSG static join.
CSCtn88378	The primary PRE crashes while creating the MQoS service flow (SF).
CSCtn90802	Cable modems go offline and recover only after the line card is reloaded. This issue was observed on the UBR10-MC5X20H card.
CSCtn99558	The ethernet controller TSEC register changes are seen on the DTCC card. The controller transmits traffic longer than required.
CSCto12809	The standby line card crashes when static synchronization occurs with 480 multicast sessions.
CSCto18994	The PRE processor engine hangs after an excessive collision.

Bug ID	Description
CSCto24410	Downstream ambiguity resolution frequency list is generated incorrectly when overlapping frequencies exist in the MAC domain downstream service group.
CSCto25075	The default MQoS queue is not used in multicast service flow configuration after removing QoS from DOCSIS Set-Top Gateway (DSG) tunnel.
CSCto26404	Traffic does not flow to the cable modem when the primary channel of cable modem is not in the bonding group and the non-primary RF channels are down.
CSCto27292	The Cisco CMTS crashes after the wideband interface is configured with the 24 RF channels.
CSCto60342	Removal of load balancing DCC group causes voice calls to drop at T8 timer time out.
CSCto67151	Cisco CMTS crash is observed during SPA online insertion and removal (OIR) when multicast fast channel change is being performed.
CSCto74020	Remora QDR error checking and correction multi-bit error causes system to crash.
CSCto90257	PRE crash is observed during SPA OIR when multicast fast channel change is performed.
CSCtq02850	On a UBR10012 router with a PRE4, the show environment all command wrongly identifies a UBR10-PWR-AC-PLUS power source as a DC PEM when the Product ID switch on the PEM is illuminated.
CSCtq09449	Cisco CMTS boot fails causing PRE4 crash when On Board Failure Logging (OBFL) feature is enabled.
CSCtq11603	The cable modem state is not synced with standby PRE.
CSCtq22890	Cisco CMTS may crash after jacket card crashes abnormally.
CSCtq27700	PacketCable (PC) Dynamic QoS(DQoS) call does not work. The show packetcable gate summary command output displays the stuck PC DQoS gates in ALLOC state, for the affected PC subscriber.
CSCtq59001	In rare cases, SIP-600 Ethernet Controller (eTSEC) violates IEEE802.3 specification for busy line by transmitting longer than allowed by the specification. As a result, Ethernet packets loss maybe observed across the network.
CSCtq64515	A memory leak is observed on the cable line card when Dynamic Bonding Change (DBC) operation is invoked for a WB modem.

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Bug ID	Description
CSCsm10121	IOS DHCP Client incorrectly populates message-type option in DHCP lease query. The message-type option is set to 0x0d (DHCPLEASEACTIVE) instead of being set to 0x0a (DHCPLEASEQUERY).
CSCsz77977	Online Insertion and Removal (OIR) of a PCMCIA flash disk can cause a watchdog reset of the PRE.
CSCsz98503	A time delay of a few minutes occurs when multiple cable modems go off on a random upstream.

Bug ID	Description
CSCtb52191	Uptime counters do not to work on certain combination cards.
CSCtc49858	Users with lower privilege levels than enable access may not be able to execute some show cable command options.
CSCtc62096	Dynamic multicast service flow and reserved bandwidth exist even after the removal of the multicast QoS (MQoS) configuration from the second bonding group.
CSCtd97055	Tracebacks occur while toggling IPv6 on and off on the customer premises equipment (CPE).
CSCte42876	The CMTS may stop forwarding traffic when it receives a broadcast packet or a IP packet with multicast VPN (MVPN) multicast distribution tree (MDT) options set.
CSCte57149	The route processor crashes with an address error when the router is configured for Border Gateway Protocol (BGP).
CSCte62448	DOT 1Q Layer 2 VPN traffic counters do not increment when Layer 2 VPN traffic flows through the Cisco CMTS.
CSCte67373	The router crashes after running the <code>ios_bgp_mtr1 TC 8</code> .
CSCte68994	After the line card switchover, the newly active line card takes a long time to come up.
CSCtf27303	The router sends Multiprotocol Unreachable Network Layer Reachability Information (MP_UNREACH_NLRI) in non-negotiated AF IPv6 unicast.
CSCtf40289	The BGP session configured for Nonstop Routing (NSR) fails to synchronize with the standby route processor.
CSCtf59785	The output of the show interface sid counter verbose command does not display the correct status (reset) of the codeword counter while the output of the show cable modem verbose command displays that the codeword counter is reset.
CSCtf64231	Inbound route-map change should not be immediately effective until a user exits the route-map configuration mode.
CSCtf85427	Memory leak occurs when more than 21 profiles are configured in a policy map.
CSCtf88832	Traceback occurs when a cable modem is reset.
CSCtg16155	A filesystem device does not display after the TEST_MULTIPLE_FUNCS.
CSCtg25471	Memory leaks are observed on Cisco UBR-MC20X20V protect line card although, line card switchover was not performed.
CSCtg50212	CPU spike are observed on the Route Processor during FPD image upgrade.
CSCtg60088	Withdrawals are not generated when a VPN Routing and Forwarding (VRF) configuration is added or deleted.
CSCtg79258	Withdrawals are not generated when configuring the no neighbor default-originate command.
CSCtg90865	A non-primary Multicast (MC) interface is selected for multicast forwarding.
CSCtg93115	Tracebacks are seen when the show pxf cable feature-table bundle x command is executed.
CSCtg94564	CMTS crash may be observed due to memory corruption.
CSCth00131	CMTS crashes when the clear cable modem all delete command is executed.

Bug ID	Description
CSCth02741	High CPU utilization is observed on Cisco CMTS while running simulation test patterns.
CSCth30415	PROC_WATCHDOG does not work with the standby PRE on Cisco uBR10012 router.
CSCth32726	When a cable modem (CM) is repeatedly forced reset, the CM certificate is not always revoked although the CM certificate is revoked on the OCSP responder.
CSCth59215	HCCP-3-CFG_FAIL error messages are observed on the active and standby PRE console. The static multicast packets have different service flows after a line card switchover.
CSCth66444	Cisco uBR10000 series router may experience packet drops during a line card switchover when the cable source-verify command is enabled.
CSCth72064	The wideband cable modems connected to the downstream bonding channel group with non-primary channel impairment are unreachable. The packet count does not increase in the PRE module.
CSCth79635	The following message is displayed: %SYS-3-INVMEMINT: Invalid memory action (free) at interrupt level.
CSCth84097	The PRE console hangs.
CSCth86397	Rate-limiting on the upstream channel is activated before the peak rate is reached leading to bandwidth requests being dropped prematurely on the Cisco UBR10-MC20X20 line card.
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.
CSCth92926	Traceback is observed after changing the modular-host configuration to a different slot.
CSCth96329	The cable modems in Subscriber Traffic Management (STM) is not getting out of penalty after the PRE or line card switchover.
CSCth97868	Dynamic upstream service flows fail on the Cisco UBR-MC20X20V and Cisco uBR-MC88V line cards when Baseline Privacy Interface (BPI) and Service ID (SID) clusters are configured.
CSCti07013	Upstream speed goes down and the Cyclic Redundancy Check (CRC) error counts increase with a Cisco uBR10-MC5X20U line card.
CSCti09257	The DOCSIS 3.0 PC call stops working after the media terminal adapter (MTA) goes into a partial mode of one downstream.
CSCti09825	The show cable multicast dsid command output contains entries with Duplicate Stat Indexes.
CSCti12590	Querying "getnext" with ipCidrRouteDest returns an OID that is not lexicographically larger than the queried OID.
CSCti15168	Packet flow increases after PRE switch or bootup, though the multicast service flow throughput shows a value of zero.
CSCti28695	The ipv6ScopeZoneIndexTable shows null interface.
CSCti32814	Standby CMTS crashes and tracebacks are observed.
CSCti47001	The line card stops responding while monitoring the cable modem statistics.

Bug ID	Description
CSCti48676	Minor multicast packet loss on a line card that is part of an Hot Connection to Connection Protocol (HCCP) group.
CSCti48887	The key-index associated with the wideband interfaces for multicast-sessions changes after line card switchover.
CSCti53112	When the Cisco CMTS acts as a TFTP proxy server for the CMs to download the configuration file, the CMTS should use IPv6 source address selection to determine the IPv6 source address for that transfer
CSCti65306	Online insertion and removal (OIR) of a shared port adapter (SPA) does not trigger call home events.
CSCti73720	The multicast service flow counters are incorrect after a PRE switchover when active guardian is different from the configured guardian.
CSCti77209	CPUHOG messages may be seen when SNMP polling is performed with load balancing enabled.
CSCti80386	During an ISSU-MS operation, many cable modems went offline after a stateful switchover (SSO) occurred.
CSCti82203	Cable throttle-ranging affects the cable modem registration speed.
CSCti84775	The DTCC card in slot 2/1 does not reload after cable clock dti or no cable clock dti commands are executed.
CSCti85651	The docsIfCmtsCmStatusEntry object identifier takes longer time to access the associated MIBs.
CSCti96127	The DHCP-Relay SOLICIT message from the CMTS to the DHCP server is sourced from the outgoing Gigabit Ethernet IPv6 IP address rather than the bundle IPv6 IP address.
CSCti96353	EPC3000 cable modems using SPA downstream as primary channel may be assigned with AES keys instead of 56DES.
CSCti97605	The input bytes counter displayed in the show interface cable command decrements, while the packet input increments; the 30 second input is consistent.
CSCtj00656	The PRE crashes when the Internet Protocol Data Records (IPDR) session is re-configured and when the IPDR exporter is started or stopped.
CSCtj01079	The DS-SG is lost when the wideband CM goes offline and comes back NB-online after a PRE switchover.
CSCtj04469	The Cisco uBR-MC20x20V line card crashed with following message in the crashdump: Unexpected exception to CPU :vector 300, PC = 0x50389C, LR = 0x50386C
CSCtj07700	Cable modems go offline when changing DOCSIS-mode from ATDMA to SCDMA or from SCDMA to ATDMA.
CSCtj11727	When a line card switchover is triggered, alignment tracebacks may occur on the new working line card.
CSCtj13148	Some UB cable modems (DPC3010) are assigned 56DES keys instead of AES keys on the line card interfaces even though they are not AES enabled.
CSCtj15176	The standby PRE4 crashes with an "Illegal access to a low address" message.
CSCtj17350	Traceback occurs when show depi tunnel command is configured without DEPI Control Plane.

Bug ID	Description
CSCtj19301	The voice dropout duration is greater than expected for "hw-mod reset" and "cable power off".
CSCtj20099	Removal of the IPDR configuration causes a reboot of the standby PRE.
CSCtj25815	Multicast service flow counters fluctuate after a remote Guaridan N+1 switchover.
CSCtj28614	The input queue drops are observed on the Cisco UBR-MC20X20V and Cisco uBR-MC3GX60V line cards.
CSCtj30579	On a Cisco UBR-MC20X20 LC, cable modems (with BPI enabled) having their primary service flow on a local downstream and a secondary unicast service flow on a SPA, may lose L3 IP connectivity on the secondary service flow.
CSCtj37469	Upstream utilization percentage in the show interface cable mac-sched command may be above 100.
CSCtj43383	DOCSIS load balance CM list is lost upon line card switchover and revertback.
CSCtj43578	Legacy load balancing group (LBG) should not coexist with DOCSIS LBG on the same MAC domain.
CSCtj47401	A Cisco uBR-MC5X20 line card that is running SNMP commands with traffic crashes.
CSCtj48567	Cable modems are getting wrongly registered with the integrated-cable interface on the Cisco uBR10-MC5X20H line card after a LC revertback from the Cisco uBR-MC20X20V line card.
CSCtj48852	The HCCP protect member is not found for the Cisco uBR10-MC5x20 line card.
CSCtj50102	The entAliasMappingIdentifier object does not return the ifIndex of the interfaces associated with the Cisco Wideband SPA.
CSCtj51639	Unable to telnet or attach from within Embedded Event Manager (EEM) script.
CSCtj52597	Cable modems cannot register in the w-online state if the RF channel is configured with User Datagram Protocol (UDP) port.
CSCtj60160	The Downstream Channel Descriptor (DCD) counters for DSG do not increment after a line card failover.
CSCtj60169	An intermediate session routing (ISR) watchdog timeout error is observed on the PRE forcing it to crash consequently.
CSCtj65972	MRI unlink error is seen on Cisco uBR10012 router.
CSCtj66429	Adding line card table entries to ccsFlapEntry and ccsCmFlapEntry is taking a longer time than expected.
CSCtj66911	When packet classifiers are configured with IPv6, the docsIetfQosPktClassEntry MIB does not show these configured values.
CSCtj68730	The PCMM service flow is cleared on the Cisco CMTS; however the PS responds as "gate-set-ack" instead of "gate-set-error".
CSCtj69254	CPU HOG and traceback occur during a line card switchover.
CSCtj71869	The show memory command output displays the MAC domain name incorrectly.
CSCtj75483	Traceback is observed on the Cisco uBR10012 router after issuing the hw-module subslot shut command on the Cisco Wideband SPA.

Bug ID	Description
CSCtj76035	If a cable modem undergoes vacillating attenuation, it gets into a power average enable mode (where the "*" displays in the "show cable modem" next to the power level) and then gets stuck in that mode. Even though the cable modem is at maximum power, it continues to stay in power average enable mode and never falls offline. In most cases, this results in the cable modem losing layer 3 traffic entirely without giving any notification that the modem dropped offline.
CSCtj76460	Errors are reported on formatting of OBFL flash memory in the Cisco uBR-MC20x20V line card.
CSCtj76750	The no mpls ip propagate-ttl command displays different values for degenerated packets. This was observed when Parallel Express Forwarding (PEF) was configured and later unconfigured on the Cisco CMTS.
CSCtj77982	The <code>dsgIfDownstreamEntry</code> object identifier is not created for modular cable downstream interfaces.
CSCtj78901	Wideband cable modems that are downstream frequency override (DFO) by the Cisco load-balance fail to come online with the following error: UBR10000-4-REG_REQ_DS_SELECTION_FAIL: DS Selection failed for Cable Modem.
CSCtj79390	The byte counter values for the <code>docsIfCmtsDownChnlCtrTotalBytes</code> MIB object and IPDR DS-UTIL schema <code>DsUtilTotalBytes</code> , for the Cisco UBR-MC20x20V and Cisco uBR-MC88V integrated cable interface are different from the Cisco UBR10-MC5X20 line cards or SPAs.
CSCtj81955	The <code>docsIfDownChannelFrequency</code> MIB object cannot be configured to minimum value on SPA using SNMP.
CSCtj82288	If the configuration file of a cable modem with an IPv4 management address is changed to APM mode, the Cisco CMTS recognizes both IPv4 and IPv6 addresses. However, the cable modem releases the IPv4 address and becomes unpingable on that address.
CSCtj83717	The upstream bandwidth cannot be configured on the Cisco UBR-MC20X20 line card when cable monitor is configured.
CSCtj83877	The range of <code>docsIfDownChannelPower</code> MIB object set through SNMP is inconsistent with the range when configured using the rf-channel and rf power commands, for modular-cable and integrated-cable interfaces.
CSCtj83888	You can configure an illegal value for the <code>docsIfDownChannelInterleave</code> attribute when Annex is equal to A.
CSCtj84222	Tracebacks are observed while unconfiguring RCC-template from the Cisco UBR-MC20X20V cable interface.
CSCtj86115	IOS <code>mroute</code> entry may not be deleted even when the last CPE member "left".
CSCtj87104	The <code>c10k_udi_info_table</code> contains the PID for Cisco UBR-MC20X20V and Cisco uBR-MC3GX60V line cards as UBR10-MC20X20H and UBR10-MC3GX60V respectively. It must be changed to UBR-MC20X20V and UBR-MC3GX60V.
CSCtj87333	The non-default cable load-balance d30-ggrp-default xxxxx configuration is not reapplied to DOCSIS 3.0 General Load Balancing Group (GLBG), if the fiber node is removed and then reapplied.
CSCtj87847	Phy static-mcast should be configured on <code>fwd_intf</code> for static-mcast TLV.

Bug ID	Description
CSCtj88459	The DOCSIS load balancing algorithm uses a default interval of 10 seconds, which may cause modems to be moved unnecessarily.
CSCtj88593	The Cisco CMTS router continuously sends LEASEQUERIES for the IP addresses of the customer premises equipment (CPE), when the CPE is behind an offline cable modem.
CSCtj90049	Traceback occurs on the Cisco CMTS router when the docsIfCmtsCmStatusEntry attribute is queried for cable modems registered in IPv6 provisioning mode.
CSCtj90313	The show cable modem command output displays IPv4 addresses for single stack IPv6 cable modems after you change cable modems from IPv4 or dual stack provisioning mode.
CSCtj90337	Traceback observed on the Cisco UBR-MC20X20V and Cisco uBR-MC3GX60V line cards due to the Command Scheduler (KRON) configuration issue.
CSCtj92331	The attributes docsIf3MdChCfgChId, docsIf3MdChCfgIsPriCapableDs and docsIf3MdChCfgSfProvAttrMask cannot be set through the MIB.
CSCtj94466	The acceptance range of some SNMP nodes of which the SYNTAX type is "BITS" is incorrect.
CSCtj95258	If TLV 56 is specified in the CM config file, the test cable dbc command is unable to add new channels after CM becomes online in MTC-Mode.
CSCtj96124	A few CPE addresses are not displayed in the cable modem database.
CSCtj96343	Some downstream channels appear to be missing in the fiber node after the hardware is reset in a Cisco UBR-MC20X20V working line card.
CSCtj96616	The attribute ccwBRFChannelStorageType cannot be set to value volatile(2).
CSCtj99642	Error messages "ALIGN-3-SPURIOUS" or "ALIGN-3-TRACE" are observed when the debug cr10k-rp pkt conditional command is enabled on PRE.
CSCtk00147	An source specific multicast (SSM) entry is created instead of any source multicast (ASM) entry if the ip pim ssm default command is not configured and SSM groups are joined.
CSCtk01750	Inconsistent values are displayed for the cable cm-status enable configuration for the UBR-MC20X20V and uBR-MC3GX60V line cards.
CSCtk02099	Drop in packets was observed when PXF was enabled on the Cisco uBR100012 router.
CSCtk05778	Cable modems that were marked offline after a line card switchover revert causing voice call drops.
CSCtk07058	Secondary DEPI sessions are not configurable with third-party Edge QAM when the CMTS and EQAM are configured for DEPI Path redundancy (DPR).
CSCtk09023	Mismatch in secondary service flow between the route processor and the cable line card causes loss of traffic.
CSCtk12189	Line card crash is observed during LCSO.
CSCtk15044	Layer 3 multicast module receive MLD report even if multicast authorization is denied at cable level.

Bug ID	Description
CSCtk16053	DTCC card-specific tracebacks and error messages are seen while reloading the PRE-2 on a Cisco uBR10012 router running Cisco IOS Release 12.2(32.8.10)SCE.
CSCtk16375	The CMTS sends session type AVP in ICRQ message when DPR is configured on the CMTS and the EQAM does not support DEPI Path redundancy (DPR) but sends DPR-capable AVP in SCCRP with capability bit 0.

Resolved Caveats—Cisco IOS Release 12.2(33)SCD7

Bug ID	Description
CSCth18889	Multicast traffic is not received by the cable modem.
CSCti12998	The cable modem might lose IP connectivity. The cable modem stays connected to the Cisco CMTS, but no data frames go through the upstream.
CSCti30196	CMTS may crash when a SNMP query or any other event makes the CMTS to go through the list of ALL service-flows.
CSCtk64406	Downstream override is performed infinitely for narrowband cable modems.
CSCti04405	The CMTS assigns cable modems to Restricted Load Balance Groups (RLBGs) to which the cable modem is not physically connected to.
CSCtl18624	Route Processor (RP) crashes on multicast QoS routine.
CSCtn42882	There is a drop in the link when the Cisco SFP and the RF gateway uses other vendor's SFPs.

Open Caveats—Cisco IOS Release 12.2(33)SCD6

Bug ID	Description
CSCsm10121	IOS DHCP Client incorrectly populates message-type option in DHCP leasequery. The message-type option is set to 0x0d (DHCPLEASEACTIVE) instead of being set to 0x0a (DHCPLEASEQUERY).
CSCsz77977	Online Insertion and Removal (OIR) of a PCMCIA flash disk can cause a watchdog reset of the PRE.
CSCsz98503	A time delay of a few minutes occurs when multiple cable modems go off on a random upstream.
CSCtb52191	Uptime counters do not to work on certain combination cards.
CSCtc49858	Users with lower privilege levels than enable access may not be able to execute some show cable command options.
CSCtc62096	Dynamic multicast service flow and reserved bandwidth exist even after the removal of the multicast QoS (MQoS) configuration from the second bonding group.

Bug ID	Description
CSCtd97055	Tracebacks occur while toggling IPv6 on and off on the customer premises equipment (CPE).
CSCte42876	The CMTS may stop forwarding traffic when it receives a broadcast packet or a IP packet with multicast VPN (MVPN) multicast distribution tree (MDT) options set.
CSCte57149	The route processor crashes with an address error when the router is configured for Border Gateway Protocol (BGP).
CSCte62448	DOT 1Q Layer 2 VPN traffic counters do not increment when Layer 2 VPN traffic flows through the Cisco CMTS.
CSCte67373	The router crashes after running the <code>ios_bgp_mtr1 TC 8</code> .
CSCte68994	After the line card switchover, the newly active line card takes a long time to come up.
CSCtf06267	An IPv6 CPE cannot communicate with the Cisco CMTS after the ND cache is cleared.
CSCtf27303	The router sends Multiprotocol Unreachable Network Layer Reachability Information (MP_UNREACH_NLRI) in non-negotiated AF IPv6 unicast.
CSCtf40289	The BGP session configured for Nonstop Routing (NSR) fails to synchronize with the standby route processor.
CSCtf59785	The output of the show interface sid counter verbose command does not display the correct status (reset) of the codeword counter while the output of the show cable modem verbose command displays that the codeword counter is reset.
CSCtf64231	Inbound route-map change should not be immediately effective until a user exits the route-map configuration mode.
CSCtf85427	Memory leak occurs when more than 21 profiles are configured in a policy map.
CSCtf88832	Traceback occurs when a cable modem is reset.
CSCtf90859	Memory allocation failure is observed on Cisco routers after fast channel change with dynamic multicast.
CSCtg16155	A filesystem device does not display after the TEST_MULTIPLE_FUNCS.
CSCtg25471	Memory leaks are observed on Cisco UBR-MC20X20V protect line card although, line card switchover was not performed.
CSCtg50212	CPU spike are observed on the Route Processor during FPD image upgrade.
CSCtg60088	Withdrawals are not generated when a VPN Routing and Forwarding (VRF) configuration is added or deleted.
CSCtg79258	Withdrawals are not generated when configuring the no neighbor default-originate command.
CSCtg90865	A non-primary Multicast (MC) interface is selected for multicast forwarding.
CSCtg93115	Tracebacks are seen when the show pxf cable feature-table bundle x command is executed.
CSCtg94564	CMTS crash may be observed due to memory corruption.
CSCth00131	CMTS crashes when the clear cable modem all delete command is executed.
CSCth02741	High CPU utilization is observed on Cisco CMTS while running simulation test patterns.
CSCth18889	Multicast traffic is not received by the cable modem.

Bug ID	Description
CSCth30415	PROC_WATCHDOG does not work with the standby PRE on Cisco uBR10012 router.
CSCth32726	When a cable modem (CM) is repeatedly forced reset, the CM certificate is not always revoked although the CM certificate is revoked on the OCSP responder.
CSCth54435	The customer premises equipment (CPE) fails to receive multicast traffic from the Cisco uBR10012 router, when SPA channels are added to a Cisco UBR10-MC2X020 line card with downstream service group configuration.
CSCth59215	HCCP-3-CFG_FAIL error messages are observed on the active and standby PRE console. The static multicast packets have different service flows after a line card switchover.
CSCth66444	Cisco uBR10000 series router may experience packet drops during a line card switchover when the cable source-verify command is enabled.
CSCth72064	The wideband cable modems connected to the downstream bonding channel group with non-primary channel impairment are unreachable. The packet count does not increase in the PRE module.
CSCth79635	The following message is displayed: %SYS-3-INVMEMINT: Invalid memory action (free) at interrupt level.
CSCth84097	The PRE console hangs.
CSCth86397	Rate-limiting on the upstream channel is activated before the peak rate is reached leading to bandwidth requests being dropped prematurely on the Cisco UBR10-MC20X20 line card.
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.
CSCth92926	Traceback is observed after changing the modular-host configuration to a different slot.
CSCth96329	The cable modems in Subscriber Traffic Management (STM) is not getting out of penalty after the PRE or line card switchover.
CSCth97868	Dynamic upstream service flows fail on the Cisco UBR-MC20X20V and Cisco uBR-MC88V line cards when Baseline Privacy Interface (BPI) and Service ID (SID) clusters are configured.
CSCti09257	The DOCSIS 3.0 PC call stops working after the media terminal adapter (MTA) goes into a partial mode of one downstream.
CSCti07013	Upstream speed goes down and the Cyclic Redundancy Check (CRC) error counts increase with a Cisco uBR10-MC5X20U line card.
CSCti09825	The show cable multicast dsid command output contains entries with Duplicate Stat Indexes.
CSCti12590	Querying "getnext" with ipCidrRouteDest returns an OID that is not lexicographically larger than the queried OID.
CSCti12998	The cable modem might lose IP connectivity. The cable modem stays connected to the Cisco CMTS, but no data frames go through the upstream.
CSCti15168	Packet flow increases after PRE switch or bootup, though the multicast service flow throughput shows a value of zero.

Bug ID	Description
CSCti28695	The ipv6ScopeZoneIndexTable shows null interface.
CSCti30196	CMTS may crash when a SNMP query or any other event makes the CMTS to go through the list of ALL service-flows.
CSCti32814	Stand-by CMTS crashes and tracebacks are observed.
CSCti47001	The line card stops responding while monitoring the cable modem statistics.
CSCti48676	Minor multicast packet loss on a line card that is part of an Hot Connection to Connection Protocol (HCCP) group.
CSCti48887	The key-index associated with the wideband interfaces for multicast-sessions changes after line card switchover.
CSCti53112	When the Cisco CMTS acts as a TFTP proxy server for the CMs to download the configuration file, the CMTS should use IPv6 source address selection to determine the IPv6 source address for that transfer
CSCti65306	Online insertion and removal (OIR) of a shared port adapter (SPA) does not trigger call home events.
CSCti73720	The multicast service flow counters are incorrect after a PRE switchover when active guardian is different from the configured guardian.
CSCti77209	CPUHOG messages may be seen when SNMP polling is performed with load balancing enabled.
CSCti80386	During an ISSU-MS operation, many cable modems went offline after a stateful switchover (SSO) occurred.
CSCti80827	IPC keep alive timeout issue is observed when running the UBR-MC20X20V line cards.
CSCti82203	Cable throttle-ranging affects the cable modem registration speed.
CSCti84775	The DTCC card in slot 2/1 does not reload after cable clock dti or no cable clock dti commands are executed.
CSCti85651	The docsIfCmtsCmStatusEntry object identifier takes longer time to access the associated MIBs.
CSCti87411	System crashes if it is reloaded during an ISSU commitversion.
CSCti88479	The active route processor crashes during the single step in-service software upgrade (ISSU).
CSCti96127	The DHCP-Relay SOLICIT message from the CMTS to the DHCP server is sourced from the outgoing Gigabit Ethernet IPv6 IP address rather than the bundle IPv6 IP address.
CSCti96353	EPC3000 cable modems using SPA downstream as primary channel may be assigned with AES keys instead of 56DES.
CSCti97605	The input bytes counter displayed in the show interface cable command decrements, while the packet input increments; the 30 second input is consistent.
CSCti99130	Memory leak is observed when using the issu loadversion command after a PRE switchover.
CSCtj00656	The PRE crashes when the Internet Protocol Data Records (IPDR) session is re-configured and when the IPDR exporter is started or stopped.
CSCtj01079	The DS-SG is lost when the wideband CM goes offline and comes back NB-online after a PRE switchover.

Bug ID	Description
CSCtj04469	The Cisco uBR-MC20x20V line card crashed with following message in the crash-dump: Unexpected exception to CPU :vector 300, PC = 0x50389C, LR = 0x50386C
CSCtj07700	Cable modems go offline when changing DOCSIS-mode from ATDMA to SCDMA or from SCDMA to ATDMA.
CSCtj11727	When a line card switchover is triggered, alignment tracebacks may occur on the new working line card.
CSCtj13148	Some UB cable modems (DPC3010) are assigned 56DES keys instead of AES keys on the line card interfaces even though they are not AES enabled.
CSCtj15176	The standby PRE4 crashes with an "Illegal access to a low address" message.
CSCtj17350	Traceback occurs when show depi tunnel command is configured without DEPI Control Plane.
CSCtj19301	The voice dropout duration is greater than expected for "hw-mod reset" and "cable power off".
CSCtj20099	Removal of the IPDR configuration causes a reboot of the standby PRE.
CSCtj25815	Multicast service flow counters fluctuate after a remote Guaridan N+1 switchover.
CSCtj28614	The input queue drops are observed on the Cisco UBR-MC20X20V and Cisco uBR-MC3GX60V line cards.
CSCtj30579	On a Cisco UBR-MC20X20 LC, cable modems (with BPI enabled) having their primary service flow on a local downstream and a secondary unicast service flow on a SPA, may lose L3 IP connectivity on the secondary service flow.
CSCtj37469	Upstream utilization percentage in the show interface cable mac-sched command may be above 100.
CSCtj43383	DOCSIS load balance CM list is lost upon line card switchover and revertback.
CSCtj43578	Legacy load balancing group (LBG) should not coexist with DOCSIS LBG on the same MAC domain.
CSCtj47401	A Cisco uBR-MC5X20 line card that is running SNMP commands with traffic crashes.
CSCtj48567	Cable modems are getting wrongly registered with the integrated-cable interface on the Cisco uBR10-MC5X20H line card after a LC revertback from the Cisco uBR-MC20X20V line card.
CSCtj48852	The HCCP protect member is not found for the Cisco uBR10-MC5x20 line card.
CSCtj50102	The entAliasMappingIdentifier object does not return the ifIndex of the interfaces associated with the Cisco Wideband SPA.
CSCtj51639	Unable to telnet or attach from within Embedded Event Manager (EEM) script.
CSCtj52597	Cable modems cannot register in the w-online state if the RF channel is configured with User Datagram Protocol (UDP) port.
CSCtj60160	The Downstream Channel Descriptor (DCD) counters for DSG do not increment after a line card failover.
CSCtj60169	An intermediate session routing (ISR) watchdog timeout error is observed on the PRE forcing it to crash consequently.
CSCtj65972	MRI unlink error is seen on Cisco uBR10012 router.

Bug ID	Description
CSCtj66429	Adding line card table entries to ccsFlapEntry and ccsCmFlapEntry is taking a longer time than expected.
CSCtj66911	When packet classifiers are configured with IPv6, the docsIetfQosPktClassEntry MIB does not show these configured values.
CSCtj68730	The PCMM service flow is cleared on the Cisco CMTS; however the PS responds as "gate-set-ack" instead of "gate-set-error".
CSCtj69254	CPU HOG and traceback occur during a line card switchover.
CSCtj71869	The show memory command output displays the MAC domain name incorrectly.
CSCtj75483	Traceback is observed on the Cisco uBR10012 router after issuing the hw-module subslot shut command on the Cisco Wideband SPA.
CSCtj76035	If a cable modem undergoes vacillating attenuation, it gets into a power average enable mode (where the "*" displays in the "show cable modem" next to the power level) and then gets stuck in that mode. Even though the cable modem is at maximum power, it continues to stay in power average enable mode and never falls offline. In most cases, this results in the cable modem losing layer 3 traffic entirely without giving any notification that the modem dropped offline.
CSCtj76460	Errors are reported on formatting of OBFL flash memory in the Cisco uBR-MC20x20V line card.
CSCtj76750	The no mpls ip propagate-ttl command displays different values for degenerated packets. This was observed when Parallel Express Forwarding (PXF) was configured and later unconfigured on the Cisco CMTS.
CSCtj77982	The dsgIfDownstreamEntry object identifier is not created for modular cable downstream interfaces.
CSCtj78901	Wideband cable modems that are downstream frequency override (DFO) by the Cisco load-balance fail to come online with the following error: UBR10000-4-REG_REQ_DS_SELECTION_FAIL: DS Selection failed for Cable Modem.
CSCtj79390	The byte counter values for the docsIfCmtsDownChnlCtrTotalBytes MIB object and IPDR DS-UTIL schema DsUtilTotalBytes, for the Cisco UBR-MC20x20V and Cisco uBR-MC88V integrated cable interface are different from the Cisco UBR10-MC5X20 line cards or SPAs.
CSCtj81955	The docsIfDownChannelFrequency MIB object cannot be configured to minimum value on SPA using SNMP.
CSCtj82288	If the configuration file of a cable modem with an IPv4 management address is changed to APM mode, the Cisco CMTS recognizes both IPv4 and IPv6 addresses. However, the cable modem releases the IPv4 address and becomes unpingable on that address.
CSCtj83717	The upstream bandwidth cannot be configured on the Cisco UBR-MC20X20 line card when cable monitor is configured.
CSCtj83877	The range of docsIfDownChannelPower MIB object set through SNMP is inconsistent with the range when configured using the rf-channel and rf power commands, for modular-cable and integrated-cable interfaces.
CSCtj83888	You can configure an illegal value for the docsIfDownChannelInterleave attribute when Annex is equal to A.

Bug ID	Description
CSCtj84222	Tracebacks are observed while unconfiguring RCC-template from the Cisco UBR-MC20X20V cable interface.
CSCtj86115	IOS mroute entry may not be deleted even when the last CPE member “left”.
CSCtj87104	The c10k_udi_info_table contains the PID for Cisco UBR-MC20X20V and Cisco uBR-MC3GX60V line cards as UBR10-MC20X20H and UBR10-MC3GX60V respectively. It must be changed to UBR-MC20X20V and UBR-MC3GX60V.
CSCtj87333	The non-default cable load-balance d30-ggrp-default xxxxx configuration is not reapplied to DOCSIS 3.0 General Load Balancing Group (GLBG), if the fiber node is removed and then reapplied.
CSCtj87847	Phy static-mcast should be configured on fwd_intf for static-mcast TLV.
CSCtj88459	The DOCSIS load balancing algorithm uses a default interval of 10 seconds, which may cause modems to be moved unnecessarily.
CSCtj88593	The Cisco CMTS router continuously sends LEASEQUERIES for the IP addresses of the customer premises equipment (CPE), when the CPE is behind an offline cable modem.
CSCtj90049	Traceback occurs on the Cisco CMTS router when the docsIfCmtsCmStatusEntry attribute is queried for cable modems registered in IPv6 provisioning mode.
CSCtj90313	The show cable modem command output displays IPv4 addresses for single stack IPv6 cable modems after you change cable modems from IPv4 or dual stack provisioning mode.
CSCtj90337	Traceback observed on the Cisco UBR-MC20X20V and Cisco uBR-MC3GX60V line cards due to the Command Scheduler (KRON) configuration issue.
CSCtj92331	The attributes docsIf3MdChCfgChId, docsIf3MdChCfgIsPriCapableDs and docsIf3MdChCfgSfProvAttrMask cannot be set through the MIB.
CSCtj93165	Downstream primary channel throughput counters are inaccurate and the throughput is higher than the maximum sustained rate value.
CSCtj94466	The acceptance range of some SNMP nodes of which the SYNTAX type is "BITS" is incorrect.
CSCtj95258	If TLV 56 is specified in the CM config file, the test cable dbc command is unable to add new channels after CM becomes online in MTC-Mode.
CSCtj96124	A few CPE addresses are not displayed in the cable modem database.
CSCtj96343	Some downstream channels appear to be missing in the fiber node after the hardware is reset in a Cisco UBR-MC20X20V working line card.
CSCtj96616	The attribute ccwbrFChannelStorageType cannot be set to value volatile(2).
CSCtj99642	Error messages “ALIGN-3-SPURIOUS” or “ALIGN-3-TRACE” are observed when the debug cr10k-rp pkt conditional command is enabled on PRE.
CSCtk00147	An source specific multicast (SSM) entry is created instead of any source multicast (ASM) entry if the ip pim ssm default command is not configured and SSM groups are joined.
CSCtk01750	Inconsistent values are displayed for the cable cm-status enable configuration for the UBR-MC20X20V and uBR-MC3GX60V line cards.
CSCtk02099	Drop in packets was observed when PXF was enabled on the Cisco uBR100012 router.

Bug ID	Description
CSCtk05778	Cable modems that were marked offline after a line card switchover revert causing voice call drops.
CSCtk07058	Secondary DEPI sessions are not configurable with third-party Edge QAM when the CMTS and EQAM are configured for DEPI Path redundancy (DPR).
CSCtk09023	Mismatch in secondary service flow between the route processor and the cable line card causes loss of traffic.
CSCtk12189	Line card crash is observed during LCSO.
CSCtk15044	Layer 3 multicast module receive MLD report even if multicast authorization is denied at cable level.
CSCtk16053	DTCC card-specific tracebacks and error messages are seen while reloading the PRE-2 on a Cisco uBR10012 router running Cisco IOS Release 12.2(32.8.10)SCE.
CSCtk16375	The CMTS sends session type AVP in ICRQ message when DPR is configured on the CMTS and the EQAM does not support DEPI Path redundancy (DPR) but sends DPR-capable AVP in SCCRP with capability bit 0.
CSCtk32866	Tracebacks and CPU spike are observed when debug cable tlvs is enabled on a Cisco CMTS running Cisco IOS Release 12.2(32.8.10)SCE with PRE-2 because of the CMTS SID management process.

Resolved Caveats—Cisco IOS Release 12.2(33)SCD6

Bug ID	Description
CSCsg92743	Cisco CMTS router crashes when the show buffers usage command is executed repeatedly.
CSCsv21109	IF-MIB HC counters for port-channels are missing.
CSCsw77313	The login command, in exec configuration mode, allows an already logged in user to change the username that is reported for the active session.
CSCsw92379	PRE crashes after the online insertion and removal (OIR) of the line card.
CSCsx22124	Static routes configured in the startup config do not take into effect till the router is re-configured.
CSCsx34615	Multicast ping works only for first few seconds when a tunnel is created.
CSCsz61595	The login on-failure command does not log the failed username consistently.
CSCtb79237	No system log or SNMP trap gets generated when COPS process, that is used for packetcable, fails.
CSCtc50579	Modems do not come online on the downstream port.

Bug ID	Description
CSCtd10712	<p>The Cisco IOS Software network address translation (NAT) feature contains multiple denial of service (DoS) vulnerabilities in the translation of the following protocols:</p> <ul style="list-style-type: none"> • NetMeeting Directory (Lightweight Directory Access Protocol, LDAP) • Session Initiation Protocol (Multiple vulnerabilities) • H.323 protocol <p>All the vulnerabilities described in this document are caused by packets in transit on the affected devices when those packets require application layer translation. Cisco has released free software updates that address these vulnerabilities. This advisory is posted at http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20110928-nat.</p>
CSCtd30002	Configuring the 5X1 Gigabit Ethernet port is not possible after swapping SPAs.
CSCtd43242	An IPC timeout could lead to a crash on the Cisco uBR10-MC5X20H line card.
CSCtd90278	The Wideband SPA does not perform Address Resolution Protocol (ARP) after the failure of the active port.
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.
CSCte77114	The wideband CM number shown in the show cable mac-domain Cx/y/z rcc command output is incorrect.
CSCtf33251	The show hccp command fails to show any result though HCCP redundancy is configured in the running-configuration.
CSCtf63729	An IPv6 customer premise equipment (CPE) fails to get an IP address when it is connected to an IPv4 cable modem.
CSCtf81039	The CPE entries are displayed even after the CPE is disconnected from the cable modem.
CSCtf99712	An error occurs when the line cards are powered on which prevents the cable modems to come online.
CSCtg18934	PRE4 crashes with dual-stack CPE.
CSCtg21793	Maximum Transmission Unit (MTU) size is not inherited by the subinterfaces on the Gigabit Ethernet VLAN.
CSCtg23313	Wideband modems moving from reject (pk) to online (pt) do not complete the Baseline Privacy Interface (BPI) negotiation.
CSCtg54998	Incorrect decode of the interrupt stack for saved registers is displayed in the crashinfo file.
CSCtg61170	Multicast may select the forwarding interface which does not match to the req-attribute mask.
CSCtg64597	Active PRE crashes due to bad chunk reference count.
CSCtg67172	A Cisco UBR-MC20X20V line card crash is observed due to partial packets entering the FPGA.
CSCtg78358	The protect line card crashed after performing a manual switchover from working Cisco uBR10-MC5x20H line card to the protect line card.

Bug ID	Description
CSCtg89795	Spectrum management does not work on the Cisco UBR-MC20X20V line card when the bandwidth is set to EuroDOCSIS frequency range.
CSCth41958	Iron bus faults causes the Cisco uBR10-MC5X20H line card to reset.
CSCth44559	SFP Missing Critical Alarm should be cleared if the interface is in "admin shutdown" status even if SFP is not installed.
CSCth48083	The Cisco UBR10-MC20X20V line card resets when the show tech-support cmts command is executed.
CSCth59049	Downstream service flow statistics display zeroes after an In-Service software upgrade (ISSU) PRE module switchover.
CSCth62938	Cisco Service Independent Intercept (SII) tap stops intercepting traffic.
CSCth64363	Inconsistent synchronization PRE error messages are displayed when the standby PRE module boots up.
CSCth69364	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. 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-20110928-dlsw .
CSCth71637	SNMP query on empty docsQosPktClassEntry/docsQos3PktClassEntry/docsLetfQosPktClassEntry takes a long time to return results.
CSCth74132	The protect line card state is not correct after removing the working line card from the high availability group.
CSCth79643	PRE crashes with an "IPC-2-INVALIDZONE" error message.
CSCth87831	The show cable calls command displays the interface with upstream channel bonding even if there are no voice call associated with that particular interface.
CSCth92861	The show interface wideband-cable slot/1/ctrlr:wb chan downstream command displays no information.
CSCti00484	The wrong ARP entry is removed.
CSCti01378	The show cable modem x.y.z qos or show cable modem x.y.z service-flow [verbose] command displays very high throughput values for a short time when traffic rates are much lower than reported.
CSCti03293	ifSpeed returns actual data instead of raw data on the integrated-cable interface/modular-cable interface.
CSCti04281	The ISSU CLC-CHANGEVERSION is delayed if the protect line card is active.
CSCti15945	Inbound octets (ifInOctets) return the value 0 for the Wideband SPA Gigabit Interface.
CSCti19280	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.
CSCti20114	The Dynamic Secret Background process consumes lots of CPU memory and results in traceback.

Bug ID	Description
CSCti22081	The (*,G) entry is generated while configuring Source Specific Multicast (SSM) mapping, if the CMTS authorization is deny (S,G).
CSCti29484	The interface column length of show cable modem cx/y/z docsis version summary needs to be increased.
CSCti32086	Memory leak is observed on the protect card. The memory is used for packetcable gate database and gate bin.
CSCti33334	CPE is not receiving multicast traffic data packets after the Cisco uBR-MC20X20V line card failover.
CSCti36308	There is a mismatch between interface and service flow.
CSCti41652	The docsQos3ServiceFlowParamSetTypeStatus is returning wrong values.
CSCti44029	The Cisco UBR-MC20X20V and Cisco UBR10-MC5X20 line cards are crashing while issuing the clear cable modem command when the CMTS metering is running.
CSCti45878	The BPI+ policy fails in PRE4. Traffic is not getting blocked using the default per-device ACL.
CSCti48004	Downstream packet loss is observed on the wideband bonding group.
CSCti53665	Memory leaks in small chunks from the line card.
CSCti54631	Cable modems using SPA downstreams online(pt) cannot pass layer 3 traffic; IPC channel between Cisco uBR-MC520 and SIP is down.
CSCti58738	Cisco uBR10012 router crashes after getting doubly-linked list corruption message.
CSCti59859	The show cable modem maintenance command output is showing wrong timestamp for Exhausted Time.
CSCti60624	Line card switchover during voice calls is crashing the protect line card.
CSCti61527	Traceback occurs after line card high availability revertback.
CSCti62897	Admission control is not preventing committed information rate (CIR) over-subscription on PCMM multicast bulk calls.
CSCti65302	It is not possible to create more than one wideband interface on a Cisco uBR10012 router.
CSCti69352	Cisco uBR10012 router crashes while executing the show packetcable gate summary command.
CSCti80157	When performing an ISSU linecard abortversion during ISSU-MS operations, the system will begin the ISSU process for all upgraded CLCs without regard to the PLC state.
CSCti81896	When the ingress cancellation feature is enabled, all modems on an upstream may momentarily go offline and then recover within minutes.
CSCti83235	The standby RP does not retain its original state after the issu abortversion command is executed.
CSCti84300	Wideband and Modular Statistics are displayed incorrectly as 0 after the issu run-version command is executed and the PRE switches over to the new image.
CSCti92174	Cable modems are going offline while executing test cable UCC command.

Bug ID	Description
CSCti96732	It is observed that the Received Power shown in the show cable modem x.x.x verbose command would always incorrectly report 0.00 for every upstream in the bonding group when testing upstream performance characteristics by introducing upstream attenuation.
CSCti96773	Upstream traffic cannot be recovered after a PRE switchover when cable modems directly go to the online(pt) state.
CSCtj00711	The cable remote query ignores the configured source IP address as set by the cable modem remote-query src-ip command and wrongly considers the bundle cable IP address as source address.
CSCtj07190	The show pxf cable intercept command output does not display the resource counters.
CSCtj09865	CPE is not responding to pings when CM is moved to a different primary downstream.
CSCtj19188	The downstream BPI index leak occurs when DCC tech 1, 2, 3, or 4 is used on SPA Modular-Cable interfaces.
CSCtj32461	Spurious memory access traceback was observed after the IPDR Exporter was configured and initiated on the CMTS.
CSCtj39203	The active PRE crashes on execution of the show cable mutlicast db command.
CSCtj44598	Cable modems are unable to register online.
CSCtj46384	Disabling debug cable receive and text protection may cause 100% CPU utilization.
CSCtj48625	The line card channel ID becomes zero when no downstream modular-cable slot/subslot/bay rf-channel command is issued.
CSCtj54510	PRE crashed at "docs_cpetype_ipdr_sender" after "hw-module reset" on the line card.
CSCtj66629	The CPE behind a CM loses layer 3 connectivity after the CM is load balanced to a different interface.
CSCtj73433	The customer premise equipment (CPE) does not receive dynamic multicast traffic.
CSCtj73436	DOCSIS 3.0 service flows may not meet the minimum reserved rate under congestion.
CSCtj77440	The test hccp rfswitch relay command fails to execute from the Secure Shell (SSH) mode.
CSCtj86132	The Baseline Privacy Interface (BPI) index is zero for a w-online cable modem after the line card switchover.
CSCtk03420	DOCSIS 3.0 service flow does not reach its minimum rate when channels are heavily congested with UDP traffic.

Open Caveats—Cisco IOS Release 12.2(33)SCD5

Bug ID	Description
CSCsi75761	Rate-limiting of ICMP unreachable messages is larger than configured when Parallel Express Forwarding (PXF) is configured on the Cisco uBR10012 router.
CSCsz36328	Cable modems remain in online (pk) and expired states after cable privacy mandatory command is executed.
CSCsz49382	Cable modems do not respond to Layer 3 pings.
CSCsz77977	Online Insertion and Removal (OIR) of a PCMCIA flash disk can cause a watchdog reset of the PRE.
CSCsz98503	A time delay of a few minutes occurs when multiple cable modems go off on a random upstream.
CSCta05835	Entries in the docsBpi2CmtsMulticastObjects MIB are duplicated after a line card revertback.
CSCta16724	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.
CSCtb67535	The %GENERAL-2-CRITEVENT: error message and tracebacks are observed on a Cisco uBR10000 series router.
CSCtb74904	The service flow counter displays wrong values on the Cisco uBR10012 router after a PRE module switchover.
CSCtb79237	No system log or SNMP trap gets generated when COPS process, that is used for packetcable, fails.
CSCtc27601	Unable to set session-range for source specific multicast (SSM) group configuration.
CSCtc50579	Modems do not come online on the downstream port.
CSCtc62096	Dynamic multicast service flow and reserved bandwidth exist even after the removal of the multicast QoS (MQoS) configuration from the second bonding group.
CSCtd24347	The Generic Routing Encapsulation (GRE) tunnel does not forward traffic.
CSCtd30002	Configuring the 5X1 Gigabit Ethernet port is not possible after swapping SPAs
CSCtd48609	The cm ipv6_address rcs-counts command clears the receive channel sets (RCS) for all cable modems instead of a specified cable modem.
CSCtd69497	Static groups and sessions are not created when static multicast groups and source addresses exist in a cable modem configuration file.
CSCtd71335	Memory leak is observed on a Cisco uBR10012 and a Cisco router when the cable modem is reset after a reservation is created using Resource Reservation Protocol (RSVP).
CSCtd90278	The Wideband SPA does not perform Address Resolution Protocol (ARP) after the failure of the active port.
CSCtd90685	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.
CSCtd97055	Tracebacks occur while toggling IPv6 on and off on the customer premises equipment (CPE).
CSCte07582	The upstream-service-group is removed from the MAC domain after the line card and PRE module switchover.
CSCte09146	PRC_CONFIG_CHANGE is returned instead of PRC_CONFIG_NO_CHANGE when the cable admission-control ds-bandwidth and cable admission-control us-bandwidth commands are executed.
CSCte10684	The status of the integrated cable interface or the cable interface changes to "Down" when the status of the relative bundle interface is set to "Down" and the CMTS is reloaded.
CSCte19017	The CPU utilization of the IGMP Input Process is very high while running simulation test patterns.
CSCte36746	An error message was flagged when the Cisco uBR10012 router tried to overwrite the ARP entry.
CSCte42876	The CMTS may stop forwarding traffic when it receives a broadcast packet or a IP packet with multicast VPN (MVPN) multicast distribution tree (MDT) options set.
CSCte43870	The admission control bucket array overflows and may corrupt the memory adjacent to the admission control array.
CSCte55906	Some downstream channels may come up as rf-shutdown when a Cisco uBR-MC20X20V line card should be replaced or Return Material Authorization (RMA) is required.
CSCte62448	DOT 1Q Layer 2 VPN traffic counters do not increment when Layer 2 VPN traffic flows through the Cisco CMTS.
CSCte63132	When any service class configuration is changed, a CPU spike on the Route Processor (RP) is observed.
CSCte64393	The ESR-PRE2 card crashes after the Cisco uBR10-MC5X20H-X module crashes.
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.
CSCte72062	The IP address of the RF switch is not refreshed after executing the ip host rfs-1 ip address command.
CSCte79637	The Cisco CMTS may not reject the registration request (REG-REQ) when the cable modem configuration file contains both IPv4 fields (other than TCP or UDP source or destination ports) and IPv6 fields in one DOCSIS QoS classifier.
CSCte84191	There is a mismatch of the BPI index between the cable line card and the remote SPA when a redundancy is not configured on the line card and the guardian line card is rebooted.
CSCte85016	Rollback fails for the cable admission-control us-bandwidth bucket-no minor major exclusive command
CSCte97814	Memory leak is observed on the Cisco CMTS during bootup. This is observed on the Border Gateway Protocol table.
CSCte99379	The cable admission-control ds-bandwidth/us-bandwidth command results in spurious memory access traceback.

Bug ID	Description
CSCtf06267	An IPv6 CPE cannot communicate with the Cisco CMTS after the ND cache is cleared.
CSCtf09375	The MAC domain cable interface is configured to shutdown after the card has been powered off with the hw-module <subslot> command. However, when the card is powered on by the no hw-module <subslot> command, the shutdown configuration is missing when the interface comes up.
CSCtf19518	The output of docsIFCMtsModulationTable MIB and the show cable modulation-profile verbose command is inconsistent.
CSCtf20370	When the line card is reverted from the protect mode to the working mode, it crashes the PRE and the working line card.
CSCtf22188	QoS group configurations accepts a ToS value of 256 through SNMP even though the valid range is 0 to 255.
CSCtf26326	When configuring the Cisco CMTS with ISIS, the internal IPC Ethernet address 127.x.x.x is advertised even when no service internal is configured. Also, in this case, the IPC interface cannot be configured by the end user.
CSCtf28287	Continuous "Nickel10G" error is logged on the PRE console of the Cisco CMTS.
CSCtf51515	AES keys are incorrectly read while the hardware and software information is incorrectly displayed.
CSCtf54880	Invalid memory action (malloc) is observed on the Cisco CMTS console when the Cisco CMTS has been idle for an extended period of time.
CSCtf57372	The "IPv6 lookup addr in host has host pointing to freed memory" error message is displayed on the Cisco CMTS.
CSCtf59785	The output of the show interface sid counter verbose command does not display the correct status (reset) of the codeword counter while the output of the show cable modem verbose command displays that the codeword counter is reset.
CSCtf63729	An IPv6 customer premise equipment (CPE) fails to get an IP address when it is connected to an IPv4 cable modem.
CSCtf76282	If a dual-stack is CPE online, the clear cable host x.x.x command causes the corresponding line card to crash.
CSCtf76524	An IPv6 modem moved into a new MAC Domain that is configured with the cable ip-init ipv4 command, still stays online.
CSCtf79314	There are duplicate DSID entries allocated to the same session on the same interface.
CSCtf79419	The service Identifier (SID) displays "zero" for multicast Baseline Privacy (BPI) sessions after a line card switchover.
CSCtf81039	The CPE entries are displayed even after the CPE is disconnected from the cable modem.
CSCtf84980	Overlapping downstream channel IDs in a MAC domain cause conflict in the configuration, thus causing some downstream channels to become unusable.
CSCtf85427	Memory leak occurs when more than 21 profiles are configured in a policy map.
CSCtf85532	The Cisco DPC3000 cable modem rejects dynamic bonding change request (DBC-REQ).
CSCtf88832	Traceback occurs when a cable modem is reset.

Bug ID	Description
CSCtf90283	The show depi command returns a traceback error on the Cisco uBR10012 router.
CSCtf90859	Memory allocation failure is observed on Cisco routers after fast channel change with dynamic multicast.
CSCtf95826	An aggregate-address nvgens (nonvolatile generation) the wrong mask for a non-contiguous or an incorrect mask.
CSCtf98939	The show cable modem ipv6 command does not display the IPv6 stack address.
CSCtf99414	The show controller command shall display BPI information for UBR10-MC20X20 line cards.
CSCtf99712	An error occurs when the line cards are powered on which prevents the cable modems to come online.
CSCtg00424	DHCPv6 SOLICIT messages are dropped by the Cisco CMTS when a static IPv4 CPE attempts to get a dual-stack IP address.
CSCtg00460	The cable filter matching behavior is different between the route processor and the toaster.
CSCtg01386	The Cisco CMTS does not drop invalid IPv6 packets with loopback source address.
CSCtg02818	Memory leak is seen after running PacketCable Multimedia (PCMM) calls for more than 12 hours.
CSCtg03087	The "spectrum-mgr" assigns frequency to an upstream interface in shutdown state. The show cable spectrum-group displays incorrect results.
CSCtg10082	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.
CSCtg13158	Bundle 1 does not function.
CSCtg14992	When a cable modem sends the ICMPv6 echo request with zero hop limit to a cable interface, the ICMPv6 echo reply is returned.
CSCtg18963	Error messages are displayed when the dual-stack CPE IPv6 modem tries to come online.
CSCtg23313	Wideband modems moving from reject (pk) to online (pt) do not complete the Baseline Privacy Interface (BPI) negotiation.
CSCtg25392	IPv4 TCP/UDP packets matches the downstream classifier that is used for IPv6 TCP/UDP packets.
CSCtg27367	The test cable dsa command does not work properly for IPv6 Customer Premise Equipment (CPE)
CSCtg33421	The output of show cable modem ipv6 cpe command displays many global IPv6 addresses.
CSCtg46412	The output of the show cable modem x.x.x cpe command does not display the static IPv4 address of the cable modem.
CSCtg46479	The message "REQGRP-6-UNKLCREQ: Received unknown IPC request (50)" is seen on uBR10012 router log periodically. This message is seen when encrypted multicast traffic is used along with a Cisco UBR-MC20X20V cable line card in slot 5, and a remote SPA as a downstream channel.
CSCtg48989	Inconsistent IPv6 CPE data is displayed in the output of the show running-config command.

Bug ID	Description
CSCtg49121	Tracebacks are seen from the AToM Manager when the clock is set to an earlier time and date while unprovisioning the virtual channel.
CSCtg49184	The output of the show hccp event-history command displays incorrect error information.
CSCtg49784	Traceback is observed after the cable modem is shifted from the Cisco uBR10-MC5X20 line card to the guardian Cisco UBR-MC20X20V line card.
CSCtg50212	CPU spike are observed on the Route Processor during FPD image upgrade.
CSCtg52567	The show running-config command displays the "penalty-period 10080" command when the default value of 10080 is configured.
CSCtg54998	Incorrect decode of the interrupt stack for saved registers is displayed in the crashinfo file.
CSCtg55865	The PRE4 module continuously logs ironbus fault messages when the line card is reboots after a line card crash.
CSCtg61170	Multicast may select the forwarding interface which does not match to the req-attribute mask.
CSCtg64597	Active PRE crashes due to bad chunk reference count.
CSCtg65851	An unscheduled reload of the router occurs when the Cisco SIP- 600 SIP is installed to a slot provisioned for a the Cisco Wideband SIP.
CSCtg67080	Error message "%Error: The LC 5/1 is Protect. Forbid to add its US into FN 5" is observed after Cisco CMTS boots up.
CSCtg68924	"Encountered TBD2 code in cmts_bundle_ipv6_addr" message is observed on the Cisco CMTS console when IPv6 is provisioned on a bundle sub-interface.
CSCtg72650	When a CPE has multiple IP addresses configured to a single MAC address, all except one of the IP addresses become unreachable after two PRE module switchovers.
CSCtg72675	The CMTS ignores the static multicast cable modem interface mask settings in cable modem configuration file.
CSCtg73720	A high CPU utilization is observed on Cisco CMTS while running simulation test patterns.
CSCtg76834	Error message "... %UBR10000-3-NOMAC: Cannot allocate MAC address for interface ..." is observed after the "shutdown" and "no shutdown" of the cable interface on the Cisco uBR10012 router with Cisco UBR-MC20X20V line card.
CSCtg78358	The protect line card crashed after performing a manual switchover from working Cisco uBR10-MC5x20H line card to the protect line card.
CSCtg81535	The debug code needs to be enhanced in order to capture the cause for bad timing offset. It does not have any impact on the functionality.
CSCtg83241	Cable modems(CM) configured with Early Authentication and Encryption (EAE) cannot be pinged even if they are in UB online (pt) state.
CSCtg83560	"Invalid Upstream Channel ID" traceback is observed on Cisco CMTS.
CSCtg84729	Working cable line card (CLC) crashes after Route Processor Redundancy (RPR) switchover when more number of multicast sessions are in progress.
CSCtg85867	The CPEs cannot process encrypted multicast traffic when a dynamic multicast session is created on a DPC-300 modem.

Bug ID	Description
CSCtg89197	System and IO Memory Leak may cause fragmentation warning after repeated configuration change of the cable upstream upstream-index max-logical-chans or cable upstream max-ports num-ports commands.
CSCtg89719	BADTXOFFSET error message is displayed on the Cisco CMTS console.
CSCtg89795	Spectrum management does not work on the Cisco UBR-MC20X20V line card when the bandwidth is set to EuroDOCSIS frequency range.
CSCtg90766	Cisco uBR-MC20X20 cable interface line card interrupt line may get stuck in the active state causing the cable modems to remain offline.
CSCtg90865	A non-primary Multicast (MC) interface is selected for multicast forwarding.
CSCtg93115	Tracebacks are seen when the show pxf cable feature-table bundle x command is executed.
CSCtg94564	CMTS crash may be observed due to memory corruption.
CSCtg95289	CMTS may fail to ping IPv6 cable modems.
CSCtg95319	Error message "cable <i>slot/subslot/port</i> is in a fiber node so Bundle cannot be changed" is observed when the bundle number on a Cable MAC domain interface is changed (or removed) using the cable bundle number command.
CSCtg96250	CMTS performs packet filtering even if it is not configured on the CMTS.
CSCtg99640	Cable modems in the reject (epk) and reject (ept) do not get reset when the clear cable modem reject reset command is executed.
CSCth00131	CMTS crashes when the clear cable modem all delete command is executed.
CSCth01285	Multicast traffic is not forwarded across DOCSIS Set-Top Gateway (DSG) tunnels on modular and legacy downstreams.
CSCth01799	The following error may be sometimes displayed on PRE4 log: "PXF_NICKEL-3-FTS_ERROR: FTS SEQUENCE Error: 1 in nickel0/port1"
CSCth02741	High CPU utilization is observed on Cisco CMTS while running simulation test patterns.
CSCth09854	Cable modem may reject DBC-REQ due to incorrect ranging dynamic window.
CSCth15663	Subscriber Traffic Management (STM) does not work in both monitoring modes on modular-Cable interface.
CSCth16375	IPv4 classifiers are not synced correctly during Dynamic Channel Change (DCC) operation.
CSCth18889	Multicast traffic is not received by the cable modem.
CSCth18973	When there are many downstream TCP sessions active at the same time, Cisco uBR10012 PRE2 may experience packet drops
CSCth22076	Dynamic Bonding Change (DBC) operation fails after the line card switchover.
CSCth24251	Cisco CMTS reports exhaustion of application IDs.
CSCth25114	Downstream External PHY Interface (DEPI) control plane sessions drop after the ISSU runversion command is executed, and fails to re-establish.
CSCth29995	A DOCSIS 3.0 Cable modem after coming online, may not respond to the ping command when it is provisioned as DOCSIS 1.0 cable modem and is forced to do Early Authentication and Encryption (EAE).

Bug ID	Description
CSCth30050	The Baseline Privacy Interface plus (BPI+) policy feature does not explicitly take care of the static IP addresses.
CSCth30415	PROC_WATCHDOG does not work with the standby PRE on Cisco uBR10012 router.
CSCth30476	TCP-flags does not work as expected in packet filtering when the tcp_mask masks off all the bits in configured tcp_flags.
CSCth32726	When a cable modem (CM) is repeatedly forced reset, the CM certificate is not always revoked although the CM certificate is revoked on the OCSP responder.
CSCth35421	A HTTP fail configuration error is observed when line card high availability member slots are added to a SCDMA configured CMTS.
CSCth37447	The CMTS logs a out of range card slot index error message during a SNMP query of the docsMcastCmtsReplSessEntry MIB object.
CSCth39702	The cable multicast-qos group does not synchronize correctly after a line card switchover.
CSCth41958	Iron bus faults causes the Cisco UBR10-MC5X20H line card to reset.
CSCth44289	The standby PRE processor module resets when the depi tunnel is removed from the configuration.
CSCth45908	The IPv6 cable modems are unreachable when Dynamic Channel Change (DCC) initialization techniques 1-4 are used within a line card on the downstream channel.
CSCth47008	The show cable registered command output has alignment issues at the online status and timing offset statistics.
CSCth48083	The Cisco UBR10-MC20X20V line card resets when the show tech-support cmts command is executed.
CSCth49224	The default interface service flow for multicast QoS is not created after a line card switchover.
CSCth50596	The show cable modem IPv6 cpe command output for IPv6 cable modems takes a long time to display.
CSCth51943	The cable dynamic-flow vrf command does not map the DSx flow to the specified VRF.
CSCth54435	The customer premises equipment (CPE) fails to receive multicast traffic from the Cisco uBR10012 router, when SPA channels are added to a Cisco UBR10-MC2X020 line card with downstream service group configuration.
CSCth59049	Downstream service flow statistics display zeroes after an In-Service software upgrade (ISSU) PRE module switchover.
CSCth59215	HCCP-3-CFG_FAIL error messages are observed on the active and standby PRE console. The static multicast packets have different service flows after a line card switchover.
CSCth59322	The guardian line card does not display all the Baseline Privacy Index (BPI) values while executing the show interfaces cable command.
CSCth59516	The low latency service flow is incorrectly created after the 16th downstream service flow is created.

Bug ID	Description
CSCth60315	Multicast sessions are not created after a revertback to the working line card. The default downstream service identifier is not created and security association identifier (SAID) is changed after the switchover.
CSCth64363	Inconsistent synchronization PRE error messages are displayed when the standby PRE module boots up.
CSCth64941	L2TP daemon error messages and high CPU utilization seen on Cisco CMTS.
CSCth66150	"Blaze HM testcase failed" error messages are displayed in the log of a Cisco uBR10012 router.
CSCth66444	Cisco uBR10000 series router may experience packet drops during a line card switchover when the cable source-verify command is enabled.
CSCth71339	The %CMTS_LIC-3-INVALID_LIC_INFO error message is erroneously displayed for a line card after the PRE switchover.
CSCth72064	The wideband cable modems connected to the downstream bonding channel group with non-primary channel impairment are unreachable. The packet count does not increase in the PRE module.
CSCth74132	The protect line card state is not correct after removing the working line card from the high availability group.
CSCth77566	The CPU HOG error message is displayed when the Cisco CMTS boots up.
CSCth79635	The following message is displayed: %SYS-3-INVMEMINT: Invalid memory action (free) at interrupt level.
CSCth79643	PRE crashes with an "IPC-2-INVALIDZONE" error message.
CSCth84097	The PRE console hangs.
CSCth84542	The Packet Cable call dropout time is more than 1600ms during the line card revertback
CSCth85067	High CPU utilization is seen on the Cisco CMTS when the IGMP input processes several thousands of IGMP reports every query-interval.
CSCth86397	Rate-limiting on the upstream channel is activated before the peak rate is reached leading to bandwidth requests being dropped prematurely on the Cisco UBR10-MC20X20 line card.
CSCth87649	Unable to block specific CPE MAC addresses on the Cisco CMTS. In some cases this can be exploited for DoS attacks.
CSCth87831	The show cable calls command displays the interface with upstream channel bonding even if there are no voice call associated with that particular interface.
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.
CSCth90490	The CMTS upstream LED display indicates wrong information whenever the upstream configuration has changed.
CSCth96035	A spurious memory access traceback is observed when the show cable modem service-flow command is used with the verbose keyword.
CSCth96153	The port number is wrongly displayed in the output of show interface service flow command for multicast service flows.

Bug ID	Description
CSCth97868	Dynamic upstream service flows fail on the Cisco UBR-MC20X20V and Cisco uBR-MC88V line cards when Baseline Privacy Interface (BPI) and Service ID (SID) clusters are configured.
CSCti00484	The wrong ARP entry is removed.
CSCti03293	ifSpeed returns actual data instead of raw data on the integrated-cable interface/modular-cable interface.
CSCti05750	The Half-Height Gigabit Ethernet (HHGE) line cards stop functioning after Cisco Wideband SPAs are inserted into the Cisco SIP-600.
CSCti07013	Upstream speed down and Cyclic Redundancy Check (CRC) error increases in a Cisco uBR0012 router with Cisco MC5x20U cable line card.
CSCti07829	The "Modular primary" interface column is found missing from the multicast forwarding table and PFX table when OIR is performed on the Cisco MC5X20 cable line card.
CSCti08817	The default cable filter is not enforced in the hardware on PRE2 and PRE4.
CSCti12998	The cable modem might lose IP connectivity. The cable modem stays connected to the Cisco CMTS, but no data frames go through the upstream.
CSCti15945	Inbound octets (ifInOctets) return the value 0 for the Wideband SPA Gigabit Interface.
CSCti17023	The "average percent contention slots" field does not display the actual values.
CSCti19280	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.
CSCti23212	Modems using SPA downstreams online(pt) cannot pass layer 3 traffic; IPC channel between Cisco uBR-MC520 and SIP is down.
CSCti30196	CMTS may crash when a SNMP query or any other event makes the CMTS to go through the list of ALL service-flows.
CSCti61284	dsgIfClassIncludeInDCD always displays the value as true(1) which is incorrect.

Resolved Caveats—Cisco IOS Release 12.2(33)SCD5

Bug ID	Description
CSCsw63003	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.
CSCtd15349	The show cable subscriber-usage command information is not displayed for a cable modem when it is moved to another interface through load balancing
CSCtd26295	The debug output to the terminal is truncated when the logging discriminator is enabled.
CSCtd70118	The Cisco uBR10012 router with PRE4 pauses indefinitely when the interrupts are disabled for 1000 to 2300 ms.

Bug ID	Description
CSCte01366	The protect Cisco uBRMC20X20 line card with a 0X20 license restarted with an error message after removing a member slot in the line card redundancy configuration.
CSCte57944	The results of the command "verify /md5" return inconsistent results when the image is saved on an external flash disk.
CSCte96459	The Cisco UBR-MC20X20V cable line card on the Cisco CMTS running Cisco IOS Release 12.2(33)SCC3 crashes due to Hot Standby Connection-to-Connection Protocol (HCCP) assert failure.
CSCtf52143	A Cisco uBR-MC20X20V cable line card may experience a silent reload without any crashinfo file.
CSCtf57509	The license modify priority command does not enable the evaluation license.
CSCtf68413	The downstream service flow counter is cleared when a modem drops offline even if the Cisco CMTS is configured with the cable primary-sflow-qos11 keep all command.
CSCtf89823	The SNMP query, ccwbrFChannelMpegPkts, for downstream RF channels does not return any result.
CSCtg12222	The DOCSIS 3.0 cable modems may come online in narrowband mode.
CSCtg12263	Some warning messages related to load balancing need to be listed as error messages.
CSCtg30528	The Cisco CMTS router takes a long time to complete the addition of extended access control list (ACL) entries.
CSCtg48066	Reprogramming the Blaze field-programmable gate array (FPGA) fails on the DOCSIS 24-RF channel SPA.
CSCtg48495	A multicast service flow admission failure occurred on the Cisco UBR10012 router for insufficient bandwidth, although the interface has sufficient bandwidth to admit the service flow.
CSCtg65255	The SNMP MIB Object entPhysicalVendorType and entPhysicalModelName display wrong output for Cisco Wideband SPA.
CSCtg73667	The Cisco Wideband SPA and the Cisco SIP-600 SIP crashed due to a watchdog reset and automatically reloaded.
CSCtg79921	InterProcess Communication (IPC) sending fails when IP security is configured.
CSCtg80103	High memory consumption by IPDR_EXP_PROC process when Internet Protocol Data Records (IPDR) is configured and an unknown collector tries to connect.
CSCtg83868	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.
CSCtg84288	Line card does not boot successfully after PRE switchover.
CSCtg88052	The following message is seen on the Cisco CMTS after shutting down a Gigabit Ethernet (GE) interface even if the XFP/SFP is not removed:
CSCtg89664	During Cisco CMTS startup the following error message is observed on standby PRE: <pre>“%UBR10K_REDUNDANCY-4-RP_HA_STDBY_INCONSISTENT: Standby PRE dropping inconsistent sync messages, Error count 1. 5/1 REMOTE BOARD not inserted.”</pre>

Bug ID	Description
CSCtg92199	The Support for IfMIB is added for CMTS bundle IPv6 subinterface.
CSCtg97973	Configuration changes made on the Cisco UBR-MC20X20V cable interface line card are not applied to the protect card.
CSCth01896	Multiprotocol Label Switching (MPLS) CPE cannot be pinged and loses IP connectivity.
CSCth03398	The standby PRE crashes when the issu abortversion reload command is executed.
CSCth09331	Cable Modem goes offline after line card switchover on MAC Domain with SCDMA and spectrum management configured.
CSCth10629	It takes a long time to get SNMP MIB object ccqmCmtsIfBwUtilEntry when CMTS contains many cable interface line cards.
CSCth11377	Cable interface line card is powered off after PRE switchover due to PXF crash
CSCth12362	Incorrect Time-Length-Value (TLV) length is received on the Route Processor (RP).
CSCth20234	During an ISSU-SS operation when the ISSU ABORTVERSION command is executed, the system rejects the command until a different version is attempted.
CSCth22572	Spectrum MIB is not supported for Multiple Transmit Channel (MTC) cable modem.
CSCth25715	Some Wideband Cable Modems (WCMs) do not get w-online after reloading Cisco CMTS.
CSCth28043	The output of the SNMP MIBs ccacUsRevEntry and ccacDsRevEntry is displayed after a long time.
CSCth31143	The show inventory command on a PRE-2 with a 64MB flashdisk wrongly displays flashdisk size as 128MB.
CSCth31946	A brief multicast packet loss is observed after an IGMPv3 leave command is executed with multiple IGMPv3 hosts in the same mulitcast group on a Cisco CMTS with the Cisco UBR-MC20X20V cable line card.
CSCth36030	System Event Archive (SEA) process accesses the boot disk even when it is disabled.
CSCth43735	Layer 3 traffic does not flow from an interface of the 5-Port Gigabit Ethernet Shared Port Adapter until a reload of the SPA, SIP, or chassis occurs.
CSCth50271	Wideband cable modems with remote SPA downstream channels configured go offline after a line card or PRE switchover.
CSCth52908	The IPC-5- WATERMARK and UBR10K-3-QUEUEFULL messages are repeatedly displayed on the Cisco uBR10012 router.
CSCth54817	The static multicast group configuration on the integrated cable interfaces is not synchronized after a line card switchover.
CSCth61055	The issu linecard loadversion command was rejected while performing an in-service software upgrade (ISSU) single step upgrade.
CSCth61850	Memory leak is observed on the Cisco uBR10012 router with multicast service flows configured.

Bug ID	Description
CSCth62056	The docsIfCmtsDownChnlCtrExtTotalBytes MIB object does not return the expected value for integrated cable interfaces on the Cisco UBR-MC20X20V line card.
CSCth74900	The cable modem is stuck in reject (pk) state when two certificates of the same manufacturer are loaded on the line card.
CSCth75743	An incorrect upstream packet filter group is set as a media terminal adapter (MTA) when upstream service flows are setup for voice calls.
CSCth86975	ARP entries with same bundle MAC are stored in the standby PRE when they are added to the Cisco CMTS.
CSCth90620	Unable to poll individual object identifiers (OID) for the first entry of ciscoEnvMonTemperatureStatusValue MIB object using SNMP requests.
CSCth95931	The Cisco CMTS may crash after a MAXHOST error message when cable modem max-cpe is configured, or when the cable modem <IP> max-hosts command is executed for a cable modem.
CSCti09242	The "input error" counter under cable interface increases rapidly.

Open Caveats—Cisco IOS Release 12.2(33)SCD4

Bug ID	Description
CSCsi75761	Rate-limiting of ICMP unreachable messages is larger than configured when Parallel Express Forwarding (PXF) is configured on the Cisco uBR10012 router.
CSCsz36328	Cable modems remain in online(pk) and expired states after cable privacy mandatory command is executed.
CSCsz49382	Cable modems do not respond to Layer 3 pings.
CSCsz98503	A time delay of a few minutes occurs when multiple cable modems go off on a random upstream.
CSCta05835	Entries in the docsBpi2CmtsMulticastObjects MIB are duplicated after a line card revertback.
CSCta16724	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.
CSCta27366	The Cisco uBR10012 router's PRE CPU utilization rises to 100% when the FPGA on the Wideband SPAs plugged into a Cisco SIP-600 card are being upgraded.
CSCta38298	An active PRE module fails over to the secondary module reporting the following error message: ACTIVE RP WATCHDOG TIMEOUT TRIGGERED
CSCtb74904	The service flow counter displays wrong values on the Cisco uBR10012 router after a PRE module switchover.
CSCtc27601	Unable to set session-range for source specific multicast (SSM) group configuration.
CSCtc62096	Dynamic multicast service flow and reserved bandwidth exist even after the removal of the multicast QoS (MQoS) configuration from the second bonding group.

Bug ID	Description
CSCtd15349	The show cable subscriber-usage command information is not displayed for a cable modem when it is moved to another interface through load balancing
CSCtd24347	The Generic Routing Encapsulation (GRE) tunnel does not forward traffic.
CSCtd26295	The debug output to the terminal is truncated when the logging discriminator is enabled.
CSCtd30002	Configuring the 5X1 Gigabit Ethernet port is not possible after swapping SPAs
CSCtd43242	An IPC timeout could lead to a crash on the Cisco uBR10-MC5X20H line card.
CSCtd48609	The ccm ipv6_address res-counts command clears the receive channel sets (RCS) for all cable modems instead of a specified cable modem.
CSCtd69497	Static groups and sessions are not created when static multicast groups and source addresses exist in a cable modem configuration file.
CSCtd70118	The Cisco uBR10012 router with PRE4 pauses indefinitely when the interrupts are disabled for 1000 to 2300 ms.
CSCtd71335	Memory leak is observed on a Cisco uBR10012 and a Cisco router when the cable modem is reset after a reservation is created using Resource Reservation Protocol (RSVP).
CSCtd90278	The Wideband SPA does not perform Address Resolution Protocol (ARP) after the failure of the active port.
CSCtd90685	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.
CSCtd90790	The line card crashes when a cable modem configuration file with the Nominal-GrantInterval value is set to less than 1000.
CSCtd97055	Tracebacks occur while toggling IPv6 on and off on the customer premises equipment (CPE).
CSCte01366	The protect Cisco uBRMC20X20 line card with a 0X20 license restarted with an error message after removing a member slot in the line card redundancy configuration.
CSCte07582	The upstream-service-group is removed from the MAC domain after the line card and PRE module switchover.
CSCte09146	PRC_CONFIG_CHANGE is returned instead of PRC_CONFIG_NO_CHANGE when the cable admission-control ds-bandwidth and cable admission-control us-bandwidth commands are executed.
CSCte10684	The status of the integrated cable interface or the cable interface changes to "Down" when the status of the relative bundle interface is set to "Down" and the CMTS is reloaded.
CSCte19017	The CPU utilization of the IGMP Input Process is very high while running simulation test patterns.
CSCte36746	An error message was flagged when the Cisco uBR10012 router tried to overwrite the ARP entry.
CSCte40466	A bus error may occur on a Cisco uBR10012 router when a traceback displays that the SNMP getNext query is in progress for the MIB object docsIf3CmtsCmReg-StatusEntry.

Bug ID	Description
CSCte42876	The CMTS may stop forwarding traffic when it receives a broadcast packet or a IP packet with multicast VPN (MVPN) multicast distribution tree (MDT) options set.
CSCte43004	Modems with a shaping rate configured cannot share the bandwidth according to their weights.
CSCte43870	The admission control bucket array overflows and may corrupt the memory adjacent to the admission control array.
CSCte49359	The output of the show interface service flow counter command displays an incorrect result when two group configurations (GCs) are configured with the same session range, but with a different type of service (ToS) and group QoS configuration (GQC).
CSCte51361	Narrowband cable modems are dropped offline during an In-Service Software Upgrade (ISSU).
CSCte55906	Some downstream channels may come up as rf-shutdown when a Cisco uBR-MC20X20V line card should be replaced or Return Material Authorization (RMA) is required.
CSCte62448	DOT 1Q Layer 2 VPN traffic counters do not increment when Layer 2 VPN traffic flows through the Cisco CMTS.
CSCte63132	When any service class configuration is changed, a CPU spike on the Route Processor (RP) is observed.
CSCte64393	The ESR-PRE2 card crashes after the Cisco uBR10-MC5X20H-X module crashes.
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.
CSCte72062	The IP address of the RF switch is not refreshed after executing the ip host rfs-1 ip address command.
CSCte79637	The Cisco CMTS may not reject the registration request (REG-REQ) when the cable modem configuration file contains both IPv4 fields (other than TCP or UDP source or destination ports) and IPv6 fields in one DOCSIS QoS classifier.
CSCte84191	There is a mismatch of the BPI index between the cable line card and the remote SPA when a redundancy is not configured on the line card and the guardian line card is rebooted.
CSCte85016	Rollback fails for the cable admission-control us-bandwidth bucket-no minor major exclusive command
CSCte90166	The show cable modulation-profiles command displays the modulation profiles for the for the Cisco uBR10-MC5X20H line card.
CSCte99379	The cable admission-control ds-bandwidth/us-bandwidth command results in spurious memory access traceback.
CSCtf06267	An IPv6 CPE cannot communicate with the Cisco CMTS after the ND cache is cleared.
CSCtf09375	The MAC domain cable interface is configured to shutdown after the card has been powered off with the hw-module <subslot> command. However, when the card is powered on by the no hw-module <subslot> command, the shutdown configuration is missing when the interface comes up.
CSCtf19518	The output of docsIFCMtsModulationTable MIB and the show cable modulation-profile verbose command is inconsistent.

Bug ID	Description
CSCtf20370	When the line card is reverted from the protect mode to the working mode, it crashes the PRE and the working line card.
CSCtf22188	QoS group configurations accepts a ToS value of 256 through SNMP even though the valid range is 0 to 255.
CSCtf24983	Incrementing of Downstream Channel Descriptor (DCD) counters stop for integrated cable interfaces on OIR of the line card.
CSCtf26326	When configuring the Cisco CMTS with ISIS, the internal IPC Ethernet address 127.x.x.x is advertised even when no service internal is configured. Also, in this case, the IPC interface cannot be configured by the end user.
CSCtf28287	Continuous "Nickel10G" error is logged on the PRE console of the Cisco CMTS.
CSCtf38065	The PRE module crashes due to a collision between the SEA and DOSFS processes
CSCtf51515	AES keys are incorrectly read while the hardware and software information is incorrectly displayed.
CSCtf53847	A cable modem with a UGS flow lags behind due to inconsistent packet transmission and request for a Q1 bit may not be processed.
CSCtf54880	Invalid memory action (malloc) is observed on the Cisco CMTS console when the Cisco CMTS has been idle for an extended period of time.
CSCtf57372	The "IPv6 lookup addr in host has host pointing to freed memory" error message is displayed on the Cisco CMTS.
CSCtf57509	The license modify priority command does not enable the evaluation license.
CSCtf59785	The output of the show interface sid counter verbose command does not display the correct status (reset) of the codeword counter while the output of the show cable modem verbose command displays that the codeword counter is reset.
CSCtf63729	An IPv6 customer premise equipment (CPE) fails to get an IP address when it is connected to an IPv4 cable modem.
CSCtf68413	The downstream service flow counter is cleared when a modem drops offline even if the Cisco CMTS is configured with the cable primary-sflow-qos11 keep all command.
CSCtf73047	The show pxf cpu statistics security interface command displays the same information for every interface.
CSCtf76282	If a dual-stack is CPE online, the clear cable host x.x.x command causes the corresponding line card to crash.
CSCtf76524	An IPv6 modem moved into a new MAC Domain that is configured with the cable ip-init ipv4 command, still stays online.
CSCtf79314	There are duplicate DSID entries allocated to the same session on the same interface.
CSCtf79419	The service Identifier (SID) displays "zero" for multicast Baseline Privacy (BPI) sessions after a line card switchover.
CSCtf81039	The CPE entries are displayed even after the CPE is disconnected from the cable modem.
CSCtf84980	Overlapping downstream channel IDs in a MAC domain cause conflict in the configuration, thus causing some downstream channels to become unusable.
CSCtf85427	Memory leak occurs when more than 21 profiles are configured in a policy map.

Bug ID	Description
CSCtf85500	The cable modem on the logical channel goes offline after a line card switchover.
CSCtf85532	The Cisco DPC3000 cable modem rejects dynamic bonding change request (DBC-REQ).
CSCtf88832	Traceback occurs when a cable modem is reset.
CSCtf89823	The SNMP query, ccwbrfChannelMpegPkts, for downstream RF channels does not return any result.
CSCtf90283	The show depi command returns a traceback error on the Cisco uBR10012 router.
CSCtf90859	Memory allocation failure is observed on Cisco routers after fast channel change with dynamic multicast.
CSCtf98939	The show cable modem ipv6 command does not display the IPv6 stack address.
CSCtf99414	The show controller command shall display BPI information for UBR10-MC20X20 line cards.
CSCtf99712	An error occurs when the line cards are powered on which prevents the cable modems to come online.
CSCtg00424	DHCPv6 SOLICIT messages are dropped by the Cisco CMTS when a static IPv4 CPE attempts to get a dual-stack IP address.
CSCtg00460	The cable filter matching behavior is different between the route processor and the toaster.
CSCtg01386	The Cisco CMTS does not drop invalid IPv6 packets with loopback source address.
CSCtg02818	Memory leak is seen after running PacketCable Multimedia (PCMM) calls for more than 12 hours.
CSCtg03087	The "spectrum-mgr" assigns frequency to an upstream interface in shutdown state. The show cable spectrum-group displays incorrect results.
CSCtg10082	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.
CSCtg12222	The DOCSIS 3.0 cable modems may come online in narrowband mode.
CSCtg12263	Some warning messages related to load balancing need to be listed as error messages.
CSCtg14992	When a cable modem sends the ICMPv6 echo request with zero hop limit to a cable interface, the ICMPv6 echo reply is returned.
CSCtg18963	Error messages are displayed when the dual-stack CPE IPv6 modem tries to come online.
CSCtg21793	Maximum Transmission Unit (MTU) size is not inherited by the subinterfaces on the Gigabit Ethernet VLAN.
CSCtg23313	Wideband modems moving from reject (pk) to online (pt) do not complete the Baseline Privacy Interface (BPI) negotiation.
CSCtg25392	IPv4 TCP/UDP packets matches the downstream classifier that is used for IPv6 TCP/UDP packets.
CSCtg30528	The Cisco CMTS router takes a long time to complete the addition of extended access control list (ACL) entries.
CSCtg33421	The output of show cable modem ipv6 cpe command displays many global IPv6 addresses.

Bug ID	Description
CSCtg46412	The output of the show cable modem x.x.x cpe command does not display the static IPv4 address of the cable modem.
CSCtg46479	The message "REQGRP-6-UNKLCREQ: Received unknown IPC request (50)" is seen on uBR10012 router log periodically. This message is seen when encrypted multicast traffic is used along with a Cisco UBR-MC20X20V cable line card in slot 5, and a remote SPA as a downstream channel.
CSCtg48066	Reprogramming the Blaze field-programmable gate array (FPGA) fails on the DOCSIS 24-RF channel SPA.
CSCtg48495	A multicast service flow admission failure occurred on the Cisco UBR10012 router for insufficient bandwidth, although the interface has sufficient bandwidth to admit the service flow.
CSCtg48989	Inconsistent IPv6 CPE data is displayed in the output of the show running-config command.
CSCtg49121	Tracebacks are seen from the AToM Manager when the clock is set to an earlier time and date while unprovisioning the virtual channel.
CSCtg49184	The output of the show hccp event-history command displays incorrect error information.
CSCtg49784	Traceback is observed after the cable modem is shifted from the Cisco uBR10-MC5X20 line card to the guardian Cisco UBR-MC20X20V line card.
CSCtg50212	CPU spike are observed on the Route Processor during FPD image upgrade.
CSCtg52567	The show running-config command displays the "penalty-period 10080" command when the default value of 10080 is configured.
CSCtg55865	The PRE4 module continuously logs ironbus fault messages when the line card is reboots after a line card crash.
CSCtg65255	The SNMP MIB Object entPhysicalVendorType and entPhysicalModelName display wrong output for Cisco Wideband SPA.
CSCtg65851	An unscheduled reload of the router occurs when the Cisco SIP- 600 SIP is installed to a slot provisioned for a the Cisco Wideband SIP.
CSCtg67080	Error message "%Error: The LC 5/1 is Protect. Forbid to add its US into FN 5" is observed after Cisco CMTS boots up.
CSCtg68924	"Encountered TBD2 code in cmts_bundle_ipv6_addr" message is observed on the Cisco CMTS console when IPv6 is provisioned on a bundle sub-interface.
CSCtg71590	Traceroute does not include differentiated services code point (DSCP)/TOS precedence bits in all routing configurations.
CSCtg72650	When a CPE has multiple IP addresses configured to a single MAC address, all except one of the IP addresses become unreachable after two PRE module switchovers.
CSCtg72675	The CMTS ignores the static multicast cable modem interface mask settings in cable modem configuration file.
CSCtg73720	A high CPU utilization is observed on Cisco CMTS while running simulation test patterns.
CSCtg76834	Error message "... %UBR10000-3-NOMAC: Cannot allocate MAC address for interface ..." is observed after the "shutdown" and "no shutdown" of the cable interface on the Cisco uBR10012 router with Cisco UBR-MC20X20V line card.

Bug ID	Description
CSCtg77372	Error message "HCCP_CFG_FAIL: hccp_parse_config" is seen on the Cisco CMTS when the cable upstream minislot-size command is executed.
CSCtg78358	The protect line card crashed after performing a manual switchover from working Cisco uBR10-MC5x20H line card to the protect line card.
CSCtg79921	InterProcess Communication (IPC) sending fails when IP security is configured.
CSCtg80103	High memory consumption by IPDR_EXP_PROC process when Internet Protocol Data Records (IPDR) is configured and an unknown collector tries to connect.
CSCtg81535	The debug code needs to be enhanced in order to capture the cause for bad timing offset. It does not have any impact on the functionality.
CSCtg83241	Cable modems (CM) configured with Early Authentication and Encryption (EAE) cannot be pinged even if they are in UB online (pt) state.
CSCtg83868	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.
CSCtg84288	Line card does not boot successfully after PRE switchover.
CSCtg88052	The following message is seen on the Cisco CMTS after shutting down a Gigabit Ethernet (GE) interface even if the XFP/SFP is not removed:
CSCtg89197	System and IO Memory Leak may cause fragmentation warning after repeated configuration change of the cable upstream upstream-index max-logical-chans or cable upstream max-ports num-ports commands.
CSCtg89795	Spectrum management does not work on the Cisco UBR-MC20X20V line card when the bandwidth is set to EuroDOCSIS frequency range.
CSCtg90865	A non-primary Multicast (MC) interface is selected for multicast forwarding.
CSCtg93115	Tracebacks are seen when the show pxf cable feature-table bundle x command is executed.
CSCtg95319	Error message "cable slot/subslot/port is in a fiber node so Bundle cannot be changed" is observed when the bundle number on a Cable MAC domain interface is changed (or removed) using the cable bundle number command.
CSCth01285	Multicast traffic is not forwarded across DOCSIS Set-Top Gateway (DSG) tunnels on modular and legacy downstreams.
CSCth01896	Multiprotocol Label Switching (MPLS) CPE cannot be pinged and loses IP connectivity.

Resolved Caveats—Cisco IOS Release 12.2(33)SCD4

Bug ID	Description
CSCte96459	The Cisco UBR-MC20X20V cable line card on the Cisco CMTS running Cisco IOS Release 12.2(33)SCC3 crashes due to Hot Standby Connection-to-Connection Protocol (HCCP) assert failure.
CSCtf52143	A Cisco uBR-MC20X20V cable line card may experience a silent reload without any crashinfo file.

Bug ID	Description
CSCtg73667	The Cisco Wideband SPA and the Cisco SIP-600 SIP crashed due to a watchdog reset and automatically reloaded.
CSCth31946	A brief multicast packet loss is observed after an IGMPv3 leave command is executed with multiple IGMPv3 hosts in the same mulitcast group on a Cisco CMTS with the Cisco UBR-MC20X20V cable line card.
CSCth75743	An incorrect upstream packet filter group is set as a media terminal adapter (MTA).
CSCth86975	ARP entries with same bundle MAC are stored in the standby PRE when they are added to the Cisco CMTS.
CSCth95931	The Cisco CMTS may crash after a MAXHOST error message when cable modem max-cpe is configured, or when the cable modem <IP> max-hosts command is executed for a cable modem.

Open Caveats—Cisco IOS Release 12.2(33)SCD3

Bug ID	Description
CSCsi75761	Rate-limiting of ICMP unreachable messages is larger than configured when Parallel Express Forwarding (PXF) is configured on the Cisco uBR10012 router.
CSCsz36328	Cable modems remain in online(pk) and expired states after cable privacy mandatory command is executed.
CSCsz49382	Cable modems do not respond to Layer 3 pings.
CSCsz55288	Alignment traceback messages are found when the show memory leak res user and show buffer usage commands are executed.
CSCsz98503	A time delay of a few minutes occurs when multiple cable modems go off on a random upstream.
CSCta05835	Entries in the docsBpi2CmtsMulticastObjects MIB are duplicated after a line card revertback.
CSCta16724	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.
CSCta27366	The Cisco uBR10012 router's PRE CPU utilization rises to 100% when the FPGA on the Wideband SPAs plugged into a Cisco SIP-600 card are being upgraded.
CSCta38298	An active PRE module fails over to the secondary module reporting the following error message: ACTIVE RP WATCHDOG TIMEOUT TRIGGERED
CSCta77009	A Cisco router may report memory leaks with 319 dual-stack CPE devices, each running the FTP GET and FTP PUT requests
CSCtb74904	The service flow counter displays wrong values on the Cisco uBR10012 router after a PRE module switchover.
CSCtc27601	Unable to set session-range for source specific multicast (SSM) group configuration.
CSCtc44487	Router crashes when a Cisco UBR-MC20X20V line card is added or removed from the redundancy configuration.

Bug ID	Description
CSCtc62096	Dynamic multicast service flow and reserved bandwidth exist even after the removal of the multicast QoS (MQoS) configuration from the second bonding group.
CSCtd14220	Tracebacks is observed during the automatic upgrade of DOCSIS Timing, Communication, and Control (DTCC) card firmware.
CSCtd15349	The show cable subscriber-usage command information is not displayed for a cable modem when it is moved to another interface through load balancing
CSCtd23429	High latency (measured between the join and the multicast packets forwarded) is observed during Video over DOCSIS (VDOC) channel changes.
CSCtd24347	The Generic Routing Encapsulation (GRE) tunnel does not forward traffic.
CSCtd26295	The debug output to the terminal is truncated when the logging discriminator is enabled.
CSCtd30002	Configuring the 5X1 Gigabit Ethernet port is not possible after swapping SPAs
CSCtd43242	An IPC timeout could lead to a crash on the Cisco uBR10-MC5X20H line card.
CSCtd48609	The ccm ipv6_address rcs-counts command clears the receive channel sets (RCS) for all cable modems instead of a specified cable modem.
CSCtd62264	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.
CSCtd69497	Static groups and sessions are not created when static multicast groups and source addresses exist in a cable modem configuration file.
CSCtd70118	The Cisco uBR10012 router with PRE4 pauses indefinitely when the interrupts are disabled for 1000 to 2300 ms.
CSCtd71335	Memory leak is observed on a Cisco uBR10012 and a Cisco router when the cable modem is reset after a reservation is created using Resource Reservation Protocol (RSVP).
CSCtd75934	The Service Independent Intercept (SII) MAC intercepts include management packets on the Cisco uBR10012 router.
CSCtd90278	The Wideband SPA does not perform Address Resolution Protocol (ARP) after the failure of the active port.
CSCtd90685	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.
CSCtd90790	The line card crashes when a cable modem configuration file with the Nominal-GrantInterval value is set to less than 1000.
CSCtd97055	Tracebacks occur while toggling IPv6 on and off on the customer premises equipment (CPE).
CSCte01366	The protect Cisco uBRMC20X20 line card with a 0X20 license restarted with an error message after removing a member slot in the line card redundancy configuration.
CSCte07582	The upstream-service-group is removed from the MAC domain after the line card and PRE module switchover.
CSCte09146	PRC_CONFIG_CHANGE is returned instead of PRC_CONFIG_NO_CHANGE when the cable admission-control ds-bandwidth and cable admission-control us-bandwidth commands are executed.

Bug ID	Description
CSCte10684	The status of the integrated cable interface or the cable interface changes to "Down" when the status of the relative bundle interface is set to "Down" and the CMTS is reloaded.
CSCte19017	The CPU utilization of the IGMP Input Process is very high while running simulation test patterns.
CSCte36746	An error message was flagged when the Cisco uBR10012 router tried to overwrite the ARP entry.
CSCte40466	A bus error may occur on a Cisco uBR10012 router when a traceback displays that the SNMP getNext query is in progress for the MIB object docsIf3CmtsCmReg-StatusEntry.
CSCte42876	The CMTS may stop forwarding traffic when it receives a broadcast packet or a IP packet with multicast VPN (MVPN) multicast distribution tree (MDT) options set.
CSCte43004	Modems with a shaping rate configured cannot share the bandwidth according to their weights.
CSCte43870	The admission control bucket array overflows and may corrupt the memory adjacent to the admission control array.
CSCte49359	The output of the show interface service flow counter command displays an incorrect result when two group configurations (GCs) are configured with the same session range, but with a different type of service (ToS) and group QoS configuration (GQC).
CSCte51361	Narrowband cable modems are dropped offline during an In-Service Software Upgrade (ISSU).
CSCte55906	Some downstream channels may come up as rf-shutdown when a Cisco uBR-MC20X20V line card should be replaced or Return Material Authorization (RMA) is required.
CSCte62448	DOT 1Q Layer 2 VPN traffic counters do not increment when Layer 2 VPN traffic flows through the Cisco CMTS.
CSCte63132	When any service class configuration is changed, a CPU spike on the Route Processor (RP) is observed.
CSCte64393	The ESR-PRE2 card crashes after the Cisco uBR10-MC5X20H-X module crashes.
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.
CSCte72062	The IP address of the RF switch is not refreshed after executing the ip host rfs-1 ip address command.
CSCte73241	Downstream traffic freezes on the cable modem when service flow is installed incorrectly.
CSCte79637	The Cisco CMTS may not reject the registration request (REG-REQ) when the cable modem configuration file contains both IPv4 fields (other than TCP or UDP source or destination ports) and IPv6 fields in one DOCSIS QoS classifier.
CSCte84191	There is a mismatch of the BPI index between the cable line card and the remote SPA when a redundancy is not configured on the line card and the guardian line card is rebooted.
CSCte85016	Rollback fails for the cable admission-control us-bandwidth bucket-no minor major exclusive command

Bug ID	Description
CSCte90166	The show cable modulation-profiles command displays the modulation profiles for the for the Cisco uBR10-MC5X20H line card.
CSCte99379	The cable admission-control ds-bandwidth/us-bandwidth command results in spurious memory access traceback.
CSCtf06267	An IPv6 CPE cannot communicate with the Cisco CMTS after the ND cache is cleared.
CSCtf09375	The MAC domain cable interface is configured to shutdown after the card has been powered off with the hw-module <subslot> command. However, when the card is powered on by the no hw-module <subslot> command, the shutdown configuration is missing when the interface comes up.
CSCtf19518	The output of docsIFCMtsModulationTable MIB and the show cable modulation-profile verbose command is inconsistent.
CSCtf20370	When the line card is reverted from the protect mode to the working mode, it crashes the PRE and the working line card.
CSCtf22188	QoS group configurations accepts a ToS value of 256 through SNMP even though the valid range is 0 to 255.
CSCtf24983	Incrementing of Downstream Channel Descriptor (DCD) counters stop for integrated cable interfaces on OIR of the line card.
CSCtf26326	When configuring the Cisco CMTS with ISIS, the internal IPC Ethernet address 127.x.x.x is advertised even when no service internal is configured. Also, in this case, the IPC interface cannot be configured by the end user.
CSCtf28287	Continuous "Nickel10G" error is logged on the PRE console of the Cisco CMTS.
CSCtf38065	The PRE module crashes due to a collision between the SEA and DOSFS processes
CSCtf51515	AES keys are incorrectly read while the hardware and software information is incorrectly displayed.
CSCtf53847	A cable modem with a UGS flow lags behind due to inconsistent packet transmission and request for a Q1 bit may not be processed.
CSCtf54697	When the Cisco CMTS is configured with SID clusters and the BPI does not correctly handle the second SID cluster, then there may be layer 3 connectivity issues if the modem switches over to the second SID cluster.
CSCtf54880	Invalid memory action (malloc) is observed on the Cisco CMTS console when the Cisco CMTS has been idle for an extended period of time.
CSCtf56062	Traceback occurred when the cable interface was shut down.
CSCtf57372	The "IPv6 lookup addr in host has host pointing to freed memory" error message is displayed on the Cisco CMTS.
CSCtf57509	The license modify priority command does not enable the evaluation license.
CSCtf59785	The output of the show interface sid counter verbose command does not display the correct status (reset) of the codeword counter while the output of the show cable modem verbose command displays that the codeword counter is reset.
CSCtf63729	An IPv6 customer premise equipment (CPE) fails to get an IP address when it is connected to an IPv4 cable modem.
CSCtf68413	The downstream service flow counter is cleared when a modem drops offline even if the Cisco CMTS is configured with the cable primary-sflow-qos11 keep all command.

Bug ID	Description
CSCtf73047	The show pxf cpu statistics security interface command displays the same information for every interface.
CSCtf76282	If a dual-stack is CPE online, the clear cable host x.x.x command causes the corresponding line card to crash.
CSCtf76524	An IPv6 modem moved into a new MAC Domain that is configured with the cable ip-init ipv4 command, still stays online.
CSCtf79314	There are duplicate DSID entries allocated to the same session on the same interface.
CSCtf79419	The service Identifier (SID) displays "zero" for multicast Baseline Privacy (BPI) sessions after a line card switchover.
CSCtf80054	Some DSC service flows are no longer available after the PRE switchover is followed by the line card switchover.
CSCtf81039	The CPE entries are displayed even after the CPE is disconnected from the cable modem.
CSCtf84980	Overlapping downstream channel IDs in a MAC domain cause conflict in the configuration, thus causing some downstream channels to become unusable.
CSCtf85427	Memory leak occurs when more than 21 profiles are configured in a policy map.
CSCtf85500	The cable modem on the logical channel goes offline after a line card switchover.
CSCtf85532	The Cisco DPC3000 cable modem rejects dynamic bonding change request (DBC-REQ).
CSCtf88832	Traceback occurs when a cable modem is reset.
CSCtf89823	The SNMP query, ccwbRFChannelMpegPkts, for downstream RF channels does not return any result.
CSCtf90283	The show depi command returns a traceback error on the Cisco uBR10012 router.
CSCtf90859	Memory allocation failure is observed on Cisco routers after fast channel change with dynamic multicast.
CSCtf98939	The show cable modem ipv6 command does not display the IPv6 stack address.
CSCtf99414	The show controller command shall display BPI information for UBR10-MC20X20 line cards.
CSCtf99712	An error occurs when the line cards are powered on which prevents the cable modems to come online.
CSCtg00424	DHCPv6 SOLICIT messages are dropped by the Cisco CMTS when a static IPv4 CPE attempts to get a dual-stack IP address.
CSCtg00460	The cable filter matching behavior is different between the route processor and the toaster.
CSCtg01386	The Cisco CMTS does not drop invalid IPv6 packets with loopback source address.
CSCtg02818	Memory leak is seen after running PacketCable Multimedia (PCMM) calls for more than 12 hours.
CSCtg03087	The "spectrum-mgr" assigns frequency to an upstream interface in shutdown state. The show cable spectrum-group displays incorrect results.

Bug ID	Description
CSCtg04799	Large scale service flows triggers the log that displays the SYS-3-CPUHOG traceback due to Hot Standby Connection-to-Connection Protocol (HCCP) on Cisco UBR-MC20X20V protect line card.
CSCtg05228	The Cisco DPC3000 modem takes a long time to get to the w-online state on the Cisco UBR-MC20X20V line card with "cable privacy mandatory" command configured.
CSCtg09135	A crash was observed on the upstream scheduler on a Cisco UBR-MC20X20V line card.
CSCtg10082	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.
CSCtg12222	The DOCSIS 3.0 cable modems may come online in narrowband mode.
CSCtg12263	Some warning messages related to load balancing need to be listed as error messages.
CSCtg14992	When a cable modem sends the ICMPv6 echo request with zero hop limit to a cable interface, the ICMPv6 echo reply is returned.
CSCtg18963	Error messages are displayed when the dual-stack CPE IPv6 modem tries to come online.
CSCtg21793	Maximum Transmission Unit (MTU) size is not inherited by the subinterfaces on the Gigabit Ethernet VLAN.
CSCtg23313	Wideband modems moving from reject (pk) to online (pt) do not complete the Baseline Privacy Interface (BPI) negotiation.
CSCtg25392	IPv4 TCP/UDP packets matches the downstream classifier that is used for IPv6 TCP/UDP packets.
CSCtg25471	Memory leaks are observed on Cisco UBR-MC20X20V protect line card although, line card switchover was not performed.
CSCtg30528	The Cisco CMTS router takes a long time to complete the addition of extended access control list (ACL) entries.
CSCtg31445	A mismatch between the sequence number in blaze memory and the route processor packet count.
CSCtg33421	The output of show cable modem ipv6 cpe command displays many global IPv6 addresses.
CSCtg46412	The output of the show cable modem x.x.x cpe command does not display the static IPv4 address of the cable modem.
CSCtg46479	The message "REQGRP-6-UNKLCREQ: Received unknown IPC request (50)" is seen on uBR10012 router log periodically. This message is seen when encrypted multicast traffic is used along with a Cisco UBR-MC20X20V cable line card in slot 5, and a remote SPA as a downstream channel.
CSCtg46709	The standby PRE module crashes constantly in a loop with similar tracebacks during bootup.
CSCtg48066	Reprogramming the Blaze field-programmable gate array (FPGA) fails on the DOCSIS 24-RF channel SPA.
CSCtg48495	A multicast service flow admission failure occurred on the Cisco UBR10012 router for insufficient bandwidth, although the interface has sufficient bandwidth to admit the service flow.

Bug ID	Description
CSCtg48989	Inconsistent IPv6 CPE data is displayed in the output of the show running-config command.
CSCtg49121	Tracebacks are seen from the AToM Manager when the clock is set to an earlier time and date while unprovisioning the virtual channel.
CSCtg49184	The output of the show hccp event-history command displays incorrect error information.
CSCtg49784	Traceback is observed after the cable modem is shifted from the Cisco uBR10-MC5X20 line card to the guardian Cisco UBR10-MC20X20 line card.
CSCtg50212	CPU spike are observed on the Route Processor during FPD image upgrade.
CSCtg52567	The show running-config command displays the "penalty-period 10080" command when the default value of 10080 is configured.
CSCtg55865	The PRE4 module continuously logs ironbus fault messages when the line card is reboots after a line card crash.
CSCtg65255	The SNMP MIB Object entPhysicalVendorType and entPhysicalModelName display wrong output for Cisco Wideband SPA.
CSCtg65851	An unscheduled reload of the router occurs when the Cisco SIP- 600 SIP is installed to a slot provisioned for a the Cisco Wideband SIP.
CSCtg67080	Error message "%Error: The LC 5/1 is Protect. Forbid to add its US into FN 5" is observed after Cisco CMTS boots up.
CSCtg68924	"Encountered TBD2 code in cmts_bundle_ipv6_addr" message is observed on the Cisco CMTS console when IPv6 is provisioned on a bundle sub-interface.
CSCtg71590	Traceroute does not include differentiated services code point (DSCP)/TOS precedence bits in all routing configurations.
CSCtg72650	When a CPE has multiple IP addresses configured to a single MAC address, all except one of the IP addresses become unreachable after two PRE module switchovers.
CSCtg72675	The CMTS ignores the static multicast cable modem interface mask settings in cable modem configuration file.
CSCtg73667	The Cisco Wideband SPA and the Cisco SIP-600 SIP crashed due to a watchdog reset and automatically reloaded.
CSCtg73720	A high CPU utilization is observed on Cisco CMTS while running simulation test patterns.
CSCtg76834	Error message "... %UBR10000-3-NOMAC: Cannot allocate MAC address for interface ..." is observed after the "shutdown" and "no shutdown" of the cable interface on the Cisco uBR10012 router with Cisco UBR-MC20X20V line card.
CSCtg77372	Error message "HCCP_CFG_FAIL: hccp_parse_config" is seen on the Cisco CMTS when the cable upstream minislot-size command is executed.
CSCtg78358	The protect line card crashed after performing a manual switchover from working Cisco uBR10-MC5x20H line card to the protect line card.
CSCtg79921	InterProcess Communication (IPC) sending fails when IP security is configured.
CSCtg80103	High memory consumption by IPDR_EXP_PROC process when Internet Protocol Data Records (IPDR) is configured and an unknown collector tries to connect.

Bug ID	Description
CSCtg81535	The debug code needs to be enhanced in order to capture the cause for bad timing offset. It does not have any impact on the functionality.
CSCtg81562	When a cable modem goes offline and immediately comes back online, its timing offset value sometimes has a "!" symbol before it.
CSCtg83241	Cable modems(CM) configured with Early Authentication and Encryption (EAE) cannot be pinged even if they are in UB online (pt) state.
CSCtg83868	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.
CSCtg84288	Line card does not boot successfully after PRE switchover.
CSCtg88052	The following message is seen on the Cisco CMTS after shutting down a Gigabit Ethernet (GE) interface even if the XFP/SFP is not removed:
CSCtg89197	System and IO Memory Leak may cause fragmentation warning after repeated configuration change of the cable upstream upstream-index max-logical-chans or cable upstream max-ports num-ports commands.
CSCtg89795	Spectrum management does not work on the Cisco UBR-MC20X20V line card when the bandwidth is set to EuroDOCSIS frequency range.
CSCtg90865	A non-primary Multicast (MC) interface is selected for multicast forwarding.
CSCtg93115	Tracebacks are seen when the show pxf cable feature-table bundle x command is executed.
CSCtg95319	Error message "cable slot/subslot/port is in a fiber node so Bundle cannot be changed" is observed when the bundle number on a Cable MAC domain interface is changed (or removed) using the cable bundle number command.
CSCtg96542	High line card CPU utilization is observed for dynamic services with 500 multicast channel changes per second.
CSCth01285	Multicast traffic is not forwarded across DOCSIS Set-Top Gateway (DSG) tunnels on modular and legacy downstreams.
CSCth01896	Multiprotocol Label Switching (MPLS) CPE cannot be pinged and loses IP connectivity.

Resolved Caveats—Cisco IOS Release 12.2(33)SCD3

Bug ID	Description
CSCsr96042	Router crashes when the VPN Routing and Forwarding (VRF) configuration is changed.
CSCsz74599	Multicast traffic is not forwarded after line card switchover.
CSCta49529	An unusual "ALIGN-3-SPURIOUS" error message is displayed when the CMTS is reloaded after running the write erase command.
CSCtb73450	Start-Control-Connection-Request (SCCRQ) packets may cause tunnel to reset after digest failure.

Bug ID	Description
CSCtc04113	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.
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.
CSCtd28028	Flow control does not work on the 1-port Gigabit Ethernet half-height (ESR-HH-1GE) interface of a Cisco uBR10012 router.
CSCtd37319	The IOS reports the fan tray status first as missing, partial failure or total failure for a brief period and later reports the status as OK.
CSCtd51642	IPC tracebacks are observed in the system log when the line card crashes.
CSCtd67202	The secondary port does not become active on the Cisco uBR10012 router when Downstream External PHY Interface (DEPI) control plane is configured.
CSCtd86472	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.
CSCtd91634	The number of customer premises equipment (CPEs) displayed in the show cable modem command output is incorrect when IPv6 is enabled on the CPE.
CSCte13340	The PRE4 processor module displays a high rate of IPC errors consistently.
CSCte17479	All cable modems under a single upstream unexpectedly move to expire (pt) state on the Cisco uBR10012 router.
CSCte36453	The System Event Archive (SEA) console feature is enabled on PRE4 processor module.
CSCte36841	Cisco uBR10012 Boothelper is not compatible with older IOS images.
CSCte44947	The upstream service group (US-SG) disappears after a Route Processor switchover.
CSCte74609	All cable modems go offline when the Wideband line card crashes.
CSCte75276	After PRE switchover on Cisco uBR10012 router, an error message is displayed indicating that the IPC message received has inconsistent header data.
CSCte77042	The cable modems drop offline during switchover and revertback of the Cisco UBR-MC20X20V line card.
CSCte77426	All the line cards crash because of the Dynamic Host Configuration Protocol Daemon (DHCPD) receive process
CSCte80520	Modems cannot go the online (w-online) state after all the cable line cards are reset when more than two working line cards are configured in a Hot Standby Connection-to-Connection Protocol (HCCP) group.
CSCte91500	An error is seen when the cable modem sends malformed mac-mgmt pak to the Cisco CMTS.
CSCte93995	Packets are delayed in prioritized downstream flows, which results in delayed or no dial tone.
CSCte97922	The hardware version, software version and serial number are not displayed for UBR10-FAN-ASSY, UBR10-PWR-DC and UBR10-PWR-AC modules.

Bug ID	Description
CSCtf02278	The SCDMA US "Code per minislots" is set to 4 after configuring the "Spreading Interval frame" to 1.
CSCtf04817	A cable line card crashes when the debug cable mac-protocol command and dynamic channel change (DCC) are used.
CSCtf04993	The IPDR/SP CMTS-US-UTIL data reported is out of the specified range
CSCtf14490	The docsIf3CmtsSpectrumAnalysisMeasEntry data is not updated on a Cisco uBR10012 router.
CSCtf21117	A cpe start ipdr record is generated when only the device-class is updated for a CPE entry.
CSCtf28247	DOCSIS 3.0 cable modems go offline after the SPA GigE link detects loss of signal when fiber node is unplugged.
CSCtf39293	A traceback was observed on the Cisco router when the cable modem failed to register.
CSCtf40657	The "UBR10K_REDUNDANCY-4-RP_HA_STDBY_INCONSISTENT" error message is displayed during the online insertion and removal (OIR) when any interface on the line card being powered down is configured with spectrum management.
CSCtf48376	The Cisco CMTS crashes when the show cable modem <ip> service flow verbose command is executed several times.
CSCtf49834	CMRegStatusValue is not consistent with the RecType2 record for DOCSIS 1.0 and DOCSIS 1.1 cable modems.
CSCtf49848	The serviceOctecPassed value does not match with docsIfCmtsServiceInOctets when clear cable modem xxx reset command is executed or when dynamical service flows are observed.
CSCtf52207	Line card-to-line card internet protocol communication (IPC) does not function when line card CPU is heavily loaded.
CSCtf65153	The "tsec_tx_interrupt: WARNING transmit underrun occurred" occurs on DTCC card even when there is no underrun.
CSCtf69637	JIB downstream ring is stuck leading to excessive uniform call distribution (UCD) update error handling due to no map buffer. This affects voice calls on other upstreams on a different MAC domain.
CSCtf72353	The SFP Entity MIB entry Removal MIB object is called repeatedly when the SPA is inserted.
CSCtf74537	There are alignment issues in the envmib_temperature_trap()
CSCtf77370	The SNMP tool returns an incorrect error message when trying to set the value of the ccqmEnfRuleViolateNotifEnable MIB object.
CSCtf77798	The output of the show cable modem <interface> upstream x offline command does not display any output.
CSCtf80198	The protect card automatically becomes active due to the keepalive failure.
CSCtf80506	Multiple grants per interval (MGPI) may not work in Cisco IOS Release 12.2(33)SCB and later.
CSCtf82934	The wideband cable modems that are online cannot go w-online after a hardware reset.

Bug ID	Description
CSCtf85667	PacketCable calls would first get closed and then set up again during a line card switchover.
CSCtf92440	If temperature goes below 0 Celsius, the Cisco CMTS router would generate false temperature log against Cisco UBR-MC20X20V cable interface line card.
CSCtf93115	After a PRE switchover, the aggregate multicast service flow counter is incorrect on the Cisco uBR10012 router.
CSCtf93373	Excessive collisions and high CPU usage observed on the Cisco uBR10012 router.
CSCtf95877	Traceback occurs when performing an In-Service Software Upgrade (ISSU).
CSCtf95986	The Internet Protocol Detail Record (IPDR) topology schema does not work correctly.
CSCtf96525	The cable filter group for the multimedia terminal adapter (MTA) does not match with the device class after a PRE switchover.
CSCtf99823	The show cable modem wideband command does not display a wideband capable cable modem, if the modem is registered as a narrowband modem.
CSCtg01311	An interprocess communication (IPC) keepalive timeout on one cable interface line card may cause a timeout event on another line card.
CSCtg07854	Packets are assigned to wrong queues when the policy-map configuration is modified.
CSCtg08584	The show logging onboard command displays a wrong voltage value.
CSCtg09253	Cable modems intermittently go offline during downstream load balancing using dynamic channel change (DCC).
CSCtg09261	After a line card switchover, the wideband cable modem may lose Layer 3 connectivity.
CSCtg09730	The show inventory command does not list all compact flash cards.
CSCtg11289	The docsQos3CmtsDebugDsidStatsDsidPackets and docsQos3CmtsDebugDsidStatsDsidOctets counters are automatically cleared after the traffic is registered for the w-online modems.
CSCtg12714	PacketCable Multimedia (PCMM) gate synchronization messages are dropped on the active PRE module after clear cable modem all delete command is executed.
CSCtg13739	The Cisco UBR-MC20X20V cable interface line cards crash without generating crashinfo files.
CSCtg16255	Modems using modular interfaces on the Cisco UBR-MC20X20V line card go offline after a line card switchover.
CSCtg16637	SAMIS and IPDR generate duplicate records for each deleted multicast service flow.
CSCtg17464	Error messages are reported on SCDMA upstream channel after minislots count wraps around.
CSCtg21941	DSG tunnel-group cable dsd tg configuration command can not be configured on the bundle subinterfaces.
CSCtg23869	IPDR triggers high RP CPU utilization when entries in the service flow log table time-out, and data is written to disk.

Bug ID	Description
CSCtg26495	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.
CSCtg34604	The Cisco UBR-MC20X20 cable interface line cards in multiple slots allow only 50 per cent of traffic load.
CSCtg36302	Debug support is added for JIB2.
CSCtg37467	The docsLoadbal3GrpStatusChgOverSuccess counters cannot be increased in DOCSIS 3.0 General Load Balancing Group (GLBG).
CSCtg39286	Cable line card crashes because of IP header (IPH) length error check.
CSCtg40023	MAC Rewrite Indices (MRI) are different on the active and standby PRE modules; the standby PRE module has more entries than the active PRE module.
CSCtg40581	Missing entries when polling the SNMP MIB object ifStackStatus.
CSCtg46662	Alignment traceback is seen when the show cable fiber association command is executed.
CSCtg48985	DOCSIS Set-Top Gateway (DSG) multicast static joins are not created in the bundle interface.
CSCtg49064	Hot Standby Connection-to-Connection Protocol (HCCP) group configuration cannot be removed when the working line card is locked.
CSCtg49195	The cable modem database is corrupted and the modems go offline after a switchover as the database is not synchronized between the Route Processor and the line card.
CSCtg51537	Line card-to-line card internet protocol communication (IPC) is broken because of memory corruption.
CSCtg52140	The cable modem database is corrupted and the modems go offline after a switchover as the database is not synchronized between the Route Processor and the line card.
CSCtg61717	Dynamic Channel Change (DCC) may now work when enabled in a protect Cisco UBR-MC20X20V and Cisco uBR10-MC5X20 line card setup.
CSCtg61848	The RF channels per controller on the protect Cisco UBR-MC20X20V line card are in no rf-shutdown state after a switchover of the working Cisco uBR10-MC5X20 line card.
CSCtg67108	The show license commands fail to execute on the Route Processor.
CSCtg72914	Cisco UBR-MC20X20V line card preconfig does not take effect when the Cisco CMTS router boots up.
CSCtg80187	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.
CSCtg84725	Layer 1 watchdog timeout is observed on a Cisco UBR-MC20X20V line card.
CSCtg87028	The Cisco uBR10-MC5X20H line card crashes when M-CMTS configuration and DOCSIS load balancing groups are present.
CSCth03415	A PRE crash is observed when a large number of voice calls are ongoing.

Open Caveats—Cisco IOS Release 12.2(33)SCD2

Bug ID	Description
CSCsv63445	The clear cable modem command does not reset the modular-host tables.
CSCsz49382	Cable modems do not respond to Layer 3 pings.
CSCsz55288	Alignment traceback messages are found when the show memory leak res user and show buffer usage commands are executed.
CSCsz69359	Memory leak occurs on a line card due to MAC parser with overnight PC calls.
CSCsz74599	Multicast traffic is not forwarded after line card switchover.
CSCsz98503	A time delay of a few minutes occurs when multiple cable modems go off on a random upstream.
CSCta05835	Entries in the docsBpi2CmtsMulticastObjects MIB are duplicated after a line card revertback.
CSCta16724	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.
CSCta27366	The Cisco uBR10012 router's PRE CPU utilization rises to 100% when the FPGA on the Wideband SPAs plugged into a Cisco SIP-600 card are being upgraded.
CSCta38298	An active PRE module fails over to the secondary module reporting the following error message: ACTIVE RP WATCHDOG TIMEOUT TRIGGERED
CSCta49529	An unusual "ALIGN-3-SPURIOUS" error message is displayed when the CMTS is reloaded after running the write erase command.
CSCta72172	Overlapping frequency is observed in a fiber-node when spectrum-group and fiber-node are configured across multiple line cards.
CSCtb74904	The service flow counter displays wrong values on the Cisco uBR10012 router after a PRE module switchover.
CSCtc04113	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.
CSCtc27601	Unable to set session-range for source specific multicast (SSM) group configuration.
CSCtc44487	Router crashes when a Cisco UBR-MC20X20V line card is added or removed from the redundancy configuration.
CSCtc59089	The cable line card crashes with PacketCable Multimedia (PCMM) voice call testing.
CSCtc62096	Dynamic multicast service flow and reserved bandwidth exist even after the removal of the multicast QoS (MQoS) configuration from the second bonding group.
CSCtd14220	Tracebacks is observed during the automatic upgrade of DOCSIS Timing, Communication, and Control (DTCC) card firmware.
CSCtd15349	The show cable subscriber-usage command information is not displayed for a cable modem when it is moved to another interface through load balancing
CSCtd20903	The cable clock dti command does not work occasionally when one of the two DTCC cards in the CMTS system is unplugged during run time.

Bug ID	Description
CSCtd23429	High latency (measured between the join and the multicast packets forwarded) is observed during Video over DOCSIS (VDOC) channel changes.
CSCtd24347	The Generic Routing Encapsulation (GRE) tunnel does not forward traffic.
CSCtd26295	The debug output to the terminal is truncated when the logging discriminator is enabled.
CSCtd28028	Flow control does not work on the 1-port Gigabit Ethernet half-height (ESR-HH-1GE) interface of a Cisco uBR10012 router.
CSCtd30002	Configuring the 5X1 Gigabit Ethernet port is not possible after swapping SPAs
CSCtd34173	An error is reported through the bug interface when the Stats, PHS, or BPI index tables fill up for the Cisco uBR-MC20X20V line card.
CSCtd43242	An IPC timeout could lead to a crash on the Cisco uBR10-MC5X20H line card.
CSCtd48609	The ccm ipv6_address rcs-counts command clears the receive channel sets (RCS) for all cable modems instead of a specified cable modem.
CSCtd51642	IPC tracebacks are observed in the system log when the line card crashes.
CSCtd54315	The number of the customer premises equipment (CPE) displayed in the show cable modem and show cable modem registered command output does not match with the number of CPEs displayed in the show cable modem cpe and show cable modem ipv6 cpe command output.
CSCtd65834	A message indicating that duplicate frequencies are configured on the integrated cable controllers is not displayed during the migration of the Cisco uBR10-MC5X20H line card to the Cisco UBR-MC20X20V line card.
CSCtd67202	The secondary port does not become active on the Cisco uBR10012 router when Downstream External PHY Interface (DEPI) control plane is configured.
CSCtd69497	Static groups and sessions are not created when static multicast groups and source addresses exist in a cable modem configuration file.
CSCtd70118	The Cisco uBR10012 router with PRE4 pauses indefinitely when the interrupts are disabled for 1000 to 2300 ms.
CSCtd71335	Memory leak is observed on a Cisco uBR10012 and a Cisco router when the cable modem is reset after a reservation is created using Resource Reservation Protocol (RSVP).
CSCtd73908	Excessive unicast and multicast packet loss is seen after a Wideband SPA switchover.
CSCtd90278	The Wideband SPA does not perform Address Resolution Protocol (ARP) after the failure of the active port.
CSCtd90685	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.
CSCtd90790	The line card crashes when a cable modem configuration file with the NominalGrantInterval value is set to less than 1000.
CSCtd91634	The number of customer premises equipment (CPEs) displayed in the show cable modem command output is incorrect when IPv6 is enabled on the CPE.
CSCtd97055	Tracebacks occur while toggling IPv6 on and off on the customer premises equipment (CPE).

Bug ID	Description
CSCte01366	The protect Cisco uBRMC20X20 line card with a 0X20 license restarted with an error message after removing a member slot in the line card redundancy configuration.
CSCte07582	The upstream-service-group is removed from the MAC domain after the line card and PRE module switchover.
CSCte09146	PRC_CONFIG_CHANGE is returned instead of PRC_CONFIG_NO_CHANGE when the cable admission-control ds-bandwidth and cable admission-control us-bandwidth commands are executed.
CSCte10684	The status of the integrated cable interface or the cable interface changes to "Down" when the status of the relative bundle interface is set to "Down" and the CMTS is reloaded.
CSCte13340	The PRE4 processor module displays a high rate of IPC errors consistently.
CSCte17479	All cable modems under a single upstream unexpectedly move to expire (pt) state on the Cisco uBR10012 router.
CSCte19017	The CPU utilization of the IGMP Input Process is very high while running simulation test patterns.
CSCte26972	The cable modems cannot get online until the Cisco uBR10012 router reloads, when the cable dynamic-secret mark command is executed.
CSCte36453	The System Event Archive (SEA) console feature is enabled on PRE4 processor module.
CSCte36746	An error message was flagged when the Cisco uBR10012 router tried to overwrite the ARP entry.
CSCte40466	A bus error may occur on a Cisco uBR10012 router when a traceback displays that the SNMP getNext query is in progress for the MIB object docsIf3CmtsCmReg-StatusEntry.
CSCte42876	The CMTS may stop forwarding traffic when it receives a broadcast packet or a IP packet with multicast VPN (MVPN) multicast distribution tree (MDT) options set.
CSCte43004	Modems with a shaping rate configured cannot share the bandwidth according to their weights.
CSCte43870	The admission control bucket array overflows and may corrupt the memory adjacent to the admission control array.
CSCte44947	The upstream service group (US-SG) disappears after a Route Processor switchover.
CSCte49359	The output of the show interface service flow counter command displays an incorrect result when two group configurations (GCs) are configured with the same session range, but with a different type of service (ToS) and group QoS configuration (GQC).
CSCte51361	Narrowband cable modems are dropped offline during an In-Service Software Upgrade (ISSU).
CSCte55711	The modular card or Wideband card or Gigabit Ethernet (MC/WC/GigE) interface reset occurs after 22 hrs of a 1500 Packet Cable call.
CSCte55906	Some downstream channels may come up as rf-shutdown when a Cisco uBR-MC20X20V line card should be replaced or Return Material Authorization (RMA) is required.

Bug ID	Description
CSCte62448	DOT 1Q Layer 2 VPN traffic counters do not increment when Layer 2 VPN traffic flows through the Cisco CMTS.
CSCte63132	When any service class configuration is changed, a CPU spike on the Route Processor (RP) is observed.
CSCte64393	The ESR-PRE2 card crashes after the Cisco uBR10-MC5X20H-X module crashes.
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.
CSCte74609	All cable modems go offline when the Wideband line card crashes.
CSCte75276	After PRE switchover on Cisco uBR10012 router, an error message is displayed indicating that the IPC message received has inconsistent header data.
CSCte77042	The cable modems drop offline during switchover and revertback of the Cisco UBR-MC20X20 line card.
CSCte77426	All the line cards crash because of the Dynamic Host Configuration Protocol Daemon (DHCPD) receive process
CSCte79637	The Cisco CMTS may not reject the registration request (REG-REQ) when the cable modem configuration file contains both IPv4 fields (other than TCP or UDP source or destination ports) and IPv6 fields in one DOCSIS QoS classifier.
CSCte80520	Modems cannot go the online (w-online) state after all the cable line cards are reset when more than two working line cards are configured in a Hot Standby Connection-to-Connection Protocol (HCCP) group.
CSCte84191	There is a mismatch of the BPI index between the cable line card and the remote SPA when a redundancy is not configured on the line card and the guardian line card is rebooted.
CSCte85016	Rollback fails for the cable admission-control us-bandwidth bucket-no minor major exclusive command
CSCte91500	An error is seen when the cable modem sends malformed mac-mgmt pak to the Cisco CMTS.
CSCte93541	RCC tables are not synchronizing with the standby PRE, resulting in wideband modems going offline on multiple downstreams.
CSCte93995	Packets are delayed in prioritized downstream flows, which results in delayed or no dial tone.
CSCte99379	The cable admission-control ds-bandwidth/us-bandwidth command results in spurious memory access traceback.
CSCtf04817	A cable line card crashes when the debug cable mac-protocol command and dynamic channel change (DCC) are used.
CSCtf04993	The IPDR/SP CMTS-US-UTIL data reported is out of the specified range
CSCtf06267	An IPv6 CPE cannot communicate with the Cisco CMTS after the ND cache is cleared.
CSCtf09375	The MAC domain cable interface is configured to shutdown after the card has been powered off with the hw-module <subslot> command. However, when the card is powered on by the no hw-module <subslot> command, the shutdown configuration is missing when the interface comes up.
CSCtf19518	The output of docsIFCMtsModulationTable MIB and the show cable modulation-profile verbose command is inconsistent.

Bug ID	Description
CSCtf20370	When the line card is reverted from the protect mode to the working mode, it crashes the PRE and the working line card.
CSCtf21117	A cpe start ipdr record is generated when only the device-class is updated for a CPE entry.
CSCtf22188	QoS group configurations accepts a ToS value of 256 through SNMP even though the valid range is 0 to 255.
CSCtf26326	When configuring the Cisco CMTS with ISIS, the internal IPC Ethernet address 127.x.x.x is advertised even when no service internal is configured. Also, in this case, the IPC interface cannot be configured by the end user.
CSCtf28247	DOCSIS 3.0 cable modems go offline after the SPA GigE link detects loss of signal when fiber node is unplugged.
CSCtf38065	The PRE module crashes due to a collision between the SEA and DOSFS processes
CSCtf39293	A traceback was observed on the Cisco uBR7200 router when the cable modem failed to register.
CSCtf40657	The "UBR10K_REDUNDANCY-4-RP_HA_STDBY_INCONSISTENT" error message is displayed during the online insertion and removal (OIR) when any interface on the line card being powered down is configured with spectrum management.
CSCtf48376	The Cisco CMTS crashes when the show cable modem <ip> service flow verbose command is executed several times.
CSCtf49834	CMRegStatusValue is not consistent with the RecType2 record for DOCSIS 1.0 and DOCSIS 1.1 cable modems.
CSCtf49848	The serviceOctecPassed value does not match with docsIfCmtsServiceInOctets when clear cable modem xxx reset command is executed or when dynamical service flows are observed.
CSCtf51515	AES keys are incorrectly read while the hardware and software information is incorrectly displayed.
CSCtf52207	Line card-to-line card internet protocol communication (IPC) does not function when line card CPU is heavily loaded.
CSCtf53847	A cable modem with a UGS flow lags behind due to inconsistent packet transmission and request for a Q1 bit may not be processed.
CSCtf54697	When the Cisco CMTS is configured with SID clusters and the BPI does not correctly handle the second SID cluster, then there may be layer 3 connectivity issues if the modem switches over to the second SID cluster.
CSCtf54880	Invalid memory action (malloc) is observed on the Cisco CMTS console when the Cisco CMTS has been idle for an extended period of time.
CSCtf56062	Traceback occurred when the cable interface was shut down.
CSCtf57372	The "IPv6 lookup addr in host has host pointing to freed memory" error message is displayed on the Cisco CMTS.
CSCtf59785	The output of the show interface sid counter verbose command does not display the correct status (reset) of the codeword counter while the output of the show cable modem verbose command displays that the codeword counter is reset.
CSCtf63729	An IPv6 customer premise equipment (CPE) fails to get an IP address when it is connected to an IPv4 cable modem.

Bug ID	Description
CSCtf65153	The "tsec_tx_interrupt: WARNING transmit underrun occurred" occurs on DTCC card even when there is no underrun.
CSCtf68413	The downstream service flow counter is cleared when a modem drops offline even if the Cisco CMTS is configured with the cable primary-sflow-qos11 keep all command.
CSCtf69637	JIB downstream ring is stuck leading to excessive uniform call distribution (UCD) update error handling due to no map buffer. This affects voice calls on other upstreams on a different MAC domain.
CSCtf73047	The show pxf cpu statistics security interface command displays the same information for every interface.
CSCtf74321	I/O Memory fragmentation on the cable line card causes the %SYS-2-MALLOC-FAIL error.
CSCtf74537	There are alignment issues in the envmib_temperature_trap()
CSCtf76282	If a dual-stack is CPE online, the clear cable host x.x.x command causes the corresponding line card to crash.
CSCtf76524	An IPv6 modem moved into a new MAC Domain that is configured with the cable ip-init ipv4 command, still stays online.
CSCtf77370	The SNMP tool returns an incorrect error message when trying to set the value of the ccqmEnfRuleViolateNotifEnable MIB object.
CSCtf77798	The output of the show cable modem <interface> upstream x offline command does not display any output.
CSCtf79314	There are duplicate DSID entries allocated to the same session on the same interface.
CSCtf80054	Some DSC service flows are no longer available after the PRE switchover is followed by the line card switchover.
CSCtf80198	The protect card automatically becomes active due to the keepalive failure.
CSCtf80506	Multiple grants per interval (MGPI) may not work in Cisco IOS Release 12.2(33)SCB and later.
CSCtf81039	The CPE entries are displayed even after the CPE is disconnected from the cable modem.
CSCtf82934	The wideband cable modems that are online cannot go w-online after a hardware reset.
CSCtf84662	The debug cable ucd command displays only the upstream channel descriptors (UCDs) of a single downstream channel, even if you have multiple downstream channels in the MAC domain.
CSCtf85427	Memory leak occurs when more than 21 profiles are configured in a policy map.
CSCtf85500	The cable modem on the logical channel goes offline after a line card switchover.
CSCtf85532	The Cisco DPC3000 cable modem rejects dynamic bonding change request (DBC-REQ).
CSCtf85667	PacketCable calls would first get closed and then set up again during a line card switchover.
CSCtf88832	Traceback occurs when a cable modem is reset.

Bug ID	Description
CSCtf89823	The SNMP query, ccwbRFChannelMpegPkts, for downstream RF channels does not return any result.
CSCtf90283	The show depi command returns a traceback error on the Cisco uBR10012 router.
CSCtf92440	If temperature goes below 0 Celsius, the Cisco CMTS router would generate false temperature log against Cisco UBR-MC20X20V cable interface line card.
CSCtf93115	After a PRE switchover, the aggregate multicast service flow counter is incorrect on the Cisco uBR10012 router.
CSCtf93373	Excessive collisions and high CPU usage observed on the Cisco uBR10012 router.
CSCtf95877	Traceback occurs when performing an In-Service Software Upgrade (ISSU).
CSCtf95986	The Internet Protocol Detail Record (IPDR) topology schema does not work correctly.
CSCtf96357	The Cisco uBR10-MC5X20S/U/H cable interface line cards are unable to enqueue messages and report a QUEUEFULL error.
CSCtf96434	The EPC3000 cable modem creates an invalid DHCP unique identification (DUID).
CSCtf96525	The cable filter group for the multimedia terminal adapter (MTA) does not match with the device class after a PRE switchover.
CSCtf96591	After a cable interface line card switchover, a customer premises equipment (CPE) cannot be pinged in VPN Routing and Forwarding (VRF).
CSCtf98939	The show cable modem ipv6 command does not display the IPv6 stack address.
CSCtf99823	The show cable modem wideband command does not display a wideband capable cable modem, if the modem is registered as a narrowband modem.
CSCtg00460	The cable filter matching behavior is different between the route processor and the toaster.
CSCtg01311	An interprocess communication (IPC) keepalive timeout on one cable interface line card may cause a timeout event on another line card.
CSCtg08584	The show logging onboard command displays a wrong voltage value.
CSCtg09253	Cable modems intermittently go offline during downstream load balancing using dynamic channel change (DCC).
CSCtg09261	After a line card switchover, the wideband cable modem may lose Layer 3 connectivity.
CSCtg09730	The show inventory command does not list all compact flash cards.
CSCtg11289	The docsQos3CmtsDebugDsidStatsDsidPackets and docsQos3CmtsDebugDsidStatsDsidOctets counters are automatically cleared after the traffic is registered for the w-online modems.
CSCtg11964	The wideband cable modems may go offline shortly after registering online on a wideband shared port adapter (SPA).
CSCtg12222	The DOCSIS 3.0 cable modems may come online in narrowband mode.
CSCtg12263	Some warning messages related to load balancing need to be listed as error messages.
CSCtg13739	The Cisco UBR-MC20X20V cable interface line cards crash without generating crashinfo files.

Bug ID	Description
CSCtg14022	The embedded multimedia terminal adapters (eMTAs) are unable to get configuration files from the TFTP server.
CSCtg14992	When a cable modem sends the ICMPv6 echo request with zero hop limit to a cable interface, the ICMPv6 echo reply is returned.
CSCtg20933	If the line card is powered off, the Cisco CMTS router allows you to configure half of a frequency stacked pair.
CSCtg23313	Wideband modems moving from reject(pk) to online(pt) do not complete the Baseline Privacy Interface (BPI) negotiation.
CSCtg23408	Cable modems do not come back online if Annex is changed back and forth on all controllers of the Cisco UBR-MC20X20V cable interface line card.
CSCtg30528	The Cisco CMTS router takes a long time to complete the addition of extended access control list (ACL) entries.
CSCtg31445	A mismatch between the sequence number in blaze memory and the route processor packet count.
CSCtg31642	After the Cisco uBR10-MC5X20U cable interface line card switchover, connectivity problem is observed on some CPE devices.
CSCtg33388	The standby Performance Routing Engine (PRE) may reload continually with the In-Service Software Upgrade (ISSU) error.
CSCtg34604	The Cisco UBR-MC20X20V cable interface line cards in multiple slots allow only 50 per cent of traffic load.

Resolved Caveats—Cisco IOS Release 12.2(33)SCD2

Bug ID	Description
CSCsr40529	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.
CSCte91820	The output of the show cable metering command is inconsistent with the output of the show cable metering verbose command.
CSCtf05943	Cable modem subscribers experience one-way RTP traffic.
CSCtf14886	When FTP/UDP traffic is sent to 304 service-flows across wideband interfaces, queues are stuck and do not pass traffic.
CSCtf20577	The CAM entries are not populated correctly for the IPv6 Multicast Traffic.
CSCtf38246	Upstream (US) traffic may exceed the peak-rate configured in service class in non-mtc mode.
CSCtf41553	CMTS PEAK-OFFPEAK STATS memory leak is observed in the line card.
CSCtf56958	Bandwidth is not shared evenly between the DOCSIS 2.0 cable modems and the DOCSIS 3.0 cable modems.
CSCtf57059	Unexpected values are observed in the activity-based Weighted Fair Queuing (WFQ) aggregated throughput.

Bug ID	Description
CSCtf61012	The Cisco CMTS router crashes when the SNMP client queries the docsIf3CmtsC-mRegStatusEntry MIB object.
CSCtf67220	Some cable modems get stuck in the reject (pk) state when connected to a UBR-MC20X20V line card.
CSCtf79425	On a Cisco uBR10-MC5X20H line card, aggregated throughput may exceed the configured value.
CSCtf83476	The wideband interface on the standby route processor is not changed from the primary bonding group to the secondary bonding group using snmp set ccwbWB-BondGrpSecondary.
CSCtf86322	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.
CSCtf89656	The Cisco CMTS router is unable to complete downstream movement for DOCSIS 1.0 cable modems.
CSCtf93904	Utilization-based downstream load balancing and dynamic bandwidth sharing do not work after an HCCP line card failover.
CSCtf95388	The show cable modem partial-mode command does not work for IPv6 cable modems.
CSCtf97614	Aggregated throughput may exceed the threshold configured using the cable upstream rate-limit-cf command.

Open Caveats—Cisco IOS Release 12.2(33)SCD1

- CSCsv63445

Symptoms: The **clear cable modem** command does not reset the modular-host tables.

Conditions:

1. No fiber nodes are configured.
2. Some narrow-band modems are bought online from the shared port adapter (SPA) downstream.
3. The **clear cable modem all reset** command is used to reset the modems.

After this command is executed, all the stat or BPI, or PHS indexes in the modular host tables are expected to be released, but are not released.

This causes a leak in the stat or BPI, or PHS indexes and raises a Cable Modem Transmission System (CMTS) scalability issue, that is, the CMTS is unable to support the stated number of modems online from the SPA downstream.

Workaround: There is no workaround.

- CSCsy72009

Symptom: When attempting to upgrade a Cisco uBR10012 router from Cisco IOS Release 12.3(21)BC to Cisco IOS Release 12.2(33)SCB, the primary PRE may crash.

Conditions: This issue is observed when the CMTS is running Cisco IOS Release 12.3(21)BC and while upgrading to Cisco IOS Release 12.2(33)SCB. The CMTS must then be powered down and physically reconfigured to run as an M-CMTS (Cisco SIP-600 inserted, WB SPAs inserted, DTCCs inserted, so on.). Finally, the CMTS must be switched on to run its new Cisco IOS Release 12.2(33)SCB IOS image and physical configuration.

Workaround: There is no workaround.

- CSCsz49382

Symptoms: CMs do not respond to Layer 3 pings.

Conditions: This issue occurs only on the Cisco uBR10-MC5X20S/U line cards when an equalization-coefficient PRE is configured.

Workaround: Restart the cable line card.

- CSCsz55288

Symptoms: Alignment traceback messages are displayed when the **show memory leak res user** and **show buffer usage** commands are executed.

Conditions: This issue occurs when the **show memory leak res user** and **show buffer usage** commands are executed in Cisco IOS Release 12.2(33)SCB.

Workaround: There is no workaround.

- CSCsz69359

Symptoms: Memory leak occurs on a line card due to MAC parser with overnight PC calls.

Conditions: This issue occurs after overnight PC calls are made.

Workaround: There is no workaround.

- CSCsz77977

Symptoms: OIR of a PCMCIA flash disk can cause a watchdog reset of the PRE.

Conditions: This issue is observed during the OIR of a PCMCIA flash disk that is being actively accessed.

Workaround: Restrict the removal of PCMCIA flash disks.

- CSCsz98503

Symptoms: Sporadic short losses of a few minutes occur when multiple CMs go off on a random upstream. These losses are usually accompanied by a spike in the error per second rate or by an MER drop and a decrease in docsIfSigQUnerrored MIB Object. However, the reverse is not true—a brief degradation of the physical connectivity parameters does not necessarily trigger a brief CM loss.

Conditions: This issue occurs on the Cisco uBR10-MC5X20H line cards.

Workaround: There is no workaround.

- CSCta05835

Symptoms: Entries in the docsBpi2CmtsMulticastObjects MIB object are duplicated after a line card revertback.

Conditions: This issue occurs when the **cable match** command is configured with BPI. The IGMP join is received for the group in the **cable match** command, and the docsBpi2CmtsMulticastObjects MIB object is populated. This results in line card switchover and revertback.

Workaround: There is no workaround.

- CSCta16724

Symptoms: Users with a privilege level of 15 and view root cannot perform a secure copy (SCP).

Conditions: This issue occurs when users with view root privilege try to perform an SCP.

Workaround: Remove the 'view root' privilege.

- CSCta27366

Symptoms: The Cisco uBR10000 PRE CPU utilization rises to 100% when the FPGA on the Wideband SPAs plugged into a Cisco SIP-600 are being upgraded.

Conditions: This issue occurs during the Wideband SPA FPGA upgrade process.

Workaround: There is no workaround.

- CSCta38298

Symptoms: An active PRE fails over to secondary reporting with the following message:

```
ACTIVE RP WATCHDOG TIMEOUT TRIGGERED
```

Conditions: This issue occurs in Cisco IOS Release 12.3(23)BC7.

Workaround: There is no workaround.

- CSCta56424

Symptoms: The router crashes while trying to delete files from corrupt Analog Telephone Adaptor (ATA) disk.

Conditions: This issue occurs when an ATA disk is corrupted. The following message is displayed in the ATA disk during access:

```
Cluster chain broken on file
```

Workaround: There is no workaround.

- CSCtb24309

Symptoms: Around 60 to 70 bytes of buffer memory space is allocated when a protect line card becomes active after a system start.

Condition: This issue occurs during a line card switchover.

Workaround: There is no workaround.

- CSCtb74904

Symptoms: After PRE switchover, the corresponding service flow counter displays 0 on the Cisco uBR10012 router.

Conditions: This issue occurs during a PRE switchover.

Workaround: There is no workaround.

- CSCtc04113

Symptoms: 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 SN ratio.

Workaround: There is no workaround.

- CSCtc27601

Symptoms: The grouping of SSM multicast groups from any source to one group configuration is not possible. The Cisco CMTS treats the session range as ASM.

Conditions: This issue occurs in a multicast group configuration.

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

- CSCtc44487

Symptoms: The router crashes in Cisco IOS Release 12.3 (33) SCB, if the Cisco UBR-MC20X20V card is added or removed from the redundancy configuration.

Conditions: This issue is observed when the line card type is unknown and the line card redundancy is configured.

Workaround: There is no workaround.
- CSCtc59089

Symptoms: The cable line card crashes with PacketCable Multimedia (PCMM) voice call testing.

Conditions: This issue occurs in a multiline ATA behind the CMs in a PCMM setup.

Workaround: There is no workaround.
- CSCtc62096

Symptoms: Dynamic multicast service flow and reserved bandwidth exist even after the removal of the multicast QoS (MQoS) configuration from the second bonding group.

Conditions: This issue occurs after as MQoS bandwidth reservation oversubscription takes place.

Workaround: Perform a PRE switchover.
- CSCtc95495

Symptom: The **show cable modem service-flow verbose** 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.

Conditions: This issue occurs when the following procedure is performed:

 1. The **show ip cef [modem ip address] platform | i mac_rewrite_index** command is run.
 2. If the value displayed is greater than 64 k, the **show cable modem service-flow verbose** command is run.

Workaround: The correct version of the information displayed incorrectly by the service flow command can be obtained by manually obtaining the correct MRI (Step 1 described above), and then running the **show pxf cpu qos mac [MRI]** command.
- CSCtd14220

Symptoms: Tracebacks occurs during the auto upgrade of DOCSIS Timing, Communication, and Control (DTCC) card firmware.

Conditions: This issue occurs on a firmware upgrade of the DTCC card.

Workaround: There is no workaround.
- CSCtd15349

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

Conditions: This issue occurs when a CM is moved to another interface through load balancing.

Workaround: Use the **dcc init-tec** command instead.
- CSCtd20903

Symptoms: The **cable clock dti** command does not work.

Conditions: This issue occurs when the system starts with two DTCC cards, and then one card is unplugged during run time.

Workaround: There is no workaround.

- CSCtd23429

Symptoms: High latency (measured between the join and the multicast packets forwarded) is observed during Video over DOCSIS (VDOC) channel changes.

Conditions: This issue is seen on the universal broadband routers running Cisco IOS Release 12.2(33)SCB.

Workaround: There is no workaround.
- CSCtd24347

Symptoms: The Generic Routing Encapsulation (GRE) tunnel does not forward traffic.

Conditions: This issue occurs when a new GRE tunnel is created on a Cisco uBR10012 router.

Workaround: Execute the **shutdown** and **no shutdown** commands on the tunnel interface.
- CSCtd26295

Symptoms: The debug output to the terminal is curtailed when logging discriminator is enabled.

Conditions: This issue occurs in Cisco IOS Release 12.2(33)SCB5.

Workaround: There is no workaround.
- CSCtd28028

Symptoms: Flow control does not work on the ESR-HH-1GE interface of a Cisco uBR10012 router.

Conditions: This issue occurs on the ESR-HH-1GE interface of a Cisco uBR10012 router.

Workaround: There is no workaround.
- CSCtd30002

Symptoms: It is not possible to configure the 5X1 Gigabit Ethernet port after swapping SPAs.

Conditions: This condition occurs after a 24rfchannel-spa-1 card is replaced with a SPA-5X1GE-V2 card.

Workaround: Reload the router or perform an OIR on the 24rfchannel-spa-1 card with another 24rfchannel-spa-1 card.
- CSCtd34173

Symptoms: If the Stats, PHS, or BPI index table for the Cisco uBR-MC20X20V LC card fills up, the error is reported through the bug interface instead of an error message. This may not be seen on the PRE and may not be captured in the syslog servers if the PRE does not monitor the CLC messages.

Conditions: There are no known conditions for this issue to occur.

Workaround: Ensure that the CLC messages are monitored by the PRE and logged in the syslog server.
- CSCtd43242

Symptoms: A crash may occur on the Cisco uBR10-MC5X20H line card.

Conditions: This issue occurs when the PRE module crashes because of an IPC timeout.

Workaround: There is no workaround.
- CSCtd48609

Symptoms: The **ccm ipv6_address rcs-counts** command clears all the RCS counts of all the CMs instead of clearing the ipv6_address specified for the CM RCS counts.

Conditions: This issue occurs when the **ccm ipv6_address rcs-counts** command is executed.

Workaround: Use the **ccm mac_address rcs-counts** command instead.

- CSCtd51642

Symptom: IPC tracebacks are observed in the system log.

Conditions: This issue occurs when the Line Card(LC) crashes and the IPC messages are still being sent to the LC from the RP.

Workaround: There is no workaround.

- CSCtd54315

Symptoms: The CPE number displayed in the **show cable modem registered** command output do not match with the CPE number displayed in the **show cable modem cpe** and **show cable modem ipv6 cpe** command outputs.

Conditions: This issue is observed on the Cisco DPC3000 modem with a general IPv6 configuration.

Workaround: There is no workaround.

- CSCtd65834

Symptoms: A message indicating that duplicate frequencies are configured on the integrated cable controllers is not displayed.

Conditions: This message must be displayed during the migration of the Cisco uBR10-MC5X20H line card to the Cisco UBR-MC20X20V line card.

Workaround: The downstream RF channel assignment must be mapped prior to migration.

- CSCtd67202

Symptoms: The secondary port does not become active.

Condition: This issue occurs on a Cisco uBR10012 router with the Downstream External PHY Interface (DEPI) control plane configured.

Workaround: There is no workaround.

- CSCtd69497

Symptoms: Static group and session are not created when static multicast group and source address exist in a CM configuration file.

Conditions: This issue occurs when you specify a static multicast group and source address in the CM configuration file.

Workaround: There is no workaround.

- CSCtd70118

Symptom: The Cisco uBR10012 router with PRE4 pauses indefinitely.

Conditions: The issue is observed when the interrupts are disabled for 1000 to 2300 ms.

Workaround: There is no workaround.

- CSCtd71335

Symptoms: Memory leak is observed on a Cisco uBR7200 series router.

Conditions: This issue occurs when a CM is reset after a reservation is created using RSVP.

Workaround: There is no workaround.

- CSCtd73908

Symptoms: Excessive unicast and multicast packet loss is seen after a Wideband SPA switchover.

Conditions: This issue occurs on a Wideband SPA Gigabit Ethernet interface. The switchover takes 70 seconds to converge.

Workaround: There is no workaround.

- CSCtd90278

Symptoms: The Wideband SPA does not perform Address Resolution Protocol (ARP) after the failure of the active port.

Conditions: This issue occurs under normal operating conditions.

Workaround: There is no workaround.

- CSCtd90685

Symptoms: Modems cannot move out of penalty using the STM enforce rule.

Conditions: This issue occurs when the parameters configured in the modem configuration file override the reg service class of the STM. As a result, the reg static service class QoS template is not a subset of the admitted QoS template.

Workaround: Do not override the reg service class in the configuration file.

- CSCtd90790

Symptoms: The line card crashes when a cable modem configuration file with the NominalGrantInterval value set to 100 is activated.

Conditions: This issue occurs on a Cisco DPC3000 modem with the NominalGrantInterval value set to less than 1000.

Workaround: Set a large value for the NominalGrantInterval.

- CSCtd91634

Symptoms: The number of CPEs displayed in the **show cable modem** command output is incorrect.

Conditions: This issue is observed on an IPv6-enabled CPE.

Workaround: There is no workaround.

- CSCtd97055

Symptoms: Tracebacks occur while toggling IPv6 on and off on the CPE.

Conditions: This issue occurs on a Cisco DPC3000 modem.

Workaround: There is no workaround.

- CSCte07582

Symptoms: The upstream-service-group is removed from the MAC domain after the line card and PRE switchover.

Conditions: This issue occurs after the Cisco UBR-MC20X20V line card and PRE switchover on Cisco IOS Release 12.2(33)SCD.

Workaround: There is no workaround.

- CSCte09146

Symptoms: PRC_CONFIG_CHANGE is returned instead of PRC_CONFIG_NO_CHANGE.

Conditions: This issue occurs when the **cable admission-control ds-bandwidth** and **cable admission-control us-bandwidth** commands are executed for the second time in either the global configuration mode or the interface configuration mode.

Workaround: There is no workaround.

- CSCte10684

Symptoms: The status of the IC or cable interface changes to Down when the status of the relative bundle interface is set to Down and the CMTS is reloaded.

Conditions: There are no known conditions for this issue to occur.

Workaround: Configure the interface using the **shutdown** command followed by the **no shut down** command.
- CSCte13340

Symptoms: PRE4 displays a high rate of IPC errors consistently.

Conditions: This issue is observed on an uBR10012 router running Cisco IOS Release 12.2(33)SCD.

Workaround: There is no workaround.
- CSCte17479

Symptoms: All CMs under a single upstream unexpectedly move to expire (pt) state.

Conditions: This issue occurs on a uBR10012 router running Cisco IOS Release 12.2(33)SCB3. The other upstreams on the same line card are not affected.

Workaround: The modems do not recover automatically. Run **shut/no shut** on the upstream to restore CMs.
- CSCte19017

Symptoms: The CPU utilization of the IGMP Input Process is very high while running simulation test patterns.

Conditions: This issue occurs when the legacy setup is configured without default service flow:

 1. Five thousand legacy modems are created.
 2. A simulation test is run with 5000 modems, 10 groups (or modems) and pps as 500.

Workaround: There is no workaround
- CSCte26014

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

Conditions: This issue occurs when multicast service identifiers (SIDs) are configured on the line card and the **show interface cable key** command is executed.

Workaround: Do not configure multicast SIDs on the line card.
- CSCte26972

Symptoms: When **cable dynamic-secret mark** command is executed, CMs cannot get online until CMTS reloads.

Conditions: This issue is occurs when **cable dynamic-secret mark** command is configured. The modem configuration file is stored on the CMTS and is served by the CMTS TFTP server. This file is not read correctly, and hence the modems using that configuration file are not able to come online. The following log message is displayed:

```
*Feb 4 05:16:02.920: %UBR10000-4-NOCFGFILE: Cannot read modem config file <filename>
from 80.14.0.1: Timed out
```

Workaround: There is no workaround
- CSCte29016

Symptoms: Cable modem drops offline during an In-Service Software Upgrade (ISSU) procedure for line card upgrade.

Conditions: This issue occurs when the following procedure are performed:

1. An image is loaded to both the PREs.
2. A packet call is started after ensuring that all the modems are online.
3. After waiting until the next round of packet call (ensure that SID value is changed for dynamic UGS service flows), a PRE Switchover is performed.
4. After waiting until both the PREs are ready, a line card switchover and then a line card revertback are performed.

Workaround: There is no workaround.

- CSCte36453

Symptoms: The System Event Archive (SEA) console feature is enabled on PRE4.

Conditions: This issue occurs when the SEA feature is present in the IOS image.

Workaround: Delete the **sea_console.dat** file present in the PRE4 bootflash.

- CSCte36746

Symptoms: The following error message is logged as a high severity level error:

```
ARP-3-STCKYARPOVR: Attempt to overwrite Sticky ARP entry"ARP-3-STCKYARPOVR: Attempt to
overwrite Sticky ARP entry"
```

Conditions: This issue is observed when a router tries to overwrite the sticky ARP entry.

Workaround: There is no workaround.

- CSCte40466

Symptoms: A bus error may occur on a Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCC.

Conditions: This issue occurs when a traceback displays that the SNMP getNext query is in progress for the MIB object docsIf3CmtsCmRegStatusEntry.

Workarounds: There is no workaround.

- CSCte42876

Symptom: The CMTS may stop forwarding traffic when it receives a broadcast packet or a IP packet with option MVPN MDT set inside.

Conditions: This issue occurs when invalid packets are received from MVPN MDT tunnel as broadcast packets or as packets with IPv4 option fields set.

Workaround: There is no workaround.

- CSCte43004

Symptom: Modems with a shaping rate configured cannot share the bandwidth according to their weights.

Conditions: This issue occurs when modular interface is shut down and then restarted while the traffic is being sent to modems.

Workaround: Stop traffic to modems during shutdown and restart of the modular interface.

- CSCte43870

Symptoms: The AC bucket array overflows and may corrupt the memory adjacent to the admission control array.

Conditions: This issue occurs when the following procedure is performed:

1. The AC is enabled.
2. The CM has a service flow that is in provisioned state (25.6 : 1).
3. The DCC is performed on the CM by a test command or load balance

Workaround: Ensure that service flows are not in provisioned state (25.6 : 1). If they are, disable the load balance functionality.

- CSCte44214

Symptoms: The OIR upgrade from a Cisco uBR-MC5X20x line card to Cisco UBRMC20X20V line card fails when the DOCSIS mode is Annex A and a spectrum range of <5-65 Mhz> is configured.

The failure of the OIR upgrade is indicated through messages, and all the Cable interfaces are placed in the administratively down state.

```
Jan 14 09:15:20.950: %UBR10K-6-COMPAT_SHUTDOWN_CARD: Failed to restore the
configuration for Cable8/0/0.
Jan 14 09:15:20.970: %UBR10K-6-COMPAT_SHUTDOWN_CARD: Failed to restore the
configuration for Cable8/0/1.
Jan 14 09:15:20.974: %UBR10K-6-COMPAT_SHUTDOWN_CARD: Failed to restore the
configuration for Cable8/0/2.
Jan 14 09:15:20.974: %UBR10K-6-COMPAT_SHUTDOWN_CARD: Failed to restore the
configuration for Cable8/0/3.
Jan 14 09:15:20.978: %UBR10K-6-COMPAT_SHUTDOWN_CARD: Failed to restore the
configuration for Cable8/0/4.
```

Conditions: This issue occurs when the Annex mode is configured as Annex A on the downstream ports of a Cisco uBR-MC5X20x line card, and the upstream ports use the spectrum range of 5 to 65Mhz.

Workaround: The issue is due to the increased frequency range supported by Annex A <5 to 65Mhz> as compared to Annex B <5 to 55Mhz>. Because the upgrade fails due to increased spectrum range, it is advisable that the following procedure is performed:

1. Reduce the frequency range such that it is within the range <5 to 55Mhz> before upgrading the Cisco UBR-MC5X20x line cards.
2. Perform the switchover to the protect card, which should be a Cisco UBR-MC20X20 line card.
3. Upgrade the working Cisco uBR-MC5X20x line card to Cisco UBR-MC20X20 line card.
4. Revert back to the working card which was upgraded.
5. Change the frequency range to <5 to 65Mhz>

If a spectrum group is configured on a line card, perform the procedure explained in the following example:

Example: cable spectrum-group 1 band 27000000 65000000 configuration

1. Execute the **cable spectrum-group 1 band 27000000 55000000** command.
2. Execute the **no cable spectrum-group 1 band 27000000 65000000** command
3. Upgrade the Cisco uBR-MC5X20x line card. After the upgrade, execute the **cable spectrum-group 1 band 27000000 65000000** command
4. Execute the **no cable spectrum-group 1 band 27000000 55000000** command

**Note**

Changing the spectrum group frequency range or the fixed frequency is not recommended because it can cause reassignment of frequencies on the upstream. As a result, modems can fall offline on all the cards using that spectrum group. It is therefore recommended that OIR upgrades be done in a maintenance window.

- CSCte44947

Symptoms: The Upstream Service Group (US-SG) disappears after Route Processor (RPs) switchover.

Conditions: This issue occurs if a fiber node is invalid because of Upstream RF Overlapping.

Workaround: There is no workaround.

- CSCte48051

Symptoms: 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.

Conditions: This issue occurs in legacy STBs that are still using VCI OpenCable2.0.

Workaround: There is no workaround.

- CSCte49359

Symptoms: The output of the **show interface service flow counter** command displays a wrong result.

Conditions: This issue occurs when the following procedure is performed:

1. Two group configurations (GCs) are configured with the same session range, but with a different type of service (ToS) and group QoS configuration (GQC). (An aggregate is used for one and single for the other.)
2. Two multicast traffic are sent with the session range in both GCs. Do not use ToS in either of them such that all traffic goes through the default service flow.

Workaround: This is a display issue and the actual traffic goes through the right service flow.

- CSCte51361

Symptoms: Narrowband CMs are dropped offline during an In-Service Software Upgrade (ISSU).

Conditions: This issue occurs when an ISSU is performed.

Workaround: There is no workaround.

- CSCte55711

Symptoms: Modular Card or Wideband Card or Gigabit Ethernet (MC/WC/GigE) interface reset occurs after 22 hrs of a 1500 packet cable call.

Conditions: This issue occurs when SPA is enabled on CMTS without switchover.

Workaround: There is no workaround.

- CSCte55906

Symptom: When Return Material Authorization (RMA) replacement of a Cisco uBR-MC20X20V line card occurs, some downstream channels may come up as rf-shutdown, even though the previously functional line card in the same slot has the configurations using **no rf-shutdown** command.

As a consequence, CMs that were previously online might not be able to register successfully again, until a **no rf-shutdown** command is executed again on these channels. If LC HA is configured, the RMA would have caused an LC switchover. When an LC revertback occurs, the channels will be shutdown and CM connectivity will be lost.

Conditions: This issue occurs on the RMA of a line card. This occurs only if a Cisco uBR-MC20X20V line card is ordered with a 0DS/5DS/license, and later upgraded by purchasing additional downstream licenses.

Workaround: The CLI command **test hccp config resitricition disable** can be used to allow **no shutdown** to be configured on the working standby before revertback.

- CSCte56499

Symptoms: The first line card does not get upgraded on the Cisco uBR10012 router.

Conditions: This issue occurs when performing Single-Step ISSU on the line card.

Workaround: Manually upgrade the first line card.

- CSCte62448

Symptoms: DOT1Q L2VPN traffic counters do not increment.

Conditions: This issue occurs when DOT1Q L2VPN is provisioned on CMTS, and L2VPN traffic is passing through L2VPN.

Workaround: There is no workaround.

- CSCte63132

Symptoms: When any service class configuration is changed, a CPU spike on the Route Processor (RP) is observed.

Conditions: This issue occurs when all the following conditions are met:

1. An operator makes a configuration change on a cable service class.
2. Debug cable tlv is turned on 3.
3. Any of the following three debugs is turned on:
 - debug cable mac-add verbose
 - **debug cable interface verbose**
 - debug cab sid verbose

If any of these conditions is not met, this issue does not occur.

Workaround: Do not enable or perform the three conditions listed here at the same time.

For example, when the production box first boots up and no debug is configured, this issue will not occur when any change is performed to the service class configuration is done. Assuming the operator has turned on the first and second conditions on a production box, and if any changes are to be made to the service class later, simply turn off either the first or the second condition before making the change.

- CSCte64393

Symptom: The ESR-PRE2 card crashes after the Cisco uBR10-MC5X20H-X module crashes.

Conditions: This issue occurs on a Cisco uBR10012 router having a Cisco uBR10-MC5X20H line card.

Workaround: There is no workaround.

- CSCte71997

Symptom: 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.

Conditions: This issue occurs on the Cisco uBR7200 series and Cisco uBR10012 routers.

Workaround: There is no workaround.
- CSCte74493

Symptom: After PRE switchover, the streaming does not start on the secondary PRE. Also, in file mode, a new file is not created on the standby PRE.

Conditions: The issue occurs because PRE switchover causes SAMIS/IPDR to stop working.

Workaround: After PRE switchover, run the **test cable metering** command to start streaming (streaming mode) or create a file (file mode) on the standby PRE.
- CSCte74609

Symptoms: All CMs go offline when wideband line card crash.

Conditions: This issue occurs when there is double failure, that is, there is a switchover from a working LC to a protected LC by using CLI, and simultaneously, the protect LC crashes or is reset, or vice versa.

Workaround: Reset both the working LC and the protect LC.
- CSCte74898

Symptoms: The DOCSIS MAC Infrastructure upstream_channel_id safety net performs some false checks. It should be turned off.

Conditions: There are no known conditions for this issue to occur.

Workaround: There is no workaround.
- CSCte75276

Symptom: After PRE switchover on Cisco uBR10012 router, an error message is displayed indicating that the IPC message received has inconsistent header data.

Conditions: This issue occurs on a Cisco uBR10012 router after PRE switchover.

Workaround: There is no workaround.
- CSCte75410

Symptoms: Ping command fails for a wideband modem hosted on Cisco uBR-MC20X20V LC after several PRE switchovers.

Conditions: This issue occurs when different bonding group IDs are on active and standby PRE.

If a bonding group ID that is configured for a wideband interface is already being used by another wideband interface, the active PRE will reject this new value with the following message:

```
"Bonding group id <id> is not unique, it would conflict with Wideband-Cable<x/y/z:a>.
Cannot modify."
```

However, the standby PRE accepts this new value. Thus, different bonding group IDs get configured on active and standby PREs, causing the ping command to fail.

Workaround: Reconfigure the bonding group ID correctly. Check if each wideband interface has the same bonding group ID on active and standby PRE. If this is not the case, reset standby PRE.
- CSCte77268

Symptom: The subinterface CLI command **downstream local upstream** is missing for a Cisco uBR10-MC5X20 cable interface line card in IOS release 12.2(33)SCD.

Conditions: There are no known conditions for this issue to occur.

Workaround: There is no workaround.

- CSCte77426

Symptoms: All the line cards crash because of the Dynamic Host Configuration Protocol Daemon (DHCPD) receive process. The CPUHog messages are also displayed because of the same process.

Conditions: This issue occurs on a Cisco uBR10012 (PRE4-RP) Universal Broadband Router running Cisco IOS Release 12.2(33)SCB5.

Workaround: There is no workaround.

- CSCte79637

Symptoms: The CMTS may not reject the REG-REQ that includes invalid DOCSIS QoS classifiers.

Conditions: This issue occurs when the CM configuration file contains both IPv4 fields (other than TCP or UDP source or destination ports) and IPv6 fields in one DOCSIS QoS classifier.

Workaround: There is no workaround.

- CSCte80520

Symptoms: Modems cannot go w-online after all the CLCs are reset.

Conditions: This issue occurs when there are two working CLCs, CLC1 and CLC2, in a hccp group. The protect CLC protects the working CLC1 before reset or power off. The working CLC2 then boots up before the working CLC1, and the working CLC2 gets the wrong downstream service group data. The same issue is observed when there are more than two working CLCs.

Workaround: Reset all the CLCs, and the working CLC which is protected earlier should boot up first.

- CSCte81646

Symptoms: The CMs lose connectivity periodically on the Cisco UBR-MC20X20 line cards. An outage is caused when the default TEK life-time interval is configured in the MAC domain.

Conditions: This issue occurs during normal operation, and is caused by a problem decrypting the upstream traffic when the modem uses the key sequence 15 to encrypt the traffic.

Workaround: There is no workaround.

- CSCte84191

Symptoms: There is a mismatch of the BPI index between the cable line card and the remote SPA.

Conditions: This issue is seen when a line card is running with no redundancy, and the guardian line card is rebooted. When the guardian line card is restarted, the unique indexes that are used to program the SPA are lost and are overwritten by new modems coming online. Two modems now share the same SPA keying index, and either one of these modems can become Layer 3 unreachable, depending on when the keys are written to the SPA.

Workaround: When the guardian card is rebooted, all the modems on the line cards using that guardian should be reset. The reset ensures that the modems have unique indexes to program the SPA.

Also, ensure that the guardian line card is running with redundancy.

- CSCte85016

Symptoms: Rollback fails for the **cable admission-control us-bandwidth bucket-no minor major exclusive** command.

Conditions: There are no known conditions for this issue to occur.

Workaround: There is no workaround.

- CSCte90922

Symptoms: The ISSU command **issu changeversion image_name** takes a wrong standby image path.

Conditions: This issue occurs when the **issu changeversion** (short CLI) command is used for ISSU, and the image path is not given.

Workaround: Provide the complete name and path of the image when using a short CLI.

- CSCte93541

Symptoms: After a PRE failover, wideband modems are dropped offline on multiple downstreams.

Conditions: This issue is seen on the Cisco uBR10012 Universal Broadband Routers on PRE-2 running Cisco IOS Release 12.2(33)SCB.

Workaround: Delete the fiber node configuration and reconfigure it.

- CSCte93995

Symptoms: Prioritized traffic in a downstream service flow is delayed for a few seconds.

Traffic in a service flow with a shape rate (maximum sustained rate in non-ERBA mode, or peak rate in an ERBA mode) less than 50 Kbps may suffer a delay of a few seconds. Because such a low shape rate has been used by customers for voice signaling flows, symptoms such as intermittently long delays in getting a dial tone, or not getting dial tone at all, may occur.

Because the voice signaling traffic is low in volume, the problem may not cause packet tail drop in most cases. The packets will only **experience** excessive delay in the service flow queues.

Furthermore, the short timeout between voice signal packet retransmission time may sometimes exacerbate the problem.

Conditions: This issue is likely to be triggered when a flow has low shaping rate (lower than 50Kbps), and a packet in that service flow arrives a few minutes after the previous packet.

Workaround: Avoid using low shaping rate. Use shaping rate of 100 Kbps or above, or no shaping at all.



Note

Even though voice flows tend to have a very low rate, using a higher shaping rate does not have a negative impact, because the bandwidth not used by the flow in question can always be consumed by other flows. Furthermore, using a high shaping rate reduces the voice signaling flow's latency, which is desirable.

- CSCte99379

Symptom: Spurious memory access tracebacks are observed on CMTS.

Conditions: This issue occurs when the **cable admission-control ds-bandwidth/us-bandwidth** command is executed.

Workaround: There is no workaround.

- CSCtf04817

Symptoms: A Cable Line Card running Cisco uBR10012 running IOS Release 12.2(33)SCB5 may crash, when using the **debug cable mac-protocol** command and DCC.

Conditions: There are no known conditions for this issue to occur.

Workaround: Disable **debug cable mac-protocol** command.

- CSCtf05943

Symptoms: Cable modem subscribers experience one-way Real-Time Transport Protocol (RTP) traffic.

Conditions: This issue is seen on a Cisco uBR10012 Universal Broadband Router running the Cisco IOS Release 12.2(33)SCB4 or Cisco IOS Release 12.2(33)SCB5, with at least 2 gigabit uplinks towards the core.

Workaround: Perform one of the following:

1. Downgrade to 12.3(21)BC7.
2. Remove one of the Gigabit uplinks.
3. Perform a microcode reload.

- CSCtf09375

Symptoms: The MAC domain cable interface is configured to shutdown after the card has been powered off with the **hw-module subslot** command. However, when the card is powered on by the **no hw-module subslot** command, the shutdown configuration is missing when the interface comes up.

Conditions: There are no known conditions for this issue to occur.

Workaround: After the card is powered up, configure the MAC domain cable interface to shutdown again.

- CSCtf19518

Symptoms: The output of docsIFCMtsModulationTable MIB and the **show cable modulation-profile verb** command is inconsistent.

When SNMP query is performed on the MIB object docsIFCMtsModulationTable, the values of docsIfCmtsModByteInterleaverDepth, docsIfCmtsModByteInterleaverBlockSize, and docsIfCmtsModChannelType objects is different from the **show cable modulation-profile verb** CLI output.

Conditions: This issue occurs on a Cisco uBR10012 router running IOS release 12.2(33)SCC.

Workaround: Refer to the output of the **show cable modulation-profile verb** command for accurate values.

- CSCtf20370

Symptoms: When the line card is reverted from the protect mode to the working mode, it crashes the PRE and the working line card.

Conditions: This issue occurs on a Cisco uBR10012 Universal Broadband Router running Cisco IOS Release 12.2(33)SCB4, with PRE-A switched to PRE-B, and the Cisco CMTS using the protect card in slot 5/1.

Workaround: There is no workaround.

- CSCtf20577

Symptom: The CAM entry for the IPv6 multicast is missed.

Conditions: This issue occurs when both IPv6 and IPv6 multicast routing are enabled on a GE interface.

Workaround: Disable the IPv6 multicast routing.

- CSCtf22188

Symptoms: Tracebacks are observed on the CMTS router.

Conditions: This issue occurs under the following conditions:

- When trying to create a Group Configuration (GC) using only the group priority field alone
- When trying to change either the group prefix length or source prefix length without specifying the group or source prefix.

Workaround: To create a GC, ensure that the group priority and row status are mentioned in the same query.

- CSCtf26326

Symptom: When configuring an uBR platform with ISIS, the internal IPC Ethernet address 127.x.x.x is advertised even when no service internal is configured.

Conditions: This issue is observed because the **no isis advertise prefix interface** command prevents ISIS from advertising an interface's IP address. However, in this case, the IPC interface cannot be configured by the end user. Due to the nature of the Ethernet loopback address, it should never be advertised by an IGP.

Workaround: There is no workaround.

- CSCtf28247

Symptoms: DOCSIS 3.0 CMs go offline after the SPA GigE link detects loss of signal when fiber is unplugged.

Conditions: There are no known conditions for this issue to occur.

Workaround: Use the redundant SPA GigE link for backup.

- CSCtf38246

Symptoms: Upstream (US) traffic may exceed the peak-rate configured in service class in non-mtc mode.

Conditions: This issue is observed when peak-rate is configured for DOCSIS2.0 service flows, the US traffic may exceed peak-rate occasionally. If a very small peak-rate with a very large max-traffic-burst is configured for DOCSIS3.0 service flow, the US traffic may also exceed peak-rate occasionally.

Workaround: There is no workaround.

- CSCtf39293

Symptoms: A traceback is observed on the Cisco uBR7200 router.

Conditions: This issue is observed when the CM fails registration, and the **clear cable modem all delete** command is executed.

Workaround: There is no workaround.

- CSCtf40657

Symptom: The following error message is displayed during OIR when any interface on the line card being powered down is configured with spectrum management.

```
UBR10K_REDUNDANCY-4-RP_HA_STDBY_INCONSISTENT
```

Due to this, error the standby PRE's upstream spectrum data does not get updated properly. Also the output of CLIs such as **show cable spectrum-group** and **show cable fiber-node spectrum** is inconsistent between the active and standby RP as well as the standby RP and LC.

Conditions: This issue occurs when PRE HA is configured. A spectrum group must be assigned to at least one interface on the LC.

Workaround: Force a change in the spectrum band for the upstream channels whose information is out of sync on the standby RP, until the

UBR10K_REDUNDANCY-4-RP_HA_STDBY_INCONSISTENT event occurs again.

- CSCtf41553
Symptom: CMTS PEAK-OFFPEAK STATS memory leak is observed in the line card.
Conditions: This issue is observed when the STM enforce rule is configured first and then removed.
Workaround: There is no workaround.
- CSCtf48376
Symptoms: A crash occurs on a Cisco uBR10012 router running IOS release 12.2(33)SCB5 with PRE-4.
Conditions: This issue occurs when the **show cable modem ip service flow verbose** command is executed several times.
Workaround: Delete the fiber node configuration and reconfigure it.
- CSCtf52207
Symptoms: Line card-to-line card inter-process communication (IPC) may go down.
Conditions: This issue occurs when the line card CPU is heavily loaded. This delays the line card-to-line card IPC connect, causing a timeout. This is only a potential problem, and has not been directly observed either on IOS Release 12.2(33)SCC or IOS Release 12.2(33)SCD.
Workaround: If a redundant PRE is present and is in SSO, a PRE switchover will force the line cards to re-establish the IPC.
- CSCtf53847
Symptoms: A modem with an UGS flow lags behind due to inconsistent packet transmission.
Conditions: This occurs with Cisco IOS Release 12.2(33)SCC2 on a Cisco UBR-MC20X20V cable interface line card when the UGS flow sends a QI bit in a message, and the QI bit is not processed, resulting in the modem lagging behind on the UGS flow.
Workaround: There is no workaround.
- CSCtf54880
Symptoms: The following error message occurs on the CMTS console:

```
Invalid memory action (malloc)
```


Conditions: This issue occurs when the CMTS is idle, and 13 hrs prior to this error a ~1500 dual-stack CPEs is brought online and then torn down.
Workaround: There is no workaround.
- CSCtf56958
Symptoms: Bandwidth is not shared evenly between the DOCSIS 2.0 CMs and the DOCSIS 3.0 CMs.
Conditions: This issue occurs when DOCSIS 2.0 modems flow on upstream 0, and DOCSIS 3.0 modems flow on upstream 0 (US0) and upstream 1 (US1). US0 is fully utilized, but not US1.
Workaround: There is no workaround.
- CSCtf57010
Symptoms: In a setup with multiple BE service flows, the service flows having either a committed information rate (CIR) or having a minimum rate configured, receive bandwidth upto its maximum rate if the bandwidth is available.

Conditions: This issue is observed in a setup with mixed BE service flows, with some service flows configured with a minimum rate. If the maximum rate of the CIR flow is higher than its minimum rate, this issue occurs.

Workaround: Most CIR flows are provisioned with the maximum rate close to if not identical to the minimum rate. If a high maximum rate for the CIR flow is not required, configure the maximum rate such that it is close to the minimum rate.

- CSCtf57059

Symptoms: Unexpected values are observed in activity-based Weighted Fair Queuing (WFQ) aggregated throughput.

Conditions: This issue is observed when the number of flows are equally distributed among priority and activity-based WFQ. The aggregated throughput for each priority does not meet the configured weight.

Workaround: Use class-based WFQ.

- CSCtf57372

Symptoms: The following error message is displayed on the Cisco CMTS:

```
IPv6 lookup addr in host has host pointing to freed memory
```

Conditions: This issue occurs when the following scenario occurs:

1. There is an IPv6 CPE in the chassis.
2. Load balance and DCC have moved the CPE from one MAC-Domain to another MAC-Domain with DCC init tech >=1.
3. The DCC fails, and the CPE comes back online from the original MAC-Domain.

Workaround: There is no workaround.

- CSCtf59785

Symptoms: After UCC, the output of the **show cable modem verbose** command displays a message stating that the codeword counter is reset. However, the output of the **show interface sid counter verbose** command does not display the correct status (reset) of the codeword counter.

Conditions: This issue occurs when the UCC is enabled.

Workaround: There is no workaround.

- CSCtf61012

Symptoms: The Cisco CMTS router crashes when the SNMP client was queries the docsIf3CmtsCmRegStatusEntry MIB object.

Conditions: This issue occurs on a Cisco uBR10012 router running 12.2(33)SCC2 with tracebacks associated with SNMP polling.

Workaround: Use docsIfCmtsCmStatusTable instead of docsIf3CmtsCmRegStatusEntry for CM-related information.

- CSCtf67220

Symptoms: Some CMs get stuck in the reject(pk) state when connected to a UBR-MC20X20V line card.

Conditions: This issue occurs when the certificate of the CM does not conform to the IETF standards.

Workaround: Move the CMs to a 5x20 line card.

- CSCtf68413

Symptoms: The downstream service flow counter is cleared when a modem drops offline even if the CMTS is configured with the **cable primary-sflow-qos11 keep all** command.

Conditions: This issue occurs in a Cisco uBR10012 routers with Cisco uBR10-MC88V and UBR-MC20X20V line cards, and running Cisco IOS Release 12.2(33)SCD.

Workaround: There is no workaround.

- CSCtf69637

Symptoms: CM subscribers report robotized voice quality during the following events:

- Detection of JIB MAC DS lockup issue. All the modems on the MAC domains (cable interfaces) that are associated to a single JIB MAC are offline.
- Robotized voice is reported by the cable modem on all the other operational cable interfaces.
- Low throughput UGS flow is observed when the **show interface service-flow verbose li packet** command is executed on all the other operational cable interfaces.

Conditions: The robotized voice is a side effect of JIB DS lockup. However, the condition that triggers the JIB DS lockup is unknown.

Workaround: When the JIB DS failure occurs, reload the cable line card to recover. After the recovery, perform the following procedure as a temporary workaround to lessen the impact of the robotized voice quality:

1. Either shut down the MAC domains (cable interfaces) that are associated with the failed JIB, or individually shut down all the upstreams of the MAC domains.
2. Provision the CMTS to disable the PacketCable DQoS, and use best effort flows for voice-bearer traffic. This method will improve the voice quality only when the upstream is not congested.

- CSCtf76282

Symptom: If a dual-stack is CPE online, the **clear cable host x.x.x** command causes the corresponding line card to crash.

Conditions: This issue occurs when the CPE is online with both the IPv6 address and the IPv4 address.

Workaround: There is no workaround.

- CSCtf77798

Symptom: The output of the **show cable modem <interface> upstream x offline** command does not display anything:

```
CMTS2020#sh cable modem c5/0/0 upstream 2 offline Interface MAC address Prim Previous
Offline Rx Rx SM Sid State Time Power SNR Exhaust Count .
```

Conditions: This issue occurs when the <interface> option is entered in the **show cable modem <interface> upstream x offline** command. CLC type is independent.

Workaround: There is no workaround.

- CSCtf79425

Symptoms: On a Cisco uBR10-MC5X20H line card, aggregated throughput may exceed the configured value. Aggregated throughput is configured using the **cable upstream rate-limit-ccf aggregated-throughput aggregated-burst** command.

Conditions: This issue is observed because the bandwidth requests for the service flows with the peak rate configured are not throttled.

Workaround: There is no workaround.

- CSCtf80506

Symptom: Multiple grants per interval may not work.

Conditions: This issue is observed in IOS Release 12.2(33)SCD, SCC and SCB uBR image with PCMM and PS, which is doing Multiple grants per interval (MGPI) task.

When there are 24 line MTA, ATA or any other kind of device capable of making 24 calls behind one CM, MGPI is performed. With MGPI, the CMTS will get an additional classifier for every call that gets added to the same gate. Thus the nth call will have n classifiers in the **Gate-Set** message. When a **Gate-Set** is received with multiple classifiers in it, the CMTS will ignore all the classifiers, except the last one in the list. This will result in call failure of all n-1 calls.

Workaround: There is no workaround.

- CSCtf81039

Symptoms: The CPE entries are not removed when the modem is disconnected.

Conditions: This issue occurs when the following procedure is performed:

1. The modem and the PC(CPE) are connected.
2. The output of either the **show cable modem cpe** or the **show interface modem** command displays the PC MAC address behind the modem.
3. The modem and the PC(CPE) are disconnected.
4. After a few minutes, the modem is reconnected without the PC(CPE).
5. The output of either the **show cable modem cpe** or the **show interface modem** command still shows the PC behind the modem, along with the PC's ARP entry. Wait until the PC's ARP entry disappears.
6. The output of either the **show cable modem cpe** or the **show interface modem** command still reports the CPE entry behind the modem.

Workaround: Delete the modem using the **clear cable modem mac address delete** command.

- CSCtf85427

Symptom: Memory leak is observed when more than 21 profiles are configured in a policy map.

Conditions: There are no known conditions for this issue to occur.

Workaround: There is no workaround.

- CSCtf87470

Symptoms: DOCSIS 3.0 CM may boot in partial mode.

Conditions: This issue occurs when a DOCSIS 3.0 modem is booted with a US BG-capable CMTS. The modem may or may not boot in partial mode.

Workaround: Use power cycling to resolve the issue. However it is not guaranteed that it will clear the partial mode.

Resolved Caveats—Cisco IOS Release 12.2(33)SCD1

- CSCsx33622

Symptoms: Flapping BGP sessions occur in the network when a Cisco IOS application sends full-length segments with TCP options.

Conditions: This issue is seen when a Cisco IOS device that is configured to send TCP options sends its initial Maximum Segment Size (MSS) during the three-way handshake. In this case, the router incorrectly accounts for 20 bytes of TCP options when it sends this initial MSS

This issue occurs when a fixed IOS communicates with a non-fixed IOS.



Note The non-fixed behavior is to subtract the 20 TCP option bytes when MSS values are initially exchanged.
The fixed behavior is to not subtract the 20 TCP option bytes when MSS values are initially exchanged.

Workaround: Set the MSS value on the non-fixed router to be the MSS received from the fixed router minus the TCP options (20 bytes). Use the global command **ip tcp mss** to adjust the MSS value that the router will use.

- CSCtb33109

Symptoms: Some CMs may go offline during a line card switchover.

Condition: This issue occurs during a switchover of a protect Cisco uBR10-MC5X20H line card and a working Cisco uBR10-MC5X20U line card.

Workaround: Reduce the number of modems connected to the Cisco uBR10-MC5X20U line card.

- CSCtc44253

Symptoms: The accumulated timing offset of a modem goes to a negative value. The following error message is displayed on the CMTS:

```
%UBR10000-4-BADTXOFFSET: Bad timing offset -182443 detected for cable modem
000a.73cc.c7b7.
```

Conditions: This issue occurs on the Cisco uBR10-MC5X20 line card.

Workaround: There is no workaround.

- CSCtc68481

Symptoms: The **show inventory** command output is not displaying the secondary PRE on an uBR10012 router.

Conditions: This issue occurs on an uBR10012 router running Cisco IOS Release 12.2(33)SCB2.

Workaround: There is no workaround.

- CSCtc96582

Symptoms: When VPN routing and forwarding (VRF) and tunneling is configured, the output traffic rate through the tunnel interface does not exceed 4 Kbps.

Conditions: This issue occurs when the destination IP of the tunnel interface belongs to non-global VRF and the traffic direction is outgoing.

Workaround: Make sure that the destination IP address of the tunnel interface belongs to global VRF, and not to a specific VRF.

- CSCtd57007

Symptoms: The CNR value goes down with added noise. Even if the noise is removed the value continues to remain the same.

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

Workaround: Reduce the traffic.

- CSCtd83463

Symptoms: The DOCSIS 3.0 CM goes offline after issuing the **test cable dcc** command with a ranging technique of 1.

Conditions: This issue occurs when the **test cable dcc** command is issued with a ranging technique of 1.

Workaround: There is no workaround.

- CSCtd93255

Symptom: An Upstream Channel Descriptor (UCD) CCC message appears for each upstream port on the protect line card when the protect card is configured based on one of the working line cards with the **member subslot protect config** command. This message should not appear for the protect card.

Conditions: This issue occurs when the protect card is configured based on one of the working line cards with the **member subslot protect config** command.

Workaround: No specific workaround. The warning message does not have any impact on normal functionality.

- CSCte05596

Symptoms: When CPU utilization is very high (around 99%), a false alarm is generated with the following error message:

```
CLONED_CM_DETECTED
```

Conditions: This issue occurs when hundreds of Cisco EPC3000s CMs are connected to the Cisco uBR-MC88V LC, and half of these CMs are flapping. When the **show memory debug leak chunk** command is executed on LC, high CPU utilization is indicated with the following error message being displayed on the console multiple times:

```
CLONED_CM_DETECTED
```

Workaround: There is no workaround.

- CSCte15207

Symptoms: The standby PRE is reset after the working and protect uBR-MC20X20V cable line cards are reset at the same time.

Conditions: This issue occurs on a Cisco uBR10012 router when the working and protect uBR-MC20X20V cable line cards are reset at the same time.

Workaround: There is no workaround, but there is no service impact after standby PRE reset.

- CSCte20181

Symptoms: The route processor crashes when polling for `ceffESelectionEntry`.

Conditions: This issue occurs when the following procedure is performed:

1. From the global configuration mode, the bundle is removed using the **no interface bundle x** command.
2. The cable interface is configured using the **interface cable x/y/z** command.
3. From the cable interface configuration mode, the bundle is added back using **cable bundle x** command.

4. The IP address and other parameters are configured for the bundle interface.
5. A query is run for the cefFESelectionEntry.

The router crashes following the query.

Workaround: Configure a new bundle with a different bundle index. Do not reuse a removed bundle.

- CSCte20441

Symptoms: Multicast data traffic is not forwarded to the VRF group.

Conditions: This issue occurs when a Multicast Virtual Private Network (MVPN) is set up.

Workaround: There is no workaround.

- CSCte36983

Symptom: The DOCSIS 3.0 General Load Balancing Group (GLBG) on a protect card continues to exist even after a revertback.

Conditions: This issue occurs when the following procedure is performed:

1. A switchover occurs from the line card interface switchover cable 8/0 to cable 5/0.
2. A revertback occurs from cable 5/0.

Workaround: There is no workaround

- CSCte49666

Symptoms: The CMTS crashes due to a bus error.

Conditions: This issue occurs only when the PRE is out of memory.

Workaround: There is no workaround.

- CSCte50468

Symptoms: Cannot capture the downstream packets on a SIP 600 with a 24 RF channel-spa-1 in bay 1 or bay 2 using a cable monitor.

Conditions: There are no specific conditions for this issue to occur.

Workaround: There is no workaround.

- CSCte53032

Symptoms: The modulation profile's preamble length for internal usage code (IUC) types, station, and initial becomes very large.

Conditions: This issue occurs on the uBR10012 routers with uBR10-MC5X20H-D and UBR-MC20X20V-D line cards on Cisco IOS Releases 12.2(33)SCC and 12.3(23)BC.

Workaround: Use a different modulation profile.

- CSCte57880

Symptoms: The service unsupported-transceiver configuration on a PRE4 is not available.

Conditions: This issue occurs only on a PRE running Cisco IOS Releases 12.2(33)SCB5, 12.2(33)SCC, and 12.2(33)SCD.

Workaround: There is no workaround.

- CSCte57965

Symptoms: All CMs on adjacent downstreams (0 and 1, or 2 and 3, or 4) are offline.

Conditions: The downstream ports that share JIB may be nonfunctional if the JIB that services both the downstream ports are locked.

Workaround: Reload the line card.

- CSCte58329

Symptoms: Layer 2 VPN configuration with BPI configuration fails on the Cisco uBR10012 router.

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

Workaround: There is no workaround.

- CSCte62343

Symptoms: The wideband SPA becomes unusable after a BLAZE SPI interrupt. All the CMs using SPA downstreams go offline.

Conditions: There are no specific conditions for this issue to occur.

Workaround: OIR the SPA.

- CSCte62738

Symptoms: The Cisco UBR-MC20X2V line card may crash when it receives an invalid bandwidth request.

Conditions: This issue occurs when an error condition in which the CMTS can receive a bonded request from an invalid SID exists, thus causing the line card crash.

Workaround: There is no workaround.

- CSCte63882

Symptoms: The output of the **show diagnostic ood-status** command does not give correct information pertaining to the SPAs and the DTCC cards.

Conditions: This issue is seen when running the Cisco IOS Release 12.2(33)SCB4.

Workaround: There is no workaround.

- CSCte67253

Symptoms: The Spumoni uptime output does not include CP utilization.

Conditions: This issue is seen when you use uptime on the Spumoni SPA card.

Workaround: There is no workaround.

- CSCte77034

Symptom: "%SYS-2-BADSHARE: Bad refcount in pak_enqueue" type of tracebacks are seen in the PRE module running Cisco IOS Release 12.2(33)SCC1.

Conditions: This issue occurs when a particle-based packet is pushed into the toaster by the PRE module.

Workaround: There is no workaround.

- CSCte78595

Symptoms: The line card reloads due to an error when Layer 2 VPN is configured on a CM.

Conditions: This issue occurs in CMs when Layer 2 VPN is configured and Baseline Privacy Index (BPI+) is not configured.

Workaround: Configure BPI+ on CMs with Layer 2 VPN configurations.

- CSCte79772

Symptoms: After the active PRE crashes, some modems cannot get online after the switchover.

Conditions: This issue occurs when the protect line card is active and some modems are online on that cable line card (CLC) before the PRE switchover.

Workaround: Revert back from the protect CLC to the working CLC.

- CSCte81144

Symptoms: The Cisco uBR10012 router delays the response to an SNMP client, causing an ongoing SNMP polling timeout.

Conditions: This issue occurs in Cisco uBR10012 routers running PRE2 while polling either the ccwbWBCmStatusTable or ccwbWBCmStatusExtTable MIB objects. This issue occurs when many narrowband modems are online, but these modems do not include a wideband modem.

Workaround: Either increase the SNMP timeout used by the Network Management Applications or either exclude the ccwbWBCmStatusTable or the ccwbWBCmStatusExtTable by configuring the SNMP view:

```
snmp-server view excludewideband iso included
snmp-server view excludewideband 1.3.6.1.4.1.9.9.479.1.6 excluded
snmp-server view excludewideband 1.3.6.1.4.1.9.9.479.1.7 excluded
snmp-server community <community> view excludewideband RO <acl number>
```

- CSCte83897

Symptoms: The output of the MIB object docsDiag is not complete when the number of CMs in error state is greater than 30.

Conditions: This issue occurs when diaglog is configured.

Workaround: There is no workaround.

- CSCte84378

Symptoms: A CM fails to receive the Ranging-Response (RNG-RSP) message.

Conditions: This issue occurs when the CMTS detects that a CM has performed initial ranging on an upstream or downstream pair that are not within the same MAC domain.

Workaround: There is no workaround.

- CSCte89797

Symptoms: The SAMIS and IPDR record displays junk value for the field CMTSupIfName for the multicast service flow.

Conditions: This issue occurs when a multicast service flow exists, and SAMIS/IPDR is enabled.

Workaround: There is no workaround.

- CSCte92761

Symptoms: SAMIS/IPDR does not export deleted multicast service-flow.

Conditions: This issue occurs when deleted multicast service flow exists, and SAMIS/IPDR is enabled.

Workaround: There is no workaround

- CSCte97135

Symptoms: An IPv4 cable modem with an IPv6 CPE does not forward IPv6 multicast traffic because the Cisco CMTS has not provided the list of DSIDs in the registration.

Conditions: This issue occurs when a CM is IPv6 compliant with an IPv6 CPE.

Workaround: There is no workaround.

- CSCte99323

Symptoms: The Secondary PRE is reset due to parser return error after the secondary collector or associate on the IPDR config is added or deleted.

Conditions: This issue is observed when **ipdr session stop** command is executed on the active PRE, followed by addition/deletion of secondary collector/associate on IPDR config.

Workaround: Execute the **ipdr session stop** command on both the active PRE and the standby PRE.

- CSCtf05351

Symptoms: The following error message is displayed on the standby PRE after the Cisco Call Manager (CCM) is deleted:

```
UBR10K-6-STDBY_CM_INCONSISTENCY
```

Conditions: This issue is observed in Cisco uBR10-MC20X20 protecting the Cisco uBR10-MC5X20 line card setup, when modems on the 5X20 working card are turned offline and are removed by the **clear cable modem delete** command.

Workaround: Ignore the error message.

- CSCtf10086

Symptom: SCDMA channel bonding (four channels of 64QAM and 6.4 MHz) throughput does not work with the following SCDMA parameter:

- Active codes = 128
- Spreading Interval per frame = 4
- Code per minislot = 2
- Packet size is greater than 1350 bytes per packet

Condition: The conditions are the same as described in Symptom.

Workaround: There is no workaround.

- CSCtf12078

Symptom: The ISSU Compatibility Matrix shows that Cisco IOS Releases 12.2(33)SCC1 to 12.2(33)SCC2 is Base-compatible instead of Compatible, when the system continues to run in SSO mode after the IOS Release 12.2(33)SCC1-12.2(33)SCC2 ISSU upgrade or downgrade.

Conditions: This issue occurs after a new software licensing feature is introduced on uBR10-MC20X20 line card.

Workaround: There is no workaround. Being Base-compatible does not affect the ISSU operation to reach SSO.

- CSCtf13030

Symptoms: The Cisco uBR10-MC5X20H-D cable line card displays incorrect software platform version group when the **show version** command is run on either the line card or on the MIB walk.

Conditions: This issue is seen on the Cisco uBR10012 Universal Broadband Router while executing either the **show version** command or MIB walk.

Workaround: There is no workaround.

- CSCtf14214

Symptoms: The Cisco UBR-MC20X20V cable interface line card may crash due to jib3us detecting a fatal interrupt.

Conditions: This issue occurs on a Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCC1 when a non-DOCSIS compliant cable modem sends fragmented packets.

Workaround: There is no workaround.

- CSCtf17357
Symptoms: The Cisco uBR7200 router may hang after the cable upstream privilege configuration CLI is executed.
Conditions: This issue occurs when privilege cable upstream CLIs are executed on the CMTS.
Workaround: There is no workaround.
- CSCtf18541
Symptoms: Cisco uBR10-MC20X20 protecting Cisco uBR10-MC5X20 redundancy preconfig does not take effect after adding the uBR10-MC20X20 working member.
Conditions: This issue occurs when a user has Cisco uBR10-MC20X20 protecting the Cisco uBR10-MC5X20 preconfig on the existing running-config, and adds one 20X20 as the new working LC.
Workaround: Reset the protect line card that triggers the HCCP state machine reinitialization.
- CSCtf19777
Symptoms: Repeated ECC error messages on PRE-4 cause 100% CPU and service interruption.
Conditions: This issue occurs when repeated ECC errors occur.
Workaround: Remove the line card reporting the errors to prevent service interruption.
- CSCtf20276
Symptoms: Load sharing of Multiprotocol Label Switching (MPLS)/Virtual Private Network (VPN) does not happen on the upstream router direction even though the paths have the same cost to reach a particular destination.
Conditions: This issue occurs when the MPLS or VPN is configured on a bundle interface, and the MPLS is configured on the links to the upstream router.
Workaround: There is no workaround.
- CSCtf20698
Symptoms: Connectivity issues occur in the outbound interface on the Cisco uBR10012 router (either cable or WAN) due to a stuck pxf queue. The modems may get stuck in init (io).
Conditions: This issue occurs when the interface default queues are deleted as a result of the **no card** command on a Cisco uBR10012 router running Cisco IOS Release 12.2(33) SCB, Cisco IOS Release 12.2(33) SCC, or Cisco IOS Release 12.2(33) SCD.
Workaround: After executing the **no card** command, perform two PRE switchovers.
- 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 setup on the Cisco UBR-MC20X20V cable interface line card.
Workaround: There is no workaround.
- CSCtf24696
Symptoms: Core temperature readings are incorrect.
Conditions: This issue is seen on the Cisco uBR10012 Universal Broadband Router with PRE2/3/4 running the Cisco IOS Release 12.2(33)SCB and later.
Workaround: There is no workaround.

- CSCtf26777

Symptoms: The **RecType** field is set to a wrong value when the template is DIAGLOG-DETAIL, and the session type is event.

Conditions: This issue occurs when the configured IPDR session type is event, set using the **configure ipdr type event** command, and the IPDR schema is DIAGLOG-DETAIL, set using the **configure ipdr template DIAGLOG-DETAIL** command.

Workaround: There is no workaround.
- CSCtf26903

Symptom: When configuring sampling rate or duration for an enforce rule, a check is present on the CLI to ensure that the duration is greater than the sample rate. This check is absent when these values are set via the MIB.

Condition: This issue occurs because the rule that the monitoring duration must be greater than the sampling rate for a legacy enforce rule is not strictly enforced by MIB.

Workaround: Configure via CLI.
- CSCtf31727

Symptoms: Changing the service class parameters on a CM results in messages not getting passed to the PRE.

Conditions: This issue is seen on the Cisco uBR10012 Universal Broadband Router running Cisco IOS Release 12.2(33)SCB4.

Workaround: Execute the **cable modem service-class-name** command from the cable line card.
- CSCtf31850

Symptoms: 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.

Conditions: Because the MD-DS-SG ID is generated based on the MAC domain, there may be different MD-DS-SG IDs for two MAC domains if the same downstream RF channel set is configured under two fiber-nodes. If a CM sends the ranging request to the wrong downstream, the CMTS tells the CM to abort ranging. Because no DFO processing takes place, no logs are displayed.

Workaround: Remove the two fiber nodes configuration, and configure them again.
- CSCtf32042

Symptoms: The CMs become unreachable even if they are in the online(pt) state.

Conditions: This issue occurs with the Cisco UBR-MC20X20V or Cisco uBR-MC88V cable interface line card when a modem moves within the same MAC domain using load balancing or the **test cable dcc** command with DCC profiles 1-4.

Workaround: Perform one of the following:

 - Use DCC 0 for load balancing, which forces the modems to reregister before completing the move. Load balancing does not move modems that have active voice calls. The **test cable dcc** command moves the modem even if it has active voice calls.
 - Disable BPI. This eliminates the need to move the keying information to the new channels.
 - Disable load balancing. This ensures that the modem remains in online(pt) and does not move to a new channel.
- CSCtf32861

Symptoms: The **cable metering ipdr session** command does not configure successfully if usage-based billing and streaming of billing records to an external server is already configured.

Conditions: This occurs when the following procedure is performed:

1. The **cable metering destination nonsecure** command is configured on the CMTS.
2. The **cable metering ipdr session** command is configured with the same time interval and session ID.

Workaround: Execute the **no cable metering destination nonsecure** command first.

- CSCtf34993

Symptoms: The IN/OUTPkts counter is zero in ifMIB.

Conditions: This issue occurs on the Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCC.

Workaround: There is no workaround.

- CSCtf35150

Symptom: The PRE2 module is not able to boot up when PXF crashed.

Conditions: This issue is occurs on a Cisco uBR10012 router running IOS release 12.2(33)SCD.

Workaround: There is no workaround.

- CSCtf37141

Symptom: The maximum character length for the VRF name is 32 characters. When configuring the VRF parameter for the divert rate limit trusted sites, the command accepts 32 characters. However only 31 characters are displayed in the running configuration and in the output of the **show pxf cpu drl-trusted-sites** command.

Also, the CMTS CLI accepts the entering of the same **divert-rate-limit trusted-sites** command multiple times when using the same 32 characters for the VRF name.

Conditions: This issue is seen when configuring a 32-character length VRF name using the **divert-rate-limit trusted-sites** command.

Workaround: There is no workaround.

- CSCtf44327

Symptom: Multiprotocol Label Switching (MPLS) Business Services over DOCSIS (BSoD) needs to convert user priority to MPLS exp range in CM config file TLVs. However the **show pxf** command does not support this.

Conditions: This issue occurs when the following procedure is performed:

1. L2VPN BSoD is setup.
2. In CM config file, user priority is set instead of MPLS exp range.

Workaround: There is no workaround.

- CSCtf59126

Symptoms: The **upstream-service-group** gets removed from the CMTS.

Conditions: This issue is observed when the Cisco UBR-MC20X20V cable interface line card switchover occurs more than three times, or when the Cisco UBR-MC20X20V cable interface line card switchover occurs, followed by the RP switchover.

Workaround: Do not let the condition described under Conditions occur.

- CSCtf72917

Symptoms: Modems on the Cisco UBR-MC20X20V cable interface line card become unreachable after load balancing between different ports on the SPA using DCC tech 1-4.

Conditions: This issue occurs only with DCC tech 1-4. It does not occur when the modem is forced to reregister and reauthenticate.

Workaround: Use load balancing in conjunction with DCC tech 0.

Open Caveats—Cisco IOS Release 12.2(33)SCD

- CSCsz49382

Symptoms: Cable modems do not respond to layer 3 pings.

Conditions: This issue occurs only on the Cisco uBR10-MC5X20S and Cisco uBR10-MC5X20U cards, and when PRE-EQ (equalization-coefficient) is configured.

Workaround: Restart the cable line card.
- CSCsz50204

Symptoms: A multicast quality of service (QoS) session is not automatically created when changing the group configuration or group QoS configuration (GQC).

Conditions: This issue is observed when a multicast QoS group is configured on a bundle interface and a matching static-group is defined. However, any change in the group configuration after it is applied to the bundle interface is not taken into effect, and the original multicast QoS session is removed.

Workaround: Remove the multicast QoS session from the bundle interface and re-apply it to the bundle.
- CSCsz55288

Symptoms: Alignment traceback messages are displayed when the **show memory leak res user** and **show buffer usage** commands are executed.

Conditions: This issue occurs when you execute the **show memory leak res user** and **show buffer usage** commands in Cisco IOS Release 12.2(33)SCB.

Workaround: There is no workaround.
- CSCsz69357

Symptoms: A memory leak is observed due to service identifier (SID) management task.

Conditions: This issue is observed when the packetcable calls are used.

Workaround: There is no workaround.
- CSCsz69359

Symptoms: A memory leak is observed on the line card due to MAC parser with overnight packetcable calls.

Conditions: This issue is observed when overnight packetcable calls are used.

Workaround: There is no workaround.
- CSCsz77977

Symptoms: Online Insertion and Removal (OIR) of a Personal Computer Memory Card Industry Association (PCMCIA) flash disk can cause a watchdog reset of the Performance Routing Engine (PRE).

Conditions: This issue is observed during OIR of the PCMCIA flash disk that is being actively accessed.

Workaround: Restrict the removal of PCMCIA flash disks.

- CSCsz98503

Symptoms: Multiple cable modems (CMs) go offline for a short time on a random upstream port. This is seen as a spike of the error-per-second rate or a modulation error ratio (MER) drop and by a decrease in the “docsIfSigQUnerrored” MIB object.

However, the reverse is not true—a brief degradation of the physical connectivity parameters does not necessarily trigger a brief CM loss.

Conditions: This issue is observed on the Cisco uBR10-MC5X20H line cards.

Workaround: There is no workaround.
- CSCta05835

Symptoms: Duplicate entries occur in **docsBpi2CmtsMulticastObjects** after the line card revertback.

Conditions: This issue is observed when a **cable match** command is configured with Baseline Privacy Index (BPI). The Internet Group Management Protocol (IGMP) join is received for the group in **cable match** command and the **docsBpi2CmtsMulticastObjects** is populated. This results in the line card switchover and revertback.

Workaround: There is no workaround.
- CSCta16724

Symptoms: Users with a privilege level of 15 and ‘view root’ cannot perform a secure copy (SCP).

Conditions: This issue occurs when users with ‘view root’ privilege try to perform an SCP.

Workaround: Remove the ‘view root’ privilege.
- CSCta27366

Symptoms: The Cisco uBR10000 PRE CPU utilization moves up to 100% when the field-programmable gate array (FPGA) on the Wideband SPAs plugged into a Cisco SIP-600 are being upgraded.

Conditions: This issue only occurs during the SPA Field Programmable Gate Array (FPGA) upgrade process.

Workaround: There is no workaround.
- CSCta32429

Symptoms: The CMs incapable of downstream bonding are expected to come online on downstreams that are not part of a bonding group. Non-bonding capable CMs are wrongly registered in bonded channels.

Conditions: This issue occurs when the **cable service attribute non-ds-bonded downstream-type bonding-disabled** command is configured on the Cisco CMTS.

Workaround: There is no workaround.
- CSCta38298

Symptoms: Active PRE fails over to the secondary reporting, with the following message:

```
ACTIVE RP WATCHDOG TIMEOUT TRIGGERED
```

Conditions: This issue was first observed on Cisco IOS Release 12.3(23)BC7.

Workaround: There is no workaround.
- CSCta39239

Symptoms: While configuring the **cable upstream docsis-mode** command using SNMP, the standby PRE module does not synchronize with this configuration.

Conditions: This issue occurs when configuring the **cable upstream docsis-mode** command using SNMP.

Workaround: Configure the **cable upstream docsis-mode** command using the CLI instead of SNMP.

- CSCtb04404

Symptoms: The Cisco Wideband SPA does not transmit traffic. The Edge Quadrature Amplitude Modulation (EQAM) indicates no input traffic.

Conditions: This issue is seen on the Cisco SIP-600 with a PRE4 module, 5 x1 GigabitEthernet interface, and SPA-24XDS-SFP Wideband SPAs.

Workaround: Perform a PRE module reload.

- CSCtb24309

Symptoms: Around 60 to 70 bytes of buffer memory space gets allocated when the protect line card becomes active after a system bootup.

Condition: This issue occurs during a line card switchover.

Workaround: There is no known workaround.

- CSCtb33109

Symptoms: Some cable modems (CMs) may go offline during a line card switchover.

Condition: This issue occurs during a switchover of the protect Cisco uBR10-MC5X20H line card and the working Cisco uBR10-MC5X20U line card.

Workaround: Reduce the number of modems SIP connected to the Cisco uBR10-MC5X20U line card.

- CSCtb74904

Symptoms: After PRE switchover, the service flow counter shows 0 on the Cisco uBR10012 router.

Conditions: This issue occurs during a PRE switchover.

Workaround: There is no workaround.

- CSCtb83278

Symptoms: Executing the **term len 0** and **show cable modem** commands pauses the generated output randomly for up to a second on PRE4 module with hundreds of CMs.

Conditions: This issue occurs on PRE4 module with hundreds of CMs.

Workaround: There is no workaround.

- CSCtc33748

Symptoms: The Cisco uBR-MC5X20U-D card crashes multiple times with the following message in the crashinfo file:

```
Address Error (load or instruction fetch) exception, CPU signal 10, PC = 0x6038C709
```

Conditions: This issue has been observed on the Cisco uBR10012 router with PRE2 module.

Workaround: There is no workaround.

- CSCtc44253

Symptoms: The accumulated timing-offset of the modem goes to a negative value. The following error message is displayed at the CMTS:

```
%UBR10000-4-BADTXOFFSET: Bad timing offset -182443 detected for cable modem
000a.73cc.c7b7.
```

Conditions: This issue occurs on the Cisco uBR10-MC5X20 line card.

Workaround: There is no workaround.

- CSCtc54875

Symptoms: The Cisco uBR10-MC5X20H line card may crash after reporting memory allocation failures.

Conditions: This issue is observed when multiple memory allocations failures occur.

Workaround: There is no workaround.

- CSCtc59089

Symptoms: The cable line card crashes when a specific 3-way call scenario is initiated.

Conditions: This issue occurs where multi-line ATAs are placed behind CMs in a PacketCable Multimedia (PCMM) setup.

Workaround: There is no workaround.

- CSCtc62096

Symptoms: Dynamic multicast service flow and reserved bandwidth exist even after removal of multicast QoS (MQoS) configuration from the second bonding group.

Conditions: This issue occurs after a multicast QoS bandwidth reservation oversubscription occurs.

Workaround: Perform a PRE switchover.

- CSCtc68481

Symptoms: The **show inventory** command output is not showing the secondary PRE on an uBR10012 router.

Conditions: This issue occurs on an uBR10012 router running Cisco IOS Release 12.2(33)SCB2.

Workaround: There is no workaround.

- CSCtc92058

Symptoms: Inaccurate timing offset values from Cable Modem Termination Systems (CMTS).

Conditions: None.

Workaround: Apply the modem firmware patch.

- CSCtc96582

Symptoms: When VPN routing and forwarding (VRF) and tunneling is configured, the output traffic rate through tunnel interface cannot exceed 4 Kbps.

Conditions: This issue occurs when the destination IP of the tunnel interface belongs to non-global VRF and the traffic direction is outgoing.

Workaround: Make sure that the destination IP address of the tunnel interface belongs to global VRF, and not to specific VRF.

- CSCtc99509

Symptoms: Cisco Wideband SPA sends only “sync Tx” packets.

Conditions: This issue is observed after Cisco Wideband SPA reload and when a DOCSIS Timing Interface (DTI) server is used.

Workaround: Reload the jacket card.

- CSCtd24347
Symptoms: Generic Routing Encapsulation (GRE) tunnel does not forward traffic.
Conditions: This issue occurs when a new GRE tunnel is created on a Cisco uBR10012 router.
Workaround: Execute the **shutdown** and the **no shutdown** commands on the tunnel interface.
- CSCtd25393
Symptoms: The IGMPv3 CPE behind the DOCSIS 3.0 main distribution frame (MDF) capable modem using local integrated-cable downstream interface as primary, fails to receive any multicast traffic after the Cisco UBR-MC20X20V line card switchover occurs due to Downstream Service Identifier (DSID) change.
Conditions: This issue occurs when the Cisco UBR-MC20X20V line card fails to receive traffic after a switchover.
Workaround: There is no workaround.
- CSCtd26295
Symptoms: The debug output to the terminal is halted when “logging discriminator” is enabled.
Conditions: This issue was observed in Cisco IOS Release 12.2(33)SCB5.
Workaround: There is no workaround.
- CSCtd28028
Symptoms: Flow-control does not function on the ESR-HH-1GE interface of a Cisco uBR10012 router.
Conditions: This issue occurs on the ESR-HH-1GE interface of a Cisco uBR10012 router.
Workaround: There is no workaround.
- CSCtd30002
Symptoms: It is not possible to configure the 5X1 Gigabit Ethernet port after swapping SPAs.
Conditions: This condition occurs after replacing a 24rfchannel-spa-1 card with a SPA-5X1GE-V2 card.
Workaround: Reload the router or perform an OIR on the 24rfchannel-spa-1 card with another 24rfchannel-spa-1 card.
- CSCtd31499
Symptoms: The Wideband DOCSIS 3.0 modem does not receive MAC Domain Descriptor (MDD) from Cisco uBR10012 router, and retraces to narrowband.
Conditions: This issue occurs on a Cisco uBR10-MC5X20H line card.
Workaround: Remove the downstream modular-cable configuration from the cable interface and then reinstall the line card. Another workaround is to reload the line card.
- CSCtd43242
Symptoms: A crash may occur on the Cisco uBR10-MC5X20H line card due to Internet Protocol Communications (IPC) timeout.
Conditions: This issue occurs as the PRE module crashes due to an IPC time out.
Workaround: There is no workaround.
- CSCtd65834
Symptoms: A message is required indicating duplicate frequencies are configured on the integrated-cable controllers.

Conditions: This message is required during migration of the Cisco uBR10-MC5X20H line card to the Cisco UBR-MC20X20V line card.

Workaround: The downstream RF-channel assignment needs to be mapped prior to migration.

- CSCtd67202

Symptoms: The secondary port does not become active.

Condition: This issue occurs on a Cisco uBR10012 router with Downstream External PHY Interface (DEPI) control plane configured.

Workaround: There is no workaround.

- CSCtd69497

Symptoms: Static group and session is not created when static multicast group and source address exists in cable modem configuration file.

Conditions: This issue occurs when you specify the static multicast group and source address in cable modem configuration file.

Workaround: There is no workaround.

- CSCtd73908

Symptoms: Excessive unicast and multicast packet loss is seen on a Wideband SPA switchover.

Conditions: This issue occurs on a Wideband SPA GigabitEthernet interface. The switchover takes 70 seconds to converge.

Workaround: There is no workaround.

- CSCtd78225

Symptoms: The router displays high CPU utilization for 1 to 2 minutes after issuing **privilege interface** commands. As a result, the router takes a long time to reload, after saving the configuration changes.

Conditions: This issue has been observed while using **privilege interface** commands on uBR10012 router running Cisco IOS Release 12.2(33)SCB5.

Workaround: Avoid using **privilege interface** commands.

- CSCtd83463

Symptoms: The DOCSIS 3.0 cable modem goes offline after giving the **test cable dcc** command with a ranging technique of 1.

Conditions: This issue occurs when the **test cable dcc** command is issued with a ranging technique of 1.

Workaround: There is no workaround.

- CSCtd90278

Symptoms: The Wideband SPA does not perform Address Resolution Protocol (ARP) after the failure of the active port.

Conditions: This issue occurs under normal operating conditions.

Workaround: There is no workaround.

- CSCtd98495

Symptoms: The cable modems go offline on a port.

Conditions: This issue is observed on the downstream PHY on the cable line cards

Workaround: Reload the line cards.

- CSCte07582

Symptoms: The upstream-service-group is removed from MAC-domain after the line card and PRE switchover.

Conditions: This issue is observed following the Cisco UBR-MC20X20V line card and PRE switchover on Cisco IOS Release 12.2(33)SCD.

Workaround: There is no workaround.
- CSCte09146

Symptoms: PRC_CONFIG_CHANGE is returned instead of the PRC_CONFIG_NO_CHANGE.

Conditions: This issue occurs when **cable admission-control ds-bandwidth** and **cable admission-control us-bandwidth** commands are executed for the second time in global or interface configuration mode.

Workaround: There is no workaround.
- CSCte10766

Symptoms: Minor alarm on the uBR10012 router when the cable line card is administratively down.

Conditions: This issue has been observed on the uBR10012 router with Cisco IOS Releases 12.3(23)BC08 and 12.2(33)SCB5.

Workaround: Reload the router.
- CSCte13340

Symptoms: PRE4 shows high-rate of IPC errors consistently.

Conditions: This issue is observed on the uBR10012 router with Cisco IOS Release 12.2(33)SCD.

Workaround: There is no workaround.
- CSCte17479

Symptoms: All cable modems under a single upstream unexpectedly move to expire(pt) state.

Conditions: This issue occurs on a uBR10012 router running Cisco IOS Release 12.2(33)SCB3. The other upstreams on the same line card are not affected.

Workaround: The modems do not recover automatically. Run **shut/no shut** on the upstream to restore CMs.
- CSCte20181

Symptoms: The route processor crashes when polling for **ceFFESelectionEntry**.

Conditions: This issue occurs after performing the following steps:

 1. From the global configuration mode, remove the bundle using **no interface bundle x** command.
 2. Configure the cable interface using **interface cable x/y/z** command.
 3. From the cable interface configuration mode, add the bundle back using **cable bundle x** command.
 4. Configure the IP address and other parameters for the bundle interface.
 5. Run a query for the **ceFFESelectionEntry**.

The router crashes following the query.

Workaround: Configure a new bundle with a different bundle index. Do not reuse a removed bundle.
- CSCte20441

Symptoms: Multicast data traffic is not forwarded to VRF group.

Conditions: This issue occurs when Multicast Virtual Private Network (MVPN) is set up.

Workaround: There is no workaround.

- CSCte26014

Symptoms: The Cisco uBR-MC8X8V cable interface line card may crash.

Conditions: This issue occurs while trying to access an active multicast session key using **show interface key sid** command with multicast sids on a Cisco uBR7200 series router.

Workaround: Do not use multicast sids.

- CSCte36453

Symptoms: System Event Archive (SEA) console feature is enabled on the PRE4.

Conditions: This issue occurs when the SEA feature is present in the IOS image.

Workaround: Delete the sea_console.dat file present on the PRE4 bootflash.

- CSCte36746

Symptoms: The “ARP-3-STCKYARPOVR: Attempt to overwrite Sticky ARP entry” message is logged as a higher severity level error.

Conditions: This issue is observed while the router tries to overwrite the sticky ARP entry.

Workaround: There is no workaround.

- CSCte40466

Symptoms: A bus error occurs on the uBR10012 router running Cisco IOS Release 12.2(33)SCC.

Conditions: This issue occurs when the SNMP getNext query is in progress for the **docsIf3CmtsCmRegStatusEntry** MIB object.

Workaround: There is no workaround.

- CSCte41711

Symptoms: Tracebacks occur after the Hot Standby Connection-to-Connection Protocol (HCCP) failover and revertback of the line card.

Conditions: This issue occurs after a line card reset, and an HCCP failover and revertback of the line card.

Workaround: There is no workaround.

- CSCte49359

Symptoms: The output of the **show interface service flow counter** command displays a wrong result.

Conditions: This issue is observed on the following conditions:

1. Configure two group configurations (GCs) with same session-range, but with different type of service (ToS) and group QoS configuration (GQC) (Use aggregate for one and single for the other).
2. Send two multicast traffic with session-range in both GCs. Do not use ToS in either of them, so that all traffic goes through the default service flow.

Workaround: This is a display issue and the actual traffic goes through the right service flow.

- CSCte49666

Symptoms: The CMTS crashes due to a bus error.

Conditions: This issue occurs only when the PRE is out of memory.

Workaround: There is no workaround.

- CSCte53032

Symptoms: The modulation profile preamble length for internal usage code (IUC) types, station, and initial becomes very large.

Conditions: This issue is observed on the uBR10012 routers with uBR10-MC5X20H-D and UBR-MC20X20V-D line cards on Cisco IOS Release versions 12.2(33)SCC and 12.3(23)BC.

Workaround: Use a different modulation profile.

- CSCte55087

Symptoms: Memory leak and traceback occurs when large number of modems are reset from the Cisco uBR10-MC5X20H line cards.

Conditions: This issue has been observed after resetting large number of modems those are provisioned with Baseline Privacy Interface Plus (BPI+) enabled DOCSIS configuration.

Workaround: Provision the cable modems with non-BPI configuration file.

- CSCte57880

Symptoms: The “service unsupported-transceiver” configuration on a PRE4 is not available.

Conditions: This issue is observed only on PRE running the Cisco IOS Releases 12.2(33)SCB5, 12.2(33)SCC, and 12.2(33)SCD.

Workaround: There is no workaround.

- CSCte57965

Symptoms: All cable modems on adjacent downstreams (0 and 1, or 2 and 3, or 4) are offline.

Conditions: The downstream ports that share JIB may be nonfunctional if the JIB that services both downstream ports are locked.

Workaround: Reload the line card.

Resolved Caveats—Cisco IOS Release 12.2(33)SCD

- 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>

- CSCta56424

Symptoms: The router crashes while trying to delete files from corrupt Analog Telephone Adaptor (ATA) disk.

Conditions: This issue occurs when the ATA disk is corrupted. The ATA disk displays “Cluster chain broken on file” message during access.

Workaround: There is no workaround.

- CSCte29016

Symptoms: Cable modem drops offline during an In-Service Software Upgrade (ISSU) procedure for line card upgrade.

Conditions: This issue occurs after you perform the following steps:

1. Load image on both the Performance Routing Engines (PREs).
2. Start packet call after making sure that all the modems are online.
3. Wait until next round of packet call (ensure that sid value is changed for dynamic UGS service flows).
4. Perform a PRE switchover.
5. Wait until both the PREs are ready.
6. Perform a line card switchover.
7. Perform a line card revertback.

Workaround: There is no workaround.

- CSCte44214

Symptoms: OIR upgrade from uBR10-MC5X20S/U/H line card to UBR-MC20X20V line card fails when Data-over-Cable Service Interface Specifications (DOCSIS) mode is Annex A and the spectrum range is 5-65 Mhz. All the cable interfaces are placed in ‘administratively down’ state and the following error messages may be seen:

```
%UBR10K-6-COMPAT_SHUTDOWN_CARD: Failed to restore the configuration for Cable8/0/0.
%UBR10K-6-COMPAT_SHUTDOWN_CARD: Failed to restore the configuration for Cable8/0/1.
%UBR10K-6-COMPAT_SHUTDOWN_CARD: Failed to restore the configuration for Cable8/0/2.
%UBR10K-6-COMPAT_SHUTDOWN_CARD: Failed to restore the configuration for Cable8/0/3.
%UBR10K-6-COMPAT_SHUTDOWN_CARD: Failed to restore the configuration for Cable8/0/4.
```

Conditions: This issue occurs when Annex A is configured on the downstream and spectrum range of 5-65 Mhz is configured on the upstream of a uBR10-MC5X20S/U/H line card.

Workaround: Complete the following steps:

1. Reduce the frequency range of uBR10-MC5X20S/U/H line card to 5-55 Mhz range before the upgrade.
2. Perform a switchover to the protect card (should be UBR-MC20X20V line card).
3. Upgrade the working uBR10-MC5X20S/U/H line card to UBR-MC20X20V line card.
4. Revertback to the working card which was upgraded.
5. Change the frequency range back to 5-65 Mhz range.



Note

Changing the spectrum group frequency or the fixed frequency is a destructive operation and it may reassign the frequencies on the upstream. Some modems can fall offline on all cards using that spectrum group. We recommend Online Insertion and Removal (OIR) upgrades only in a maintenance window.

