



Release Notes for Cisco IOS Release 12.2(33)SCF for Cisco uBR10012 Routers

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Release Notes for Cisco IOS Release 12.2(33)SCF for Cisco uBR10012 Routers
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Introduction

This release notes contain information about downloading and installing Cisco IOS Release 12.2(33)SCF. It also provides new and changed information, hardware support, limitations and restrictions, and caveats for Cisco IOS Release 12.2(33)SCF.

For software caveats that apply to the Cisco IOS Release 12.2(33)SCF 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.



Note

Cisco IOS Release 12.2(33)SCF is generally available for field deployment. However, we recommend that you validate and qualify Cisco IOS Release 12.2(33)SCF in a limited field trial with your specific network configuration requirements in order to ensure a smoother, faster, and successful field deployment.

This chapter includes the following sections:

- [System Requirements, page 1-2](#)
- [New and Changed Information, page 1-10](#)
- [MIBs, page 1-27](#)
- [Limitations and Restrictions, page 1-28](#)
- [Important Notes, page 1-30](#)
- [Obtaining Documentation and Submitting a Service Request, page 1-33](#)

System Requirements

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

- [Memory Requirements, page 1-2](#)
- [Hardware Supported, page 1-3](#)
- [Verifying the Software Version, page 1-6](#)
- [Upgrading to a New Software Release, page 1-6](#)
- [Microcode Software, page 1-6](#)
- [Feature Support, page 1-7](#)

Memory Requirements

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



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)SCF 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 1-3](#)
- [Microcode Software, page 1-6](#)
- [Other Hardware Supported, page 1-5](#)

Cable Interface Line Cards Supported

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

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

Supported Cable Interface Line Card	Minimum Cisco IOS Release Required	Processor Engine
Cisco uBR10-MC5X20H—maximum 8	Cisco IOS Release 12.2SCA	PRE2/PRE4
Cisco UBR-MC20X20V—maximum 8	Cisco IOS Release 12.2SCC	PRE2/PRE4
Cisco uBR-MC3GX60V—maximum 8	Cisco IOS Release 12.2SCE	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



Note

The Cisco uBR-MC3GX60V line card does not support OIR compatibility. To upgrade to the Cisco uBR-MC3GX60V line card from the Cisco uBR10-MC5X20H or Cisco UBR-MC20X20V line cards, you must remove the existing configuration of the line card using the **no card** command and create a new configuration for the Cisco uBR-MC3GX60V line card.

- 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 12.2SCF.

Table 1-3 Other Hardware Supported in Cisco IOS Release 12.2SC

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)SCF
EXPERIMENTAL IMAGE ENGINEERING C10K_WEEKLY BUILD, synced to
MAYFLOWER_BASE_FOR_V122_33_SF_THROTTLE
Copyright (c) 1986-2011 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 Search Tool (BST) at the following URL:

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

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)SCF is the `ubr10k-fpd-pkg.122-33.SCF` pkg file.

Table 4 12.2(33)SCB 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	<p>Describes a set of Cisco CMTS documents and contains links to the referenced documents.</p> <p>Go to the following link to access this document: http://www.cisco.com/c/en/us/td/docs/cable/cmts/ubr10012/roadmap/u10krdmp.html</p>
Command Reference	<p>Provides information about the software commands used to configure a Cisco CMTS. Includes command syntax, default value, value range, command mode, usage guidelines, and examples.</p> <p>Go to the following link to access this document: http://www.cisco.com/c/en/us/td/docs/cable/cmts/cmd_ref/b_cmts_cable_cmd_ref.html</p>
Design Guides	<p>Describes how to plan, install, and configure a Cisco CMTS. Contains information about the supported technologies, interfaces and protocols and can also contain special installation considerations, network diagrams, example applications, system design, and environmental recommendations.</p> <p>Go to the following link to access this document set: http://www.cisco.com/c/en/us/support/video/ubr10000-series-universal-broadband-routers/products-implementation-design-guides-list.html</p>
Install and Upgrade Guides	<p>Provides step-by-step instructions for installing or upgrading a Cisco CMTS. Also includes line card installation guides, shipping documents, safety information, and quick-start guides for experienced users.</p> <p>Go to the following link to access this document set: 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

Guide	Description
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)SCF:

- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCF5, page 1-11](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCF4, page 1-11](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCF3, page 1-11](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCF2, page 1-11](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCF1, page 1-11](#)
- [New Hardware Features in Cisco IOS Release 12.2\(33\)SCF, page 1-11](#)

- [Hardware Features Integrated into Cisco IOS Release 12.2\(33\)SCF](#), page 1-12
- [New Software Features in Cisco IOS Release 12.2\(33\)SCF5](#), page 1-12
- [New Software Features in Cisco IOS Release 12.2\(33\)SCF4](#), page 1-12
- [Features Integrated into Cisco IOS Release 12.2\(33\)SCF4](#), page 1-13
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCF4](#), page 1-13
- [New Software Features in Cisco IOS Release 12.2\(33\)SCF3](#), page 1-13
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCF3](#), page 1-13
- [New Software Features in Cisco IOS Release 12.2\(33\)SCF2](#), page 1-13
- [Features Integrated into Cisco IOS Release 12.2\(33\)SCF2](#), page 1-15
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCF2](#), page 1-16
- [New Software Features in Cisco IOS Release 12.2\(33\)SCF1](#), page 1-16
- [Features Integrated into Cisco IOS Release 12.2\(33\)SCF1](#), page 1-17
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCF1](#), page 1-18
- [New Software Features in Cisco IOS Release 12.2\(33\)SCF](#), page 1-18
- [Modified Software Features in Cisco IOS Release 12.2\(33\)SCF](#), page 1-27

New Hardware Features in Cisco IOS Release 12.2(33)SCF5

There are no new hardware features in Cisco IOS Release 12.2(33)SCF5.

New Hardware Features in Cisco IOS Release 12.2(33)SCF4

There are no new hardware features in Cisco IOS Release 12.2(33)SCF4.

New Hardware Features in Cisco IOS Release 12.2(33)SCF3

There are no new hardware features in Cisco IOS Release 12.2(33)SCF3.

New Hardware Features in Cisco IOS Release 12.2(33)SCF2

There are no new hardware features in Cisco IOS Release 12.2(33)SCF2.

New Hardware Features in Cisco IOS Release 12.2(33)SCF1

There are no new hardware features in Cisco IOS Release 12.2(33)SCF1.

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

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

Hardware Features Integrated into Cisco IOS Release 12.2(33)SCF

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

- [New 3300 W AC Power Entry Module](#)
- [New 3300 W DC Power Entry Module](#)
- [New Fan Assembly Module](#)

New Software Features in Cisco IOS Release 12.2(33)SCF5

There are no new software features in Cisco IOS Release 12.2(33)SCF5.

New Software Features in Cisco IOS Release 12.2(33)SCF4

This section describes the new cable software features in Cisco IOS Release 12.2(33)SCF4.

DHCPv6 with Full 6VPE Support

The DHCPv6 with Full 6VPE Support feature introduced in Cisco IOS Release 12.2(33)SCF4 supports the following capabilities for IPv6 on the Cisco CMTS routers:

- Assignment of different prefixes to cable modem (CM) and customer premises equipment (CPE)
- DHCPv6 over Multiprotocol Label System-Virtual Private Network (MPLS-VPN)
- DHCPv6 relay Prefix Delegation (PD) VRF awareness

The following commands were modified:

- **clear ipv6 dhcp relay binding**
- **show ipv6 dhcp relay binding**

For more information about this feature, see the *IPv6 on Cable* feature guide at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_ipv6.html

DEPI CIN Failover

The **depi cin-failover** command enables CIN failure triggered line card switchover when DEPI control plane is used, and N+1 is configured. When the CPU utilization is high, DEPI CIN failover may get rejected. Starting Cisco IOS Release 12.2(33)SCF4 and later, **cpu-threshold** values can be configured using the **depi cin-faiover cpu-threshold** command.

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

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

For more information about this feature, see *M-CMTS DEPI Control Plane* feature guide at the following URL:

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

Features Integrated into Cisco IOS Release 12.2(33)SCF4

The following feature introduced in an earlier Cisco IOS Release is now supported in Cisco IOS Release 12.2(33)SCF4:

Optimized Downstream Queues for High Speed Services

Starting with Cisco IOS Release 12.2(33)SCG, the default queue size for the DOCSIS service flows (with bandwidth greater than 150 Mbps) is increased from 255 to higher values based on the bandwidth on the cable downstream interfaces. Additionally, the queue limit for all service flows can also be adjusted using the cable queue-limit command.

For more information, see the DOCSIS WFQ Scheduler on the Cisco CMTS Routers at:

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

and the Cisco IOS CMTS Cable Command Reference at:

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

Modified Software Features in Cisco IOS Release 12.2(33)SCF4

There are no modified software features in Cisco IOS Release 12.2(33)SCF4.

New Software Features in Cisco IOS Release 12.2(33)SCF3

This section describes the new cable software features in Cisco IOS Release 12.2(33)SCF3.

Cable Modem Registration Throttling

The Cable Modem Registration Throttling feature improves the cable modem online speed at initial ranging stage by reducing CPU usage.

The following commands were introduced or modified:

- **cable throttle-modem**
- **show cable throttle-modem**

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

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

Modified Software Features in Cisco IOS Release 12.2(33)SCF3

There are no modified software features in Cisco IOS Release 12.2(33)SCF3.

New Software Features in Cisco IOS Release 12.2(33)SCF2

This section describes the new cable software features in Cisco IOS Release 12.2(33)SCF2.

DOCSIS Extended Transmit Power Feature

The DOCSIS Extended Transmit Power feature, introduced in Cisco IOS Release 12.2(33)SCF2, supports extended upstream transmit power capability as defined in the *DOCSIS3.0 Specification*. This feature allows the cable modems to transmit at a high extended power level to counter the attenuation in the US channel.

The following commands were introduced or modified:

- **cable upstream ext-power**
- **show cable modem extended-power**

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

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

DSG Disablement for Hybrid STBs

In Cisco IOS Release 12.2(33)SCF2 and later, the **cable multicast mdf-disable** command with the **wb-incapable-cm** keyword disables multicast DSID forwarding (MDF) capability only on DOCSIS 2.0 hybrid cable modems. To disable MDF capability on all DOCSIS Set-Top Gateway (DSG) embedded cable modems, a new keyword, **DSG**, was introduced in Cisco IOS Release 12.2(33)SCF2.

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.html

DSx Support for L2VPN-enabled CMs

The Cisco IOS Release 12.2(33)SCF2 introduces Voice-Call Support on L2VPN CM feature. This feature enables the Cisco CMTS routers to support dynamic service flows on L2VPN-provisioned cable modems to permit voice calls from a non-L2VPN CPE.

To provide voice-call support on a L2VPN CM, you have to configure correct classifiers and create two static service flows (primary and secondary) using the cable modem configuration file.

For more information about this feature, see *L2VPN Support over Cable* feature guide at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_l2vpn.html

Service Class Relay Agent Option

The Cisco IOS Release 12.2(33)SCF2 introduces support for the DHCP Relay Agent Information sub-option (DHCP Option 82, Suboption 9) enhancement to simplify provisioning of the CPE devices. Using this sub-option, the cable operators can relay the service class or QoS information of the CPE to the DHCP server to get an appropriate IP address.

The **cable dhcp-insert service-class** command was modified to support this feature.

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

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

Moving CMs Configured with IGMP and RSVP (test cable dcc force Command)

In earlier releases, the **test cable dcc** command did not support transaction for dynamic channel change (DCC) when the cable modem was configured with IGMP and RSVP. Starting with Cisco IOS Release 12.2(33)SCF2, the **force** keyword allows users to manually move cable modems configured with IGMP and RSVP, when the DCC init-tech is set to 0.

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

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

Upstream Buffer Control for Maximum Queue Depth

Upstream traffic shaping uses queues to control the upstream data flow. The data packets are buffered in a queue on the CM to regulate traffic and avoid network congestion. Starting with Cisco IOS Release 12.2(33)SCF2, the Upstream Buffer Control for Maximum Queue Depth feature enables the Cisco CMTS to control the size of this queue (or buffer) by controlling the amount of data that can be enqueued for transmission at any point of time.

The following commands were added or modified:

- **cable service class**
- **show cable modem service-flow**
- **show cable service-class**

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

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

Features Integrated into Cisco IOS Release 12.2(33)SCF2

The following features introduced in an earlier Cisco IOS Release is now supported in Cisco IOS Release 12.2(33)SCF2:

Configurable DHCPv6 Relay Address

Cisco IOS Release 12.2(33)SCE5 introduces the Configurable DHCPv6 Relay Address feature on the Cisco CMTS routers. A DHCPv6 relay agent is used to send relay-forward messages from a source address to all configured relay destinations. The source address is either an IPv6 address provisioned on the network interface or a CMTS WAN IPv6 address. The relay destination can be a unicast address of a server, another relay agent, or a multicast address.

The **ipv6 dhcp relay destination** command was modified to support this feature.

For detailed information about this feature, see the *IPv6 on Cable* feature guide at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_ipv6.html

PRE High Availability Enhancement

In Cisco IOS Release 12.2(33)SCE5, the PRE high availability is enhanced to address the PRE switchover issue in which both the PRE modules behave as the primary PRE modules. The line card uses a link loop mechanism when both the PRE modules behave as primary PRE modules. In this mechanism, the line card checks the packet sent from the active PRE module, and automatically does a switchover to the real active PRE. The link loop mechanism automatically connects to the new PRE module based on the MAC address, thus increasing robustness. This mechanism occurs before the IPC keepalive timeout mechanism occurs between the route processor and the line card.

The PRE high availability enhancement applies to both Stateful Switchover (SSO) and Route Processor Redundancy (RPR) modes on the Cisco uBR10012 router.

For detailed information on configuring Route Processor Redundancy, see *Route Processor Redundancy for the Cisco uBR10012 Universal Broadband Router* document at:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/ubr10012_rtpro_red.html

For detailed information on configuring Stateful Switchover (SSO), see *Stateful Switchover* document at:

http://www.cisco.com/en/US/docs/ios/12_2s/feature/guide/fssso20s.html

Modified Software Features in Cisco IOS Release 12.2(33)SCF2

There are no modified software features in Cisco IOS Release 12.2(33)SCF2.

New Software Features in Cisco IOS Release 12.2(33)SCF1

This section describes the new cable software features in Cisco IOS Release 12.2(33)SCF1.

Dynamic Bonding Change for DOCSIS3.0 Static Modem

Effective with Cisco IOS Release 12.2(33)SCF1, the DOCSIS 3.0 static modem count-based load balancing is enhanced to use the dynamic bonding change (DBC) to modify parameters of DOCSIS 3.0 cable modem with multiple transmit channel (MTC) mode or multiple receive channel (MRC) mode without a primary channel change.

The **cable load-balance docsis30-enable** command is introduced to enable the DOCSIS 3.0 static modem count-based load balancing.

For more information about this feature, see *Load Balancing, Dynamic Channel Change, and Dynamic Bonding Change on the Cisco CMTS Routers* feature guide at the following URL:

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

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

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

Support for IPv6 Prefix Stability on the CMTS

Cisco IOS Release 12.2(33)SCF1 supports IPv6 prefix stability on the Cisco CMTS as specified in DOCSIS 3.0 MULPI CM-SP-MULPIv3.0-I15-110210 standard. The IPv6 prefix stability allows an IPv6 home router to move from one Cisco CMTS to another while retaining the same prefix.

The multiple service operators (MSOs) can use this feature to allow their business customers (with IPv6 routers) to retain the same IPv6 prefix during a node split.

The IPv6 prefix stability is only supported with Cisco Network Registrar (CNR) version 8.1 or higher.

For more information about this feature, see *IPv6 on Cable* feature guide at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_ipv6.html

Unitary DHCPv6 Leasequery

The Cisco IOS Release 12.2(33)SCF1 introduces support for Unitary DHCPv6 Leasequery protocol (RFC 5007) on the Cisco CMTS routers for upstream IPv6 source verification. This protocol verifies the authenticity of the IPv6 CPE behind a home or small office cable deployment.

The Unitary DHCPv6 Leasequery feature is only supported with Cisco Network Registrar (CNR) version 7.2 or higher.

The following commands are new or modified for Unitary DHCPv6 Leasequery feature:

- **cable ipv6 source-verify**
- **cable ipv6 source-verify leasequery-filter downstream**
- **show cable leasequery-filter**
- **debug cable ipv6 lq**

For more information, see *Cable DHCP Leasequery* feature guide at the following URL:

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

Features Integrated into Cisco IOS Release 12.2(33)SCF1

The following features introduced in an earlier Cisco IOS Release is now supported in Cisco IOS Release 12.2(33)SCF1

MDF1 Support for DOCSIS 2.0 Hybrid Cable Modems

From Cisco IOS Release 12.2(33)SCE4 onwards, the MDF capability is enabled by default on DOCSIS 2.0 hybrid cable modems to allow IPv6 packet forwarding. The **cable multicast mdf-disable** command was modified by adding the keyword **wb-incapable-cm**. This new keyword allows the **cable multicast mdf-disable** command to disable MDF on a wideband incapable 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.html

Move Secondary Service Flows to the Primary Channel Interface

This feature enables the Cisco CMTS router to move all unicast secondary service flows (of a cable modem) to the primary channel interface (modular or cable), when a downstream channel impairment is reported by a cable modem via a CM-STATUS message. Only those unicast secondary service flows, which share the same wideband interface as the primary service flow, are moved to the primary channel interface.

The **cable rf-change-trigger** command was modified to support this feature.

For more information about this feature, see the *Wideband Modem Resiliency* feature guide at the following URL:

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

Support for 256 Legacy LBGs

To support effective configuration of legacy LBGs on the Cisco uBR-MC3GX60V line card, the valid range for the legacy load balance group is changed in Cisco IOS Release 12.2(33)SCE4. In Cisco IOS Release 12.2(33)SCE3 and earlier, the valid range is from 1 to 80. In Cisco IOS Release 12.2(33)SCE4 and later, the valid range is from 1 to 256.

The following commands are new or modified:

- **cable load-balance group**
- **cable load-balance group (interface)**
- **cable load-balance group interval**
- **cable load-balance group policy ugs**
- **cable load-balance group threshold**
- **cable upstream load-balance group**
- **show cable load-balance**

For more information about this feature, see the *Load Balancing and Dynamic Channel Change on the Cisco CMTS Routers* feature guide at the following URL:

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

Modified Software Features in Cisco IOS Release 12.2(33)SCF1

There are no modified software features in Cisco IOS Release 12.2(33)SCF1.

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

This section describes the new cable software features in Cisco IOS Release 12.2(33)SCF.

802.1Q QoS Support on GiGE WAN

The 802.1Q QoS Support on GiGE WAN feature introduces QoS on the Gigabit Ethernet WAN interface for 802.1Q packets, enabling the user to set priority bits to prioritize traffic.

The following commands are new or modified for 802.1Q QoS Support on GiGE WAN feature:

- **class**
- **class-map**
- **policy-map**
- **match cos**
- **set cos**

For more information about 802.1Q QoS Support on GiGE WAN feature, see the *MQC QoS on the Cisco CMTS Routers* feature guide at the following URL:

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

Automatic ROMMON Upgrade for Cisco Cable Interface Line Cards

The Automatic ROM Monitor (ROMMON) Upgrade feature enables the Cisco uBR10012 cable interface line cards to automatically update the ROMMON image whenever a newer version is available.

The ROMMON is a bootstrap program that initializes the hardware and boots up the Cisco IOS software when the Cisco CMTS (or cable interface line card) is powered on or rebooted. It is an integral part of the cable interface line card firmware, which provides basic services such as CPU initialization, memory mapping, and image relocation. The ROMMON image may require updates due to feature additions or enhancements. The Automatic ROMMON Upgrade feature enables the line card to upgrade the ROMMON image without user intervention. The user is informed about the upgrade status through error or warning messages.

The following new commands are introduced for the Automatic ROM Monitor (ROMMON) Upgrade feature:

- **cable linecard auto-rommon-downgrade**
- **cable linecard auto-rommon-upgrade**

For more information about this feature, see *Automatic ROMMON Upgrade for Cisco Cable Interface Line Cards* feature guide at the following URL:

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

Cable Modem Upstream RF Adaptation

The Cable Modem Upstream RF Adaptation feature uses per cable modem physical layer statistics to identify and automatically move cable modems to another logical upstream channel within the same physical port. This is to prevent unnecessary channel-wide parameter changes, which reduces throughput, disrupts traffic flow for all modems, and causes modems to go offline in extreme cases.

The following commands are new or modified for the Cable Modem Upstream RF Adaptation feature:

- **cable rf-adapt timer**
- **cable upstream rf-adapt**
- **cable upstream rf-adapt(logical channel)**
- **cable upstream threshold**
- **cable upstream threshold hysteresis**
- **cable upstream threshold rf-adapt**
- **show cable rf-adapt**
- **show cable modem**
- **show cable modem access-group**
- **show cable modem calls**
- **show cable modem connectivity**
- **show cable modem counters**
- **show cable modem docsis version**

- **show cable modem domain-name**
- **show cable modem errors**
- **show cable modem flap**
- **show cable modem ipv6**
- **show cable modem mac**
- **show cable modem maintenance**
- **show cable modem offline**
- **show cable modem phy**
- **show cable modem primary channel**
- **show cable modem registered**
- **show cable modem rf-adapt**
- **show cable modem rogue**
- **show cable modem summary**
- **show cable modem type**
- **show cable modem unregistered**
- **show cable modem vendor**
- **show cable modem wideband**

For more information on this feature, see *Cable Modem Upstream RF Adaptation* feature guide at: http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cm_upstream_rf_adaptation.html

Channel Interface for Physical RF Channel

In Cisco IOS Release 12.2(33)SCF, the ifIndex MIB object that pointed to the modular or integrated interfaces now points to the cable interface and RF channels Simple Network Management Protocol (SNMP) ifIndex of the Cisco uBR-MC3GX60V, Cisco UBR-MC20X20V, Cisco uBR-MC88V line cards, and Shared Port Adapters (SPA). Following are the MIBs and their tables where the ifIndex object points to the RF channel SNMP IF index:

- DOCS-IF-MIB—docsIfDownstreamChannelTable, docsIfCmtsChannelUtilizationTable, and docsIfCmtsDownChannelCounterTable
- CLAB-TOPO-MIB—clabTopoChFnCfgTable
- CISCO-CABLE-WIDEBAND-MIB—CcwbfiberNodeTable
- DOCS-DRF-MIB—docsDrfDownstreamTable, docsDrfDownstreamCapabilitiesTable, and docsDrfChannelBlockTable.

In Cisco IOS Release 12.2(33)SCF, the following MIBs are modified to support:

- ENTITY-MIB—The ifIndex object (entAliasMappingIdentifier), in addition to pointing to the cable interfaces, now points to the RF channel SNMP IF Index in the EntAliasMappingTable.
- IF-MIB—Attributes are added to point to the RF channel interfaces in the tables ifTable, ifXtable and ifStackTable.

For more information, see the *Cisco CMTS Universal Broadband Router Series MIB Specifications Guide 12.2SC* at the following URL:

http://www.cisco.com/en/US/docs/cable/cmts/mib/12_2sc/reference/guide/ubrmibv5.html

DOCSIS 3.0 CNiR Measurement

Cisco IOS Release 12.2(33)SCF now supports DOCSIS 3.0 carrier-to-noise plus interference ratio (CNiR) measurement. The term CNiR is part of the CableLabs nomenclature, and is same as the Carrier-to-noise ratio (CNR). Therefore these two terms, CNR and CNiR, can be used interchangeably.

In the previous releases, the CNR (CNiR) measurement was supported for only those upstream (US) channels that had Spectrum Management feature enabled. Starting with Cisco IOS Release 12.2(33)SCF, the CNR (CNiR) measurement is supported for all US channels, irrespective of whether Spectrum Management feature is enabled or not on the US channels.

The output of the **show cable modem cnr** command is modified.

For detailed information about the DOCSIS 3.0 CNiR Measurement feature, see the *Spectrum Management and Advanced Spectrum Management for the Cisco CMTS Routers* feature guide at the following URL:

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

DOCSIS 3.0 Load Balancing

This feature has the following enhancements over DOCSIS 2.0 load balancing:

- Information on the wideband and upstream bonded (WB/UB) modems is provided in the **show cable load-balance docsis-group** command output.
- Information on UB modems is provided in the **show cable load-balance docsis-group modem-list** command output.
- Information on downstream/receive channel configuration (RCC), and upstream/transmit channel set is provided separately in the **show cable load-balance docsis-group pending list** command output.
- Wideband downstream information is no longer considered in the narrowband cable modem (NBCM) total for wideband modems.
- Logical channels are combined into physical channels.
- Interface and channel states for load balance group (LBG) assignment are no longer considered.
- Service-flow method is removed.
- Multiple Transmit Channel (MTC) information is now added in the LBG ID assignment.

The **show cable load-balance docsis-group** command was modified to support DOCSIS 3.0 Load Balancing feature.

For more information about this feature, see the *Load Balancing and Dynamic Channel Change on the Cisco CMTS Routers* feature guide at the following URL:

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

DWDM Support on Cisco uBR10012 Routers

Starting with Cisco IOS Release 12.2(33)SCF, the following the small form-factor pluggable (SFP) modules are supported on the Cisco uBR10012 routers:

- XFP-10G-MM-SR=
- DWDM-XFP-50.12=
- DWDM-XFP-30.33=

For more information, see the *Cisco uBR10012 Universal Broadband Router SIP and SPA Hardware Installation Guide* and *Cisco uBR10012 Universal Broadband Router SIP and SPA Software Configuration Guide* at the following URLs:

http://www.cisco.com/en/US/docs/interfaces_modules/shared_port_adapters/install_upgrade/uBR10012/hwsipspa.html

http://www.cisco.com/en/US/docs/interfaces_modules/shared_port_adapters/configuration/ubr10012/12.3_23_bc/sipsp_d3.html

Fairness Across DOCSIS Interfaces

The Fairness Across DOCSIS Interfaces feature introduces an adaptive mechanism to effectively distribute reservable bandwidth for committed information rate (CIR) flows and fair bandwidth for best-effort (BE) service flows across adjacent bonding groups (BGs).

The following commands are new or modified for the Fairness Across DOCSIS Interfaces feature:

- **cable acfe enable**
- **cable acfe max-eir-ratio**
- **cable acfe max-bonus-bandwidth**
- **debug cable acfe**
- **debug cable acfe filter**
- **show cable acfe controller**
- **show cable acfe interface**
- **show cable acfe summary**
- **show cable admission-control**
- **show cr10k-rp controller**
- **show interface integrated-cable**
- **show interface modular-cable**
- **show interface wideband-cable**

For more information about this feature, see the *Fairness Across DOCSIS Interfaces* feature guide at the following URL: http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_acfe.html

Inter Line Card RF Spanning

The Inter Line Card RF Spanning feature supports sharing of downstream channels across line cards installed on the Cisco uBR10012 router. This feature is an extension to the existing downstream channel sharing functionality supported within the bonding groups configured on a single line card. This feature enables you to associate downstream channels of a line card to a service group that is hosted on a different line card.

The following commands are new or modified for the Inter Line Card RF Spanning feature:

- **show cable active-reman**
- **show cable multicast db**

For more information about the Inter Line Card RF Spanning feature, see the *IGMP-Triggered VDOC Broadcast Support on the Cisco CMTS Routers* feature guide at the following URL:

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

IPC Enhancements

In Cisco IOS Release 12.2(33)SCF, inter-process communication (IPC) is enhanced to provide better bandwidth to support new applications.

The **service** keyword is added to the **show cmts ipc-cable client base** command to display all the IPC service structures for all slots and subslots in the system. This information includes IPC port information, such as service type and port ID, retry and timeout information of the IPC messages, and watermark information in the request queue.

The **show cmts ipc-cable client base** command was modified to support the IPC enhancement.

For more information about IPC enhancements, see *Cisco IOS CMTS Cable Command Reference* guide at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/command/reference/cbl_17_show_ch_to_show_cr.html

IPv6 CPE Router Support on the Cisco CMTS

In Cisco IOS Release 12.2(33)SCF, the IPv6 CPE router support is provided on the Cisco CMTS. The IPv6 CPE router is a node primarily for home or small office use that connects the end-user network to a service provider network. It is also referred to as the home router. The IPv6 CPE router is responsible for implementing IPv6 routing; that is, the IPv6 CPE router looks up the IPv6 destination address in its routing table and determines to which interface it should send the packet.

The following commands are new or modified for the IPv6 CPE Router Support on the Cisco CMTS feature:

- **show ipv6 route**
- **show ipv6 cef platform**

For more information about the IPv6 CPE Router Support on the Cisco CMTS feature, see the *IPv6 on Cable* feature guide at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_ipv6.html

IPv6: 6PE & 6VPE

The 6PE & 6VPE feature represents an implementation of the provider edge (PE) based VPN model. This feature allows service providers to provide an IPv6 VPN service that does not require an upgrade or reconfiguration of the PE routers in the IPv4 MPLS core. The resulting IPv6 VPN service has a configuration and operation that is virtually identical to the current IPv4 VPN service.

For more information about 6PE & 6VPE feature, see the *IPv6 on Cable* feature guide at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_ipv6.html

JIB3US Partial Reset

The fatal interrupts received from the hardware components on the cable line cards result in reset and reload of the line cards, which triggers switchover and partial system downtime. The JIB3US Partial Reset feature significantly reduces this recovery time.

The cable line cards that use this feature include:

- Cisco UBR-MC20X20V

- Cisco uBR-MC3GX60V
- Cisco uBR-MC88V

The **show controllers cable jib** command was introduced for the JIB3US Partial Reset feature.

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_17_show_ch_to_show_cr.html

L2VPN Pseudowire Redundancy

The L2VPN Pseudowire Redundancy feature enables you to configure a backup pseudowire in case the primary pseudowire fails.

The following commands are new or modified for the L2VPN Pseudowire Redundancy feature:

- **backup delay**
- **backup peer**
- **cable l2-vpn xconnect backup force-switchover**
- **show cable l2vpn xconnect**
- **show mpls l2transport vc**
- **show xconnect**

For more information about L2VPN Pseudowire Redundancy feature, see the *MPLS Pseudowire for Cable L2VPN* feature guide at the following URL:

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

MPLS Short-Pipe Mode

The MPLS Short-Pipe Mode feature introduces quality of service (QoS) service on the WAN interface for MPLS EXP bits, enabling the user to set priority bits for traffic prioritization.

The following commands are new or modified for the MPLS Short-Pipe Mode feature:

- **match mpls experimental topmost**
- **set mpls experimental topmost**
- **show policy-map interface**
- **show cable l2-vpn xconnect**

For more information about MPLS Short-Pipe Mode feature, see the *MQC QoS on the Cisco CMTS Routers* feature guide at the following URL:

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

Service Independent Intercept-routed CPE Support

Starting with Cisco IOS Release 12.2(33)SCF, Service Independent Intercept (SII) taps can be configured to an IP address learned from a customer-premises equipment (CPE) router.

For more information, see the *Service Independent Intercept on the Cisco CMTS Routers* feature guide at the following URL:

http://www.cisco.com/en/US/docs/ios/cable/configuration/guide/cmts_siiv2.html

show cable modem Command Enhancements

In Cisco IOS Release 12.2(33)SCF, the following **show** commands are enhanced:

- **show cable modem**
- **show cable modem qos**
- **show cable modem wideband channel**
- **show interfaces cable qos paramset**
- **show interfaces cable service-flow qos**

For detailed information about these commands, see the *Cisco IOS CMTS Command Reference* guide at the following URL:

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

Upstream Bandwidth Request Rate Limiting

The Cisco CMTS Upstream (US) scheduler may report high CPU consumption because of extensive incoming bandwidth request processing. The Upstream Bandwidth Request Rate Limiting feature, which controls the CPU consumption of the US scheduler by monitoring the number of incoming bandwidth requests, and dropping excessive bandwidth requests.

The **cable upstream rate-limit-bwreq exempted-priority** command was introduced for the Upstream Bandwidth Request Rate Limiting feature.

For detailed information about the Upstream Bandwidth Request Rate Limiting feature, see the *Upstream Scheduler Mode for the Cisco CMTS Routers* feature guide at the following URL:

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

VDOC: Robustness, Scalability & Debuggability

The following commands have been modified to verify the enhanced performance of the multicast feature:

- **clear cable multicast statistics counter**
- **show cable multicast db**
- **show cable multicast statistics failure**
- **show interface cable multicast-session latency**
- **show interface modular-cable multicast-session latency**
- **show interface integrated-cable multicast-session latency**
- **show interface wideband-cable multicast-session latency**

For more information about these commands, see *Cisco IOS CMTS Cable Command Reference* guide at the following URL:

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

Video over DOCSIS Load Balancing for DOCSIS 2.0 Cable Modems

The Internet Group Management Protocol (IGMP)-triggered Dynamic Channel Change (DCC) load balancing is introduced to avoid rejection of new video streams, either due to bandwidth constraints or repeated admission control failures on an interface. If there are admission control failures during a session request, the load balancing infrastructure provides a list of downstream channels to which the cable modem (CM) can be moved. Downstream channels that already carry the existing session replication are given preference.

The following commands are modified for the Video over DOCSIS Load Balancing for DOCSIS 2.0 Cable Modems feature:

- **show cable load-balance**
- **show cable load-balance docsis-group**

For more information, see the *Video over DOCSIS Load Balancing for DOCSIS 2.0 Cable Modems* feature guide at the following URL:

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

Voice MGPI Support

The voice multiple grants per interval (MGPI) feature enables the Cisco CMTS router to map multiple PacketCable or PacketCable Multimedia (PCMM) gates (application flows) to a single DOCSIS service flow using Unsolicited Grant Service (UGS) traffic profiles of the same cable modem. The application manager uses the UGS traffic profiles to explicitly set the number of grants per interval and place several application flows on a single gate. This results in an aggregated view for event messages, volume, and time usage limits.

The following commands are new or modified for the Voice MGPI feature:

- **cable dynamic-qos trace**
- **debug cable dynamic-qos subscriber**
- **debug cable dynamic-qos trace**
- **show cable dynamic-qos trace**
- **show interface cable dynamic-service statistics**
- **show interface cable packetcable statistics**
- **show packetcable cms**

For more information about the Voice MGPI feature, see the *PacketCable and PacketCable Multimedia on the Cisco CMTS Routers* feature guide at the following URL:

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

Voice Support Over DOCSIS 3.0 E-MTAs

Beginning with Cisco IOS Release 12.2(33)SCF, PacketCable and PacketCable Multimedia (PCMM) services are supported on embedded multimedia terminal adapters (E-MTAs). An E-MTA is a network element that contains the interface to a physical voice device, a network interface, and all signaling and encapsulation functions required for the VoIP transport, class features signaling, and QoS signaling.

For more information about the Voice Support Over DOCSIS 3.0 E-MTAs feature, see the *PacketCable and PacketCable Multimedia on the Cisco CMTS Routers* feature guide at the following URL:

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

VRF Steering for Cisco CMTS Routers

The VRF Steering for Cisco CMTS Routers feature allows provisioning of data traffic from cable modems to be contained to a specified VRF instance. This feature addresses the need to accommodate more IPv4 addresses when customers run out of IPv4 addresses for their customer premise equipment (CPE). This solution helps customers expand their existing IP address space until they move to the IPv6 address mode.

The following commands are new or modified for the VRF Steering for Cisco CMTS Routers feature:

- **cable source-route**
- **cable vrf-steering cable-modem**
- **ip vrf**
- **show ip arp vrf**

For more information about this feature, see the *VRF Steering for Cisco CMTS Routers* feature guide at the following URL :

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

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

This section lists the modified software features in Cisco IOS Release 12.2(33)SCF.

Online Offline Diagnostics - Field Diagnostics

Online Offline Diagnostics - Field Diagnostics is supported on the Cisco UBR10-MC20X20V cable interface line card.

For more information, see *Online Offline Diagnostics - Field Diagnostics on Cisco uBR10012 Router Users Guide* at the following URL:

<http://www.cisco.com/en/US/docs/cable/cmts/ubr10012/troubleshooting/fdub10k.html>

Software Features Integrated into Cisco IOS Release 12.2(33)SCF

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

- [Configurable DFO Retry Count](#)
- [Extended Transmit Power](#)
- [RFC4388 Compliance DHCP Lease Query](#)

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)SCF

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

- ENTITY-MIB
- IF-MIB

Limitations and Restrictions

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

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 workaround 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

Documentation Updates in Cisco IOS Release 12.2(3)SCF

IP Packets and Cisco CMTS Buffer Size

If the Cisco CMTS receives IP packets larger than its default buffer size (8192), the CMTS cannot process these packets. This causes IP fragment issues on the Cisco CMTS.

Changes in Cisco IOS Release 12.2(33)SCF



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 this 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)SCF.

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
Point-to-Point over Ethernet Configuration For Point-to-Point over Ethernet (PPoE) configuration on the Cisco uBR7200 series routers, the bba-group command replaces the vpdn-group command. The software automatically converts an existing vpdn-group configuration to bba-group global configuration. After the configuration of bba-group , you cannot configure PPoE at the virtual private dialup network (VPDN) level. You need to use the bba-group configuration.	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

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

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

Obtaining Documentation and Submitting a Service Request

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

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



Caveat List for Cisco IOS Release 12.2(33)SCF

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

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

The 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/cbsshelp/help.html>.

Open Caveats—Cisco IOS Release 12.2(33)SCF5

Bug	Description
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.
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	Description
CSCtg71590	Traceroute does not include differentiated services code point (DSCP)/TOS precedence bits in all routing configurations.
CSCth30415	PROC_WATCHDOG does not work with the standby PRE on Cisco uBR10012 router.
CSCth79635	The following message is displayed: %SYS-3-INVMEMINT: Invalid memory action (free) at interrupt level.
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.
CSCti66880	The show ip rsvp counters command does not display the port values.
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.
CSCtk15093	CPE, in one multicast VPN, incorrectly receives traffic destined to a CPE in another multicast VPN.
CSCtl22266	The DOCSIS general load balancing group information is lost from the MAC domain cable modem service group after a PRE switchover occurs.
CSCtn96470	The carrier-to-noise ratio (CNR) accuracy varies on the Cisco uBR-MC3GX60V line card.
CSCto81183	The dynamic modulation criteria is met for downstream groups not met for upstream groups when the spectrum group is configured.
CSCts20435	CPE schema record contains IPv6 link-local address (LLA) address of the CPE.
CSCtt70223	There is inconsistent Cisco uBR-MC3GX60V controller RF-channel configuration between the active and standby route processors.
CSCtw44697	Spurious tracebacks are observed after a SPA online insertion and removal (OIR).
CSCtw56127	The Cisco interface line card crashed on the cmts_flap_list_cm_add_event process.
CSCtx26044	SNMP traceback is observed after moving line card from slot 8/1 to slot 8/0.
CSCtx34060	Static multicast service flow (SF) is lost during ISSU.
CSCtx77976	CMs do not come online when reloading the Cisco CMTS while the protect line card is active.

Bug	Description
CSCty18719	Cisco IOS may crash while configuring ACLs from multiple CLI terminals at the same time.
CSCty88142	When the DOCSIS mode is configured as A-TDMA in the startup configuration and fragmentation is enabled, the cable modem comes online in a different upstream after it is reset.
CSCty95775	Cable line cards are forced to power cycle during CMTS reboot after LCHUNG message is displayed.
CSCty99658	Packetcable bit is not set for PacketCable Multimedia (PCMM) multicast.
CSCtz02213	The show run command output has empty init-tech-list. Also, invalid range such as 100-0 is accepted by the init-tech-list.
CSCtz14185	The show cable load docsis-group fn 1 md command is not parsed in user EXEC mode.
CSCtz14627	After GigEthernet port is shut down, DEPI sessions are not removed when DEPI is configured in DEPI control plane mode.
CSCtz23513	During system bootup, the message "%SCHEM-7-WATCH" and traceback is observed.
CSCtz29975	The standby PRE crashes on PRE switchover.
CSCtz32084	The clear cable modem all delete command does not delete modems from the modem list.
CSCtz59978	The clear cable modem command with the following keywords do not work— rcs-counts, all rcs-counts,IPV4 address.
CSCtz68573	Deleted controller modular-cable configurations are not synchronized on the protect line card.
CSCtz71368	The output of the show hccp linecard subslot modem summary total command is not synchronized with the show cable modem summary total command.
CSCtz74248	Trace back occurs while performing Dynamic Bonding Change (DBC) with RCC ID and SFID options, and executing the ccm all delete or ccm all reset command with load balancing enabled.
CSCtz80972	Traceback occurs after moving the CM from IPv6 online/w-online to IPv4 online/w-online.
CSCtz85895	There is no IGMP traffic and it does not recover even after a line card switchover.
CSCtz87516	CM_INCONSISTENCY message is reported in dynamic LB when wideband auto-reset mode and dynamic LB are enabled.

Bug	Description
CSCtz87652	Cisco Discovery Protocol (CDP) packets are sent only from the first member link of the etherchannel group, which causes the remote side to display incorrect information in the output of the show cdp neighbor command.
CSCtz90160	The show cable modem cable x/y/z upstream domain-name command does not display details, such as MAC address, IP address, and domain names.
CSCtz91342	The output of the show cable modem mac cpe and show cable modem mac ipv6 cpe commands do not match.
CSCtz96971	The CPU utilization goes up to 80% on sending upstream-only traffic at 10 Gbps when source verification of IPv6 packets is enabled on CMTS using the cable ipv6 source verify [dhcp] command.
CSCtz97911	If a MAC Domain (MD) configuration of the working line card contains more than 1024 lines, the protect line card crashes and traceback is observed.
CSCua02221	The CM silently drops the DHCPV6 DECLINE message for a duplicate DHCPv6 request.
CSCua05976	SPA channels remain up even when the modular-host is down. CMs on SPA are pingable.
CSCua06253	MQoS SIDs are exhausted on the Cisco CMTS and are not allocated to new service flows.
CSCua06500	Error message “Bad refcount in datagram_done” is displayed with traceback.
CSCua10891	IPv4 destination or source IP address cannot be matched for input MQC on bundle when the IP access list is configured to include the IPv4 destination or source IP address for input MQC on bundle.
CSCua11055	Error messages are displayed to indicate duplicate SNMP registration after the protect line card comes up.
CSCua11695	Spurious memory access when changing the RF channel frequency through SNMP.
CSCua11732	CMs go offline after an HCCP switchover.
CSCua12085	The show interface cable command displays incorrect packets input counter after a Cisco uBR-MC3GX60V line card switchover.
CSCua12456	The values for <code>ccwbRFChannelUtilization</code> and <code>docsIfCmtsChannelUtUtilization</code> are calculated incorrectly.
CSCua13267	The Cisco CMTS stops forwarding IPv6 multicast traffic after the CPE leaves the IPv4 multicast groups.

Bug	Description
CSCua13328	Error messages are displayed when one running-configuration is replaced with another running-configuration.
CSCua13577	The subinterface receives traffic even after its status change to “administrator down”.
CSCua13614	The Cisco CMTS crashes when it receives the SSM MLD report message.
CSCua14078	Downstream traffic is dropped by CM for invalid DSID in DOCSIS extended header.
CSCua15263	%HCCP-3-CFG_FAIL error message with error code “1” is displayed and traceback is observed when a line card switches over after the wideband SPA is removed.
CSCua20383	The throughput is 8.9 Mpps in system when the traffic is sent from WAN to CPE .
CSCua20917	Communication failure between the Cisco CMTS and the Cisco Next Generation RF Switch.
CSCua23251	PCMM for IPv6 devices fail and DSA-REQ is rejected.
CSCua25507	CPE MAC can be added to the forwarding table even after the CPE is removed. However, the host database and neighbor cache do not include this MAC, which may cause the CPE move to fail.
CSCua25760	After a Cisco UBR-MC20X20 line card switchover, error and warning messages are displayed while configuring HCCP.
CSCua25855	CM can get IPv4 and IPv6 addresses from the CNR, but fails to get the configuration file.
CSCua25883	Spurious memory access is observed when static multicast is enabled in CM configuration file.
CSCua33061	Traceback is observed when an access group is added to host.
CSCua33517	Configuration of dhcp-giaddr policy host and secondary addresses under bundle interface is not accepted by the Cisco CMTS. However, no warning message is displayed that the configuration was not accepted.
CSCua34434	Although Alternative Provisioning Mode (APM) is configured as the IP provisioning mode, CM gets dual stack online.
CSCua35518	The cable modem name domain-name max-hosts host_num command does not execute correctly.
CSCua36877	The CM throttling queue size is much larger than actual number of CMs.
CSCua37298	CMs configured for the upstream channel bonding (USCB) bond to an incorrect bonding group and display incorrect transmit channel set (TCS).

Bug	Description
CSCua37535	When the sum of host name length and domain name length exceeds 32 bytes, IPDR records contain corrupted host name strings.
CSCua38201	When one WB is shut down, other WBs across the controller cannot forward traffic. After the traffic is suspended, the CMs are not pingable.
CSCua38362	The show interface bundle command reports very high input and output rate, as well as high input and output counter values.
CSCua38434	The change in disk location for storing the log messages, using logging system disk command, does not work after reload.
CSCua38828	The Cisco uBR-MC3GX60V line card crashes and resets.
CSCua40214	Although the GigE MAC address of a Cisco Wideband SPA is set manually, it still uses the default MAC address after reload.
CSCua41672	The show running-configuration all command does not display configured max-reserved bandwidth.
CSCua43019	When the cable upstream filter is configured, Service Independent Intercept (SII) MAC tap types 0x60 and 0x62 send duplicate US IPv6 packets to MD.
CSCua43769	When the same IP address is configured for two bundle interfaces, the DHCP IP mismatch error is seen and some modems cannot come online.
CSCua45329	The Cisco CMTS does not issue DHCP Leasequery (LQ).
CSCua46000	Spurious memory access is observed on the standby PRE during the bootup with the following error message on active PRE: %IDBINDEX_SYNC-4-RESERVE: Failed to lookup existing ifindex for an interface on the Standby, allocating a new ifindex from the Active.
CSCua46119	IPv4 cannot move between modems across MD with source address verification (SAV) configured and the cable source-verify dhcp command enabled on bundle interface.
CSCua47433	%IPC-5-INVALID error message and traceback are observed on protect line card after commitversion.
CSCua48216	Firstly, IPDR collector continues to disconnect and reconnect with the Cisco CMTS. Secondly, time stamp values are negative in the IPDR protocol packets received by collector.
CSCua48865	The service class removed via SNMP is removed only in the active PRE, and exists in the standby PRE.

Bug	Description
CSCua49126	When a modem is moved from one BG to another BG using the test cable dbc command, the modem is not pingable.
CSCua49219	When the no bundle interface command is executed before executing the no cable ipv6 pd-route command, error message is displayed.
CSCua49227	When multiple telnet sessions are opened with different fiber node IDs, upstream configuration on the fiber node does not work properly.
CSCua51464	When only one UBR10-PWR-AC-PLUS PEM module is installed, the show environment command on Cisco CMTS displays incorrect power values.
CSCua51495	The Cisco CMTS does not use the correct giaddr for different types of CPEs.
CSCua52110	The route processor (RP) loses the IPv6 CPE information.
CSCua52793	The IP address of CPE, when changed, is not reflected on the standby PRE.
CSCua57078	The standby PRE reloads when redundancy configuration is changed on the active PRE.
CSCua59912	Cisco Wideband SPA card loses connection when online insertion and removal (OIR) is performed or the issu loadversion command is executed.
CSCua59985	The new active PRE parses an invalid card x/x No Card license 72X60 command after the PRE crash and switchover.
CSCua60069	On Cisco uBR10012, the SNMP trap ccwbSFPLinkUpNotification may not always be triggered when OIR is performed on the Cisco Wideband SPA card.
CSCua60092	Traceback is observed on the standby PRE after the card and no card commands are executed for the SPA card when there is no SPA card in the slot.
CSCua60370	DOCSIS 3.0 modems cannot be assigned to DOCSIS 3.0 general load balancing group (GLBG).
CSCua62457	When two CPEs with duplicate MAC address are online simultaneously, one clear cable host mac-address command can clear only one of these CPEs.
CSCua65785	When a working card switches over to standby mode, WB configuration cannot be performed using CLI. However, WB configuration can be performed using SNMP, which causes RF channel inconsistencies between the working and protect line card.

Bug	Description
CSCua69999	%NICKEL10G-3-N10GERREVT error message is observed during PXF reload.
CSCua70281	The downstream traffic goes down after PRE switchover.
CSCua70408	The deleted DOCSIS LBG appears in the show running-config and show cable load commands.
CSCua70711	%SYS-3-BADLIST_DESTROY error message is observed on the Cisco uBR-MC3GX60V line card.
CSCua70926	When a new modem is used to override the old modem in VRF environment, the two modems get the same IPv6 address and the stale entry removal fails.
CSCua72300	Cable modem service flows (SFs) fail to move to an existing dynamic bonding group (DBG) after line card switchover.
CSCua72537	The standby PRE reloads when Resiliency Bonding Group (RBG) feature is enabled, and default DBG resiliency wideband interface is configured.
CSCua73151	Cisco uBR-MC3GX60V line card crashes due to the memory corruption on a Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCE6.
CSCua74462	DBG resiliency count and time statistics information is lost after a line card switchover followed by a PRE switchover.
CSCua74782	Line card crashes due to FAUNA fatal error. However, the bits of "FAUNA_GBL_FATAL_INT" register are not set in the crashinfo file.
CSCua75101	DEPI sessions on the Cisco Wideband SPA go down after using shutdown and no shutdown commands for Cisco Wideband SPA.
CSCua75277	Traceback is observed during bootup after the redundant PRE and standby PRE are booted using Route Processor Redundancy (RPR).
CSCua75312	When MIB value is set via SNMP, the configuration is inconsistent between working and protect line cards.
CSCua75325	When configuring RF channel bandwidth for wideband-cable interface by SNMP operation, if the RF channel is from a different controller, then the RF channel is incorrectly configured on the standby PRE.
CSCua80124	Cable modem is not synchronized with the standby PRE.
CSCua80318	The link-address and source-address are deleted after switchover when DHCPv6 is used during PRE switchover.

Bug	Description
CSCua84854	Dynamic Bonding Change (DBC) failure message is displayed for Multicast DSID Forwarding (MDF) compliant modems.
CSCua84970	After the no card command is used to remove a line card from running-config, the modular-host subslot configuration for a Wideband SPA can still point to the removed line card.
CSCua87302	Prefix Delegation (PD) route in primary downstream interface is lost after Dynamic Channel Change (DCC) is enabled on the Cisco CMTS.
CSCua88497	Traceback is observed after resetting the SPA card and executing the show controller modular command.
CSCua89967	Bandwidth of a wideband interface is not released when the CCM is deleted or reset.
CSCua90051	Fiber node upstream and downstream is inconsistent when the line card is added to HCCP group.
CSCua90867	When the no downstream modular-cable rf-channel command is executed, the system crashes.
CSCua92314	Cable modem may access uninitialized memory address.
CSCua93169	When the IPv6 address is changed in the bundle, DHCPv6 relay source address is incorrect. The old source address still exists.
CSCua93181	When the MAC address of MD is changed, the MD configuration performed using the interface cable command is lost in running-config.
CSCua95263	MQoS session range with invalid source prefix IP mask defaults to null IP mask (0.0.0.0).
CSCua97658	The static IPv6 route does not change when the bundle interface is changed to different virtual routing and forwarding (VRF) instance.
CSCua97690	Inconsistency in different configuration sequences with rate-adapt when upstream utilization optimization is configured locally first and then enabled globally.
CSCub04150	After using the <i>hw-module subslot 1/0 shutdown</i> command, saving and reloading the system, DTI card in slot 1/1 cannot bootup.
CSCub04299	The CPE cannot come online after it moves to different MAC domain when the database for CPE is inconsistent.
CSCub04599	On Cisco uBR10000 router, the Source Address Verification (SAV) may not work for DOCSIS 3.0 CM.
CSCub04652	Invalid logging on standby PRE in RPR mode while performing auto-generate on the active PRE.

Bug	Description
CSCub07246	CPUHOG is observed when the saved configuration is copied to running configuration.
CSCub08188	Some cable modems are considered as clones and cannot come online when the cable modems are moved from one MAC domain to another.
CSCub10067	The CPE does not come online after the cable modem and CPE are configured to use different VRFs and dual-stack mode is enabled.
CSCub10176	When the DTCC card is moved from one slot to another, the MIBs do not change.
CSCub10389	On a primary channel with narrowband modems, when wideband modem is online, those modems should select other channels as the primary channel.
CSCub12198	Cisco uBR-MC3GX60V line card Gigabit Ethernet port status is up even if no line card is connected to the port.
CSCub12392	When the line card HA is ready and updates the LB group to replace the standby line card with an active line card, standby line card resets due to configuration synchronization error.
CSCub12690	Most MPLS deaggregation traffic is lost, approximately 4 kpps (68 byte frame length) traffic is received.
CSCub13563	Incorrect data flow is observed when the second channel of is added.
CSCub14757	CM cannot come online when the fiber node contains two controllers RF channel with overlapping frequencies.
CSCub15514	After all the CMs are cleared from CMTS, CMs can still be seen in the pending list of DOCSIS 2.0 LBG.
CSCub15941	CMTS crashes when the show interface x multicast-sessions command is executed.
CSCub15996	After the DHCPv6 CPE is recovered by the CMTS, DUID of the CPE is zero.
CSCub15999	DSG multicast traffic is forwarded on the default service flow instead of non-default service flow.
CSCub17050	Traceback and the error message SYS-2-INSCHED is observed when the line card crashes.
CSCub17093	Incorrect upstream SFID summary is observed after PRE switchover when MPLS L2VPN is configured.
CSCub17736	CPUHOG and traceback are observed if DCC is performed when 250 CPEs are behind one modem.
CSCub20172	The no cable cm-status x command on interface removes the other option.

Bug	Description
CSCub23036	%SYS-2-MALLOCFAIL error message is observed on cable line cards.
CSCub25025	Cable monitor configuration is rejected for SPA WB interface.
CSCub25128	With a large fiber node and dual-stack configured, "Unexpected fragment sequence number. Got 2 and expected 1" error message is observed on the modem console. Modems cannot come online with IPv6 when the error message appears.
CSCub25811	After SNMP setany and PRE switchover, the changed modulation-profile is set to default.
CSCub26315	Modem and eMTA are not pingable from outside the CMTS. The ds_classif is zero in the output of the show cable modem x.x.x service-flow verbose command.
CSCub27638	When one modem is configured with more than two different classifiers and the microcode reload pxf command is executed, the downstream traffic, except for the first and last classifiers, traffic on the modem is dropped.
CSCub27686	Assertion fails with spurious memory access when the show cable modem service-flow verbose command is executed.
CSCub28061	The following error message and traceback are observed: %HCCP-3-CFG_FAIL: Configuration failed. Parsing on Cable5/0/0 (error 1) -Process= "HCCP_LC_CTRL", ipl= 0, pid= 386"
CSCub33063	The show controllers integrated-cable xx mapping rf-channel command output is unclear on Cisco uBR7200 routers.
CSCub35871	The standby RP may show "%UBR10K_REDUNDANCY-4-RP_HA_STDBY_IN CONSISTENT" messages on console, when the line card is reset.
CSCub36209	The packet loss rate is up to 20% in Cisco SIP-600 priority queue for IP precedence on the 5-Port Gigabit Ethernet SPA.
CSCub37666	The CPE type remains static instead of DHCPv6.
CSCub39104	Active PRE4 crashes while changing the fiber node (FN) channel configuration.
CSCub41631	The output of show controllers integrated-cable xx mapping wb-channel is unclear for Cisco uBR7246 router.
CSCub41655	Inconsistent output of the show controller integrated-cable command.

Bug	Description
CSCub42367	Wideband-cable interface is not available for generating RCC after executing the cable ds-resiliency and no cable ds-resiliency commands.
CSCub42368	The outputs of the show cable l2-vpn xconnect dot1q-vc-map modem-mac verbose and show cable l2-vpn xconnect mpls-vc-map modem-mac verbose commands are the same for dot1q L2VPN service.
CSCub43248	DOCSIS 3.0 modem registers with the wrong number of RF channels in its RCS, which is not specified by TLV56, when TLV56 is configured.
CSCub43273	The CPU usage of hardware API background process is more than 50%.
CSCub43358	The codewords are not counted for ranging requests on Cisco uBR-MC3GX60V, Cisco UBR-MC20X20V, and Cisco uBR-MC88V line cards.
CSCub43523	Switchover fails during the Cisco UBR-RFSW-ADV image upgrade.
CSCub44765	CM cannot get all the IPv4 and IPv6 address via MIB cdxCmToCpeTable when more than 255 IPv6 and IPv4 addresses exist in hosts under one CM.
CSCub44885	The L2TPv3 tunnel does not come up on the Cisco CMTS. Error messages are displayed.
CSCub45028	The pending counter does not clear on channel shutdown.
CSCub45231	IPv6 ACL with UDP Routing Information Protocol (RIP) field does not work.
CSCub47047	The shutdown and no shutdown of Cisco uBR-MC3GX60V GE (SFP) port causes insert OIR event in call home.
CSCub47647	When the protect line card is down and the line card switches over, the CM or CPE goes offline. However, the show ipv6 dhcp relay binding and show ipv6 route static commands still show the PD route.
CSCub50729	IPv6 can crash without reset interrupt.
CSCub52401	IPv6 spoof MAC detection is not available in IPv6 calling path.
CSCub57143	The second bonding group cannot be selected after line card switchover.
CSCub57956	Memory leak is observed on Cisco uBR10012 router when PRE switches over in RPR redundancy mode.
CSCub57967	One Cisco uBR-MC3GX60V line card works as the modular host line card of SPA and protect card at the same time.
CSCub58043	Traceback is observed when the line card is reset and PRE switches over.

Bug	Description
CSCub59823	The value of docsIf3BondingGrpCfgChList using SNMP GET is null for cross controller.
CSCub60220	The show logging onboard temperature voltage summary command does not display any output when Onboard Failure Logging (OBFL) is configured.
CSCub62559	IPv6 packet is dropped by failed RPF in PXF. However, when the no service pxf command is executed, the IPv6 packets are forwarded by RP.
CSCub62885	After DBC changes the transmit channel set (TCS) of the modem to upstream channel set, the partial mode information is not erased.
CSCub64405	A wrong "IP MTU" configuration message appears in interface configuration when 10 Gigabit Ethernet SPA is configured with MTU and the 10 Gigabit Ethernet SPA interface is removed and added.
CSCub64465	The show pxf cpu mpls command displays incorrect VRF table IDs for MPLS labels.
CSCub64722	Load Balancing Group assignment cannot be performed for DOCSIS 3.0 CM after PRE switchover and modular-cable interface is configured with dynamic DEPI session.
CSCub64990	The standby PRE crashes after the modem configuration file that includes multicast static TLV is changed and line card switches over.
CSCub65411	All routed packets are incorrectly counted in the show interface stats command on tunnel interface.
CSCub67370	IPv6 ACL cannot be applied to Generic Router Encapsulation (GRE) tunnel interface through startup-config file after reboot.
CSCub69510	If DBC is enabled and DBC receive channel configuration (RCC) is performed, when DS service flow information of CM exceeds the maximum TLV buffer, the line card crashes.
CSCub69512	Error message and tracebacks are observed when configuring Q-in-Q backhaul subinterfaces.
CSCub70942	Spurious memory access error is observed.
CSCub76172	Memory leakage occurs when the virtual bundle fails.
CSCub76665	After the global SFAC threshold is changed when the protect card is active, global AC threshold does not synchronize from active protect card to standby working card.
CSCub78418	Traffic breaks when any of the following commands are executed at a tunnel interface: — no ipv6 enable , no ipv6 address , no ipv4 address .

Bug	Description
CSCub81383	Error messages and Traceback is seen when ipv6 dhcp relay destination command is configured.
CSCub81852	Spurious memory access seen with high CPU utilization when cable upstream power-level command is configured on the Cisco CMTS.
CSCub83278	The Cisco RFGW-10 Supervisor card switchover may cause a Cisco CMTS line card to switchover when DEPI protect tunnel is configured.
CSCub89046	CPE is added to wrong CM after leasequery.
CSCub91406	The output of show pxf cable feature-table does not distinguish between DHCPv4 and DHCPv6 source verify inquiries when the source verification of the IPv6 packets is configured on the bundle interface.
CSCub92892	IPv6-enabled DOCSIS2.0 compliant modems in multicast DSID forwarding (MDF) explicit mode are not reachable.

Resolved Caveats—Cisco IOS Release 12.2(33)SCF5

Bug	Description
CSCtl50170	During stress testing, CPUHOG is observed during Subscriber Account Management Interface Specification (SAMIS) operations which eventually causes PRE crash.
CSCtq09884	A Cisco uBR-MC5X20 line card crash is observed during voice calls.
CSCtw56127	The Cisco interface line card crashed on the cmts_flap_list_cm_add_event process.
CSCtx14448	Multicast DSID is lost after RP switchover.
CSCua37298	CMs configured for the upstream channel bonding (USCB) bond to an incorrect bonding group and display incorrect transmit channel set (TCS).
CSCua43019	When the cable upstream filter is configured, Service Independent Intercept (SII) MAC tap types 0x60 and 0x62 send duplicate US IPv6 packets to MD.
CSCua48216	Firstly, IPDR collector continues to disconnect and reconnect with the Cisco CMTS. Secondly, time stamp values are negative in the IPDR protocol packets received by collector.
CSCua51464	When only one UBR10-PWR-AC-PLUS PEM module is installed, the show environment command on Cisco CMTS displays incorrect power values.

Bug	Description
CSCua60370	DOCSIS 3.0 modems cannot be assigned to DOCSIS 3.0 general load balancing group (GLBG).
CSCua73151	Cisco uBR-MC3GX60V line card crashes due to the memory corruption on a Cisco uBR10012 router.
CSCua93181	When the MAC address of MD is changed, the MD configuration performed using the interface cable command is lost in running-config.
CSCub00394	IP connectivity of CPE is lost after it is moved from one CM to another by changing VLAN ID.
CSCub12392	When the line card HA is ready and updates the LB group to replace the standby line card with an active line card, standby line card resets due to configuration synchronization error.
CSCub15996	After the DHCPv6 CPE is recovered by the CMTS, DUID of the CPE is zero.
CSCub17050	Traceback and the error message SYS-2-INSCHED is observed when the line card crashes.
CSCub26315	Modem and eMTA are not pingable from outside the CMTS. The ds_classif is zero in the output of the show cable modem x.x.x service-flow verbose command.
CSCub39104	Active PRE4 crashes while changing the fiber node (FN) channel configuration.
CSCub44885	The L2TPv3 tunnel does not come up on the Cisco CMTS. Error messages are displayed.
CSCub57143	The second BG cannot be selected after line card switchover.
CSCub64722	LBG assignment cannot be performed for DOCSIS 3.0 CM after PRE switchover and modular-cable interface is configured with dynamic DEPI session.
CSCub69510	If DBC is enabled and DBC receive channel configuration (RCC) is performed, when DS service flow information of CM exceeds the maximum TLV buffer, the line card crashes.
CSCub81383	Error messages and Traceback is seen when ipv6 dhcp relay destination command is configured.
CSCub81852	Spurious memory access seen with high CPU utilization when cable upstream power-level command is configured on the Cisco CMTS.
CSCub83278	The Cisco RFGW-10 Supervisor card switchover may cause a Cisco CMTS line card to switchover when DEPI protect tunnel is configured.
CSCub84330	After a route processor switchover, an error is observed when a port channel ID is configured with the maximum number.

Bug	Description
CSCub84409	A Toaster XRAM parity error is observed with the refresh period register.
CSCub91122	When the 5-Port Gigabit Ethernet SPA card is removed, and dot1q NSI configuration is removed, the standby PRE fails to boot.
CSCub92892	IPv6-enabled DOCSIS2.0 compliant modems in multicast DSID forwarding (MDF) explicit mode are not reachable.
CSCub95534	With process stack overflow, the standby route processor might crash if you use the docsIfDownChannelFrequency MIB object to set RF channel frequency.
CSCuc09628	If get-info is executed before removing the call, the PCMM call bandwidth is not released after removing the PCMM gate.
CSCuc18671	The Cisco 5-Port Gigabit Ethernet SPA does not forward downstream TLS dot1q Layer 2 VPN traffic.
CSCuc22394	Spurious memory access observed when using the Cisco uBR10-MC5X20H line card.
CSCuc33742	An FPGA firmware issue might cause a line card crash.
CSCuc42574	The PCMM gate for multicast traffic cannot be successfully set from a PCMM Server when “DOCSIS-Specific Parameterization” is used as the traffic profile option.
CSCuc43175	Unexpected leasequery is sent when NA glean is configured but not performed on a configured PD-route.
CSCuc44367	The instance range command works only for the first index in a given range.
CSCuc44405	When compact flash memory card is being accessed on Cisco UBR-PRE4 module, traceback and CPU Hog occurs.
CSCuc57298	CPU hog and crash seen on the Cisco CMTS after issuing the show mpls for vrf command with pathlist nonip keyword.
CSCuc61997	When admission control “Config Sync: Bulk-sync” failure occurs, the standby PRE resets.
CSCuc64786	The line card stops responding after the hw-module slot stop and hw-module slot start commands are executed.
CSCuc69898	When cable ipv6 source-verify and no cable nd commands are not configured, a CPE behind a Cisco uBR10012 router is not recovered by LQv6.

Bug	Description
CSCuc75535	When license is transferred between two Cisco uBR-MC3GX60V line cards on the same Cisco uBR10012 router, the transfer fails due to wrong destination port on TFTP data packet from Cisco License Manager (CLM).
CSCuc77844	When a REG-REQ message is divided into several fragments and a the cable modem attempts to come online, the line card crashes continuously without any operation
CSCuc79228	PRE hangs or crashes and is unable to be accessed via telnet or console.
CSCuc87301	When IPv6 is not enabled on an interface bundle and a static IPv6 route is created for the bundle, the static IPv6 route created is incorrect.
CSCud04316	The Cisco uBR-MC3GX60V line card crashes and fails to boot up and memory allocation error occurs.
CSCud04690	The Cisco CMTS crashes after a tag name is assigned to a non-existent cable tag.
CSCud23499	When the number of upstream max-ports of the MAC domain are equal to or more than default number, the upstream bonding groups above 65535 do not have any upstream channels.
CSCud25884	After several line card switchovers, a CPU Hog occurs and the line card crashes.
CSCud26521	When dot1q TLS map is configured on the SPA card without configuring l2vpn default, and the NSI port and SPA card is removed, the standby PRE is reloaded.
CSCud28273	When configuration is changed before line card boots up, the CMTS crashes.
CSCud28276	The system crashes on reload with error messages when the Cisco UBR-MC20X20V or the Cisco uBR-MC3GX60 line card exists in the Cisco CMTS.
CSCud28400	When Cisco router is used as a CPE, Duplicate Address Detection (DAD) fails and IPv6 address is not assigned by DHCPv6 server.
CSCud32155	When the license revoke command is used, the license count does not reduce or change on the Cisco uBR10012 router with Cisco uBR-MC3GX60V line card.
CSCud38297	IPv6 summary-prefix shows up as inter-area route on the Cisco CMTS.
CSCud45121	When VPN Routing and Forwarding (VRF) is enabled, some cable modems on the VPN do not have correct Customer-premises Equipment (CPE) prefix and cannot be pinged.

Bug	Description
CSCud47000	When BPI is enabled, if CMTS uses DBC to move a cable modem, a large fragment of DBC_REQ message is dropped by the JIB processor. When the modem does not receive a complete DBC_REQ, the DBC fails and modem is reset.
CSCud53756	All the modems on a specific upstream channel drop offline and the Map Late Flush Count increases with "test cable bcm3142 errors 2" reports. Other upstream channels on the same line card are not affected.
CSCud56903	When CMTS is reloaded, "Config Sync: Bulk-sync failure" error leads to standby PRE reset.
CSCud58757	When all MAC domain interfaces are put into the online insertion and removal (OIR) state, by using the hw-module slot stop command on the Cisco cable line cards, the DOCSIS Set-Top Gateway (DSG) configuration on cable interfaces is not restored.
CSCud60449	The CMTS crashes when no ipdr template command is executed and IPDR exporter is running.
CSCud78978	The upstream Layer 2 VPN (L2VPN) traffic is lost is configured on a non-primary upstream service flow on the Cisco CMTS.
CSCud83396	Parallel Express Forwarding (PXF) crash observed on the Cisco CMTS with IPv6 VPN Provider Edge (6PE/VPE) traffic.
CSCud84792	When the free memory in the router is very low, the PRE crashes with the exception vector 1500 error message.
CSCud86373	The CMTS crashed when Packet Cable Multimedia (PCMM) gate was deleted through distributed QoS (dQoS) connection.
CSCue01647	The cable modem goes into p-online state after a Online Removal and Insertion (OIR) procedure is performed on the Cisco RFGW-10 DS-384 and Cisco uBR-MC3GX60V line cards.
CSCue03624	DEPI tunnels on the SPA card go down after executing the hw-module subslot command. Ten Gigabit Ethernet interfaces are not reachable.
CSCue44744	During the initial configuration of DEPI tunnels, the Cisco CMTS router experiences issues with establishing DEPI tunnels connections. The Cisco CMTS router may also stop responding when interfacing with RF Gateway-1 or other third-party EQAM devices.

Open Caveats—Cisco IOS Release 12.2(33)SCF4

Bug ID	Description
CSCtb59962	UBR7200-NPE-G2 with auxiliary port connected to the console of an ME-C3750-24TE-MD switch hangs or crashes when reloaded.
CSCtc62096	Dynamic multicast service flow and reserved bandwidth exist even after the removal of the multicast QoS (MQoS) configuration from the second bonding group.
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.
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.
CSCtg02818	Memory leak is seen after running PacketCable Multimedia (PCMM) calls for more than 12 hours.
CSCtg71590	Traceroute does not include differentiated services code point (DSCP)/TOS precedence bits in all routing configurations.
CSCth30415	PROC_WATCHDOG does not work with the standby PRE on Cisco uBR10012 router.
CSCth79635	The following message is displayed: %SYS-3-INVMEMINT: Invalid memory action (free) at interrupt level.
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.
CSCti48887	The key-index associated with the wideband interfaces for multicast-sessions changes after line card switchover.
CSCti66880	The show ip rsvp counters command does not display the port values.
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.
CSCtk15093	CPE, in one multicast VPN, incorrectly receives traffic destined to a CPE in another multicast VPN.
CSCtl22266	The DOCSIS general load balancing group information is lost from the mac domain cable modem service group after a PRE switchover occurs.
CSCtn96470	The carrier-to-noise ratio (CNR) accuracy varies on the Cisco uBR-MC3GX60V line card.
CSCto81183	The dynamic modulation is able to DG but not UG if the spectrum group is configured.
CSCtr00705	Starting with Cisco IOS Release 12.2(33)SCE, IPv6 addresses on Cisco uBR10012 routers are hashed into 256 buckets.

Bug ID	Description
CSCts20435	CPE schema record contains IPv6 link-local address (LLA) address of the CPE.
CSCts42241	DOCSIS 3.0 cable modem is not seen on modem list.
CSCtt70223	There is inconsistent Cisco uBR-MC3GX60V controller RF-channel configuration between the active and standby route processors.
CSCtw44697	Spurious tracebacks are observed after a SPA online insertion and removal (OIR).
CSCtw56127	The Cisco interface line card crashed on the <code>cmnts_flap_list_cm_add_event</code> process.
CSCtw66769	The Cisco uBR-MC3GX60V line card IPC timeout causes a line card switchover or a line card reload.
CSCtx26044	SNMP traceback is observed after moving line card from slot 8/1 to slot 8/0.
CSCtx34060	Static multicast service flow (SF) is lost during ISSU.
CSCtx37531	The Cisco uBR-MC3GX60V line card logs a message (<code>%BCM3142-3-READ_ERR_SEQ</code>) and stops passing traffic.
CSCtx77976	CMs do not come online when reloading the Cisco CMTS while the protect line card is active.
CSCty18719	Cisco IOS may crash while configuring ACLs from multiple CLI terminals at the same time.
CSCty65044	Incorrect delta on <code>ServiceOctetsPassed</code> counters on a Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCE4 with IPDR exporter inprogress.
CSCty78822	The Cisco UBR-MC20X20 and Cisco uBR10-MC5X20 cable line cards fail to boot up and the <code>"%LCINFO-4-LCHUNG"</code> is displayed.
CSCty88142	When the DOCSIS mode is configured as A-TDMA in the startup configuration and fragmentation is enabled, the cable modem comes online in a different upstream after it is reset.
CSCty95775	Cable line cards are forced to power cycle during CMTS reboot after LCHUNG message is displayed.
CSCty99658	Packetcable bit is not set for PacketCable Multimedia (PCMM) multicast.
CSCtz02213	The show run command output has empty <code>init-tech-list</code> . Also, invalid range such as 100-0 is accepted by the <code>init-tech-list</code> .
CSCtz14185	The show cable load docsis-group fn 1 md command is not parsed in user EXEC mode.
CSCtz14627	After GigEthernet port is shut down, DEPI sessions are not removed when DEPI is configured in DEPI control plane mode.
CSCtz17459	A single-event upset (SEU) error puts Cisco uBR-MC3GX60V and Cisco uBR-MC20X20 line cards running the Cisco IOS Releases 12.2(33)SCE or 12.2(33)SCF into a corrupted state where the card cannot gracefully recover.
CSCtz23513	During system bootup, the message <code>"%SCHED-7-WATCH"</code> and traceback is observed.
CSCtz29975	The standby PRE crashes on PRE switchover.
CSCtz32084	The clear cable modem all delete command does not delete modems from the modem list.

Bug ID	Description
CSCtz42496	Packet loss is observed on the upstream ports on the Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCF2 having Cisco UBR-MC20X20V line card and Cisco uBR-MC3GX60V line card. This issue is observed during ixia testing with packets smaller than 200 bytes.
CSCtz59978	The clear cable modem command with the following keywords do not work: <ul style="list-style-type: none"> • rcs-counts • all rcs-counts • IPV4 address
CSCtz68573	Deleted controller modular-cable configurations are not synchronized on the protect line card.
CSCtz71368	The output of the show hccp linecard subslot modem summary total command is not synchrony with the show cable modem summary total command.
CSCtz74248	Trace back occurs while performing Dynamic Bonding Change (DBC) with RCC ID and SFID options, and ccm all delete or ccm all reset with load balancing enabled.
CSCtz80972	Traceback occurs after moving the CM from IPv6 online/w-online to IPv4 online/w-online.
CSCtz85895	There is no IGMP traffic and it does not recover even after a line card switchover.
CSCtz87516	CM_INCONSISTENCY message is reported in dynamic LB when wideband auto-reset mode and dynamic LB are enabled.
CSCtz87652	Cisco Discovery Protocol (CDP) packets are sent only from the first member link of the etherchannel group, which causes the remote side to display incorrect information in the output of the show cdp neighbor command.
CSCtz90160	The show cable modem cable x/y/z upstream domain-name command does not display details, such as MAC address, IP address, and domain names.
CSCtz91342	The output of the show cable modem mac cpe and show cable modem mac ipv6 cpe commands do not match.
CSCtz96971	The CPU utilization goes up to 80% on sending upstream-only traffic at 10 Gbps when source verification of IPv6 packets is enabled on CMTS using the cable ipv6 source verify [dhcp] command.
CSCtz97911	If a MAC Domain (MD) configuration of the working line card contains more than 1024 lines, the protect line card crashes and traceback is observed.
CSCua02221	The CM silently drops the DHCPV6 DECLINE message for a duplicate DHCPv6 request.
CSCua05976	SPA channels remain up even when the modular-host is down. CMs on SPA are pingable.
CSCua06253	MQoS SIDs are exhausted on the Cisco CMTS and are not allocated to new service flows.
CSCua06500	Error message "Bad refcount in datagram_done" is displayed with traceback.
CSCua10891	IPv4 destination or source IP address cannot be matched for input MQC on bundle when the IP access list is configured to include the IPv4 destination or source IP address for input MQC on bundle.

Bug ID	Description
CSCua11055	Error messages are displayed to indicate duplicate SNMP registration after the protect line card comes up.
CSCua11695	Spurious memory access when changing the RF channel frequency through SNMP.
CSCua11732	CMs go offline after an HCCP switchover.
CSCua12085	The show interface cable command displays incorrect packets input counter after a Cisco uBR-MC3GX60V line card switchover.
CSCua12456	The values for ccwbrFChannelUtilization and docsIfCmtsChannelUtUtilization are calculated incorrectly.
CSCua13267	The Cisco CMTS stops forwarding IPv6 multicast traffic after the CPE leaves the IPv4 multicast groups.
CSCua13328	Error messages are displayed when one running-configuration is replaced with another running-configuration.
CSCua13577	The sub-interface receives traffic even after its status change to "administrator down".
CSCua13614	The Cisco CMTS crashes when it receives the SSM MLD report message.
CSCua14078	Downstream traffic is dropped by CM for invalid DSID in DOCSIS extended header.
CSCua15263	%HCCP-3-CFG_FAIL error message with error code 1 is displayed and traceback is observed when a line card switches over after the wideband SPA is removed.
CSCua20383	The throughput is 8.9 Mpps in system when the traffic is sent from WAN to CPE .
CSCua20917	Communication failure between the Cisco CMTS and the Cisco Next Generation RF Switch.
CSCua22652	When a configuration file that does not include HCCP is used to replace the running-config file that includes HCCP, traceback and error messages are observed.
CSCua22948	%COMMON_FIB-4-FIBHWIDBMISMATCH: mismatch message is observed when the no card and card commands are used for Cisco uBR-MC3GX60V line card and Cisco Wideband SPA.
CSCua23251	PCMM for IPv6 devices fail and DSA-REQ is rejected.
CSCua25507	CPE MAC can be added to the forwarding table even after the CPE is removed. However, the host database and neighbor cache do not include this MAC, which may cause the CPE move to fail.
CSCua25760	After a Cisco UBR-MC20X20 line card switchover, error and warning messages are displayed while configuring HCCP.
CSCua25855	CM can get IPv4 and IPv6 addresses from the CNR, but fails to get the configuration file.
CSCua25883	Spurious memory access is observed when static multicast is enabled in CM configuration file.
CSCua29079	Some RF channels of a WB CM do not send traffic when the modulation format is changed from 256-QAM to 64-QAM. Even after the modulation format is again changed to 256-QAM, some RF channels do not send traffic.
CSCua33061	Traceback is observed when an access group is added to host.

Bug ID	Description
CSCua33517	Configuration of dhcp-giaddr policy host and secondary addresses under bundle interface is not accepted by the Cisco CMTS. However, no warning message is displayed that the configuration was not accepted.
CSCua34434	Although Alternative Provisioning Mode (APM) is configured as the IP provisioning mode, CM gets dual stack online.
CSCua35518	The cable modem name domain-name max-hosts host_num command does not execute correctly.
CSCua36877	The CM throttling queue size is much larger than actual number of CMs.
CSCua37298	CMs configured for the upstream channel bonding (USCB) bond to an incorrect bonding group and display incorrect transmit channel set (TCS).
CSCua37535	When the sum of host name length and domain name length exceeds 32 bytes, IPDR records contain corrupted host name strings.
CSCua38201	When one WB is shut down, other WBs across the controller cannot forward traffic. After the traffic is suspended, the CMs are not pingable.
CSCua38362	The show interface bundle command reports very high input and output rate, as well as high input and output counter values.
CSCua38434	The change in disk location for storing the log messages, using logging system disk command, does not work after reload.
CSCua38828	The Cisco uBR-MC3GX60V line card crashes and resets.
CSCua40214	Although the GigE MAC address of a Cisco Wideband SPA is set manually, it still uses the default MAC address after reload.
CSCua40825	IPC communication issues occur. Messages similar to the following can be seen in logs: "SLOT 6/1: Jun 4 10:13:23.764: CR10K_CLNT-3-IPCTXERR IPC send failure: client=0 entity=1 ses=6/0 msg=22 err=timeout"
CSCua41672	The show running-configuration all command does not display configured max-reserved bandwidth.
CSCua43019	When the cable upstream filter is configured, Service Independent Intercept (SII) MAC tap types 0x60 and 0x62 send duplicate US IPv6 packets to MD.
CSCua43769	When the same IP address is configured for two bundle interfaces, the DHCP IP mismatch error is seen and some modems cannot come online.
CSCua45329	The Cisco CMTS does not issue DHCP Leasequery (LQ).
CSCua46000	Spurious memory access is observed on the standby PRE during the bootup with the following error message on active PRE: "%IDBINDEX_SYNC-4-RESERVE: Failed to lookup existing ifindex for an interface on the Standby, allocating a new ifindex from the Active"
CSCua46119	IPv4 cannot move between modems across MD with source address verification (SAV) configured and the cable source-verify dhcp command enabled on bundle interface.
CSCua47433	%IPC-5-INVALID error message and traceback are observed on protect line card after commitversion.

Bug ID	Description
CSCua48216	Firstly, IPDR collector continues to disconnect and reconnect with the Cisco CMTS. Secondly, time stamp values are negative in the IPDR protocol packets received by collector.
CSCua48865	The service class removed via SNMP is removed only in the active PRE, and exists in the standby PRE.
CSCua49126	When a modem is moved from one BG to another BG using the test cable dbc command, the modem is not pingable.
CSCua49219	When the no bundle interface command is executed before executing the no cable ipv6 pd-route command, error message is displayed.
CSCua49227	When multiple telnet sessions are opened with different fiber node IDs, upstream configuration on the fiber node does not work properly.
CSCua51310	Spurious memory access is observed on standby PRE when the show cable multicast statistics command is executed.
CSCua51464	When only one UBR10-PWR-AC-PLUS is installed, the show environment command on Cisco CMTS displays incorrect power values.
CSCua51495	The Cisco CMTS does not use the correct giaddr for different types of CPEs.
CSCua52110	The route processor (RP) loses the IPv6 CPE information.
CSCua52793	The IP address of CPE, when changed, is not reflected on the standby PRE.
CSCua56491	The SNMP information "ciscoFlashDeviceEntry" exists even after the USB storage is removed.
CSCua57078	The standby PRE reloads when redundancy configuration is changed on the active PRE.
CSCua59912	Cisco Wideband SPA card loses connection when online insertion and removal (OIR) is performed or the issu loadversion command is executed.
CSCua59985	The new active PRE parses an invalid command card x/x No Card license 72X60 after the PRE crash and switchover.
CSCua60069	On Cisco uBR10012, the SNMP trap ccwbsFPLinkUpNotification may not always be triggered when OIR is performed on the Cisco Wideband SPA card.
CSCua60092	Traceback is observed on the standby PRE after the card and no card commands are executed for the SPA card when there is no SPA card in the slot.
CSCua60370	DOCSIS 3.0 modems cannot be assigned to DOCSIS 3.0 general load balancing group (GLBG).
CSCua60800	IPv6 unicast Neighbor Discovery (ND) packets sent from the CMTS are handled on the default best effort queue. During congestion, these ND packets can be dropped, which leads to a loss of connection.
CSCua62457	When two CPEs with duplicate MAC address are online simultaneously, one clear cable host mac-address command can clear only one of these CPEs.
CSCua65785	When a working card switches over to standby mode, WB configuration cannot be performed using CLI. However, WB configuration can be performed using SNMP, which causes RF channel inconsistencies between the working and protect line card.
CSCua68317	The standby PRE crashes when the CPE IP address overlaps the CM IP address.
CSCua69999	%NICKEL10G-3-N10GERREVT error message is observed during PXF reload.

Bug ID	Description
CSCua70281	The DS traffic goes down after PRE switchover.
CSCua70408	The deleted DOCSIS LBG appears in the show running and show cable load commands.
CSCua70711	%SYS-3-BADLIST_DESTROY error message is observed on the Cisco uBR-MC3GX60V line card.
CSCua70926	When a new modem is used to override the old modem in VRF environment, the two modems get the same IPv6 address and the stale entry removal fails.
CSCua72300	Cable modem service flows (SFs) fail to move to an existing dynamic bonding group (DBG) after line card switchover.
CSCua72537	The standby PRE reloads when Resiliency Bonding Group (RBG) feature is enabled, and default DBG resiliency wideband interface is configured.
CSCua72652	Line card crashes when TLV-based static multicast is configured in CM configuration file.
CSCua73151	Cisco uBR-MC3GX60V line card crashes due to the memory corruption on a Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCE6.
CSCua74462	DBG resiliency count and time statistics information is lost after a line card switchover followed by a PRE switchover.
CSCua74557	CmtsSysUpTime field in Subscriber Account Management Interface Specification (SAMIS) records has the same value for all records during the same time interval.
CSCua74782	Line card crashes due to FAUNA fatal error. However, the bits of "FAUNA_GBL_FATAL_INT" register are not set in the crashinfo file.
CSCua75101	DEPI sessions on the Cisco Wideband SPA go down after using shutdown and no shutdown commands for Cisco Wideband SPA.
CSCua75277	Traceback is observed during bootup after the redundant PRE and standby PRE are booted using Route Processor Redundancy (RPR).
CSCua75312	When MIB value is set via SNMP, the configuration is inconsistent between working and protect line cards.
CSCua75325	When configuring RF channel bandwidth for interface Wideband-Cable by SNMP operation, if the RF channel is from a different controller, then the RF channel is incorrectly configured on the standby PRE.
CSCua75599	Cable modems on Cisco Wideband SPA go offline with multicast traffic.
CSCua80124	Cable modem is not synchronized with the standby PRE.
CSCua80318	The link-address and source-address are deleted after switchover when DHCPv6 is used during PRE switchover.
CSCua84854	Dynamic Bonding Change (DBC) failure message is displayed for Multicast DSID Forwarding (MDF) compliant modems.
CSCua84970	After the no card command is used to remove a line card from running-config, the modular-host subslot configuration for a Wideband SPA can still point to the removed line card.
CSCua87302	Prefix Delegation (PD) route in primary downstream interface is lost after Dynamic Channel Change (DCC) is enabled on the Cisco CMTS.

Bug ID	Description
CSCua88497	Traceback is observed after resetting the SPA card and executing the show controller modular command.
CSCua89967	Bandwidth of a wideband interface is not released when the CCM is deleted or reset.
CSCua90051	Fiber node US and DS is inconsistent when the line card is added to HCCP group.
CSCua90867	When the no downstream modular-cable rf-channel command is executed, the system crashes.
CSCua91146	The following error message is observed while performing ISSU: "RLC_ISSU_PROCESS-3-RLC_ISSU_N1_PLC_WPLC_ERR: runversion error, primary LC 6/0 not standby ready."
CSCua92314	Cable modem may access uninitialized memory address.
CSCua93169	When the IPv6 address is changed in the bundle, DHCPv6 relay source address is incorrect. The old source address still exists.
CSCua93181	When the MAC address of MD is changed, the MD configuration performed using the interface cable command is lost in running-config.
CSCua95263	MQoS session range with invalid source prefix IP mask defaults to null IP mask (0.0.0.0).
CSCua95554	When the show cable multicast db command is executed, unicast address may be displayed.
CSCua97658	The static IPv6 route does not change when the bundle interface is changed to different virtual routing and forwarding (VRF) instance.
CSCua97690	Inconsistency in different configuration sequences with rate-adapt when upstream utilization optimization is configured locally first and then enabled globally.
CSCub01426	The value of "cRFStatusManualSwactInhibit" and the output of the show redundancy state command for "Manual Swact" are incorrect.
CSCub04150	After using the hw-module subslot 1/0 shutdown command, saving and reloading the system, DTI card in slot 1/1 cannot bootup.
CSCub04299	The CPE cannot come online after it moves to different MAC domain when the database for CPE is inconsistent.
CSCub04599	On Cisco uBR10000 router, the SAV may not work for DOCSIS 3.0 CM.
CSCub04652	Invalid logging on standby PRE in RPR mode while performing auto-generate on the active PRE.
CSCub07246	CPUHOG is observed when the saved configuration is copied to running-config.
CSCub08188	Some cable modems are considered as clones and cannot come online when the cable modems are moved from one MAC domain to another.
CSCub09988	Modems are offline alternately after sending DS traffic to a single Cisco uBR-MC3GX60V line card.
CSCub10067	The CPE does not come online after the cable modem and CPE are configured to use different VRFs and dual-stack mode is enabled.
CSCub10176	When the DTCC card is moved from one slot to another, the MIBs do not change.
CSCub10389	On a primary channel with narrowband modems, when wideband modem is online, those modems should select other channels as the primary channel.

Bug ID	Description
CSCub12198	Cisco uBR-MC3GX60V line card Gi port status is up even if no line card is connected to the port.
CSCub12392	When the line card HA is ready and updates the LB group to replace the standby line card with an active line card, standby line card resets due to configuration synchronization error.
CSCub12565	PRE crash and error message are observed when line card switches over with active multicast session.
CSCub12690	Most MPLS deaggregation traffic is lost, approximately 4 kpps (68 byte frame length) traffic is received.
CSCub13563	Incorrect data flow is observed when the second channel of is added.
CSCub14757	CM cannot come online when the fiber node contains two controllers RF channel with overlapping frequencies.
CSCub15514	After all the CMs are cleared from CMTS, CMs can still be seen in the pending list of DOCSIS 2.0 LBG.
CSCub15941	CMTS crashes when the show interface x multicast-sessions command is executed.
CSCub15996	After the DHCPv6 CPE is recovered by the CMTS, DUID of the CPE is zero.
CSCub15999	DSG multicast traffic is forwarded on the default service flow instead of non-default service flow.
CSCub17050	Traceback and the error message SYS-2-INSCHED is observed when the line card crashes.
CSCub17093	Incorrect upstream SFID summary is observed after PRE switchover when MPLS L2VPN is configured.
CSCub17736	CPUHOG and traceback are observed if DCC is performed when 250 CPEs are behind one modem.
CSCub20172	The no cable cm-status x command on interface removes the other option.
CSCub23036	%SYS-2-MALLOCFAIL error message is observed on cable line cards.
CSCub25025	Cable monitor configuration is rejected for SPA WB interface.
CSCub25128	With a large fiber node and dual-stack configured, "Unexpected fragment sequence number. Got 2 and expected 1" error message is observed on the modem console. Modems cannot come online with IPv6 when the error message appears.
CSCub25281	The show cable modem phy output is not cleared when the remote-query is enabled while the timer does not reach the interval.
CSCub25811	After SNMP setany and PRE switchover, the changed modulation-profile is set to default.
CSCub26315	Modem and eMTA are not pingable from outside the CMTS. The ds_classif is zero in the output of the show cable modem x.x.x service-flow verbose command.
CSCub27638	When one modem is configured with more than two different classifiers and the microcode reload pxf command is executed, the DS traffic, except for the first and last classifier's traffic on the modem, is dropped.
CSCub27686	Assertion fails with spurious memory access when the show cable modem service-flow verbose command is executed.

Bug ID	Description
CSCub28061	The following error message and traceback are observed: "%HCCP-3-CFG_FAIL: Configuration failed. Parsing on Cable5/0/0 (error 1) -Process= "HCCP_LC_CTRL", ipl= 0, pid= 386"
CSCub31131	Cable modems are unreachable after a reset using the ccm all reset command.
CSCub33063	The show controllers integrated-cable xx mapping rf-channel command output is unclear on Cisco uBR7200 routers.
CSCub35871	The standby RP may show "%UBR10K_REDUNDANCY-4-RP_HA_STDBY_INCONSISTENT" messages on console, when the line card is reset.
CSCub36209	The packet loss rate is up to 20% in Cisco SIP-600 priority queue for IP precedence on the 5-Port Gigabit Ethernet SPA.
CSCub37666	The CPE type remains static instead of DHCPv6.
CSCub38032	The show cable host access-group command does not show IPv6 host.
CSCub39104	Active PRE4 crashes while changing the fiber node (FN) channel configuration.
CSCub40601	The Cisco CMTS forwards packets from a manually configured IP address when cable source-verify dhcp command is configured.
CSCub41631	The output of show controllers integrated-cable xx mapping wb-channel is unclear for Cisco uBR7246 router.
CSCub41655	Inconsistent output of the show controller integrated-cable command.
CSCub42367	Wideband-cable interface is not available for generating RCC after executing the cable ds-resiliency and no cable ds-resiliency commands.
CSCub42368	The outputs of the show cable l2-vpn xconnect dot1q-vc-map modem-mac verbose and show cable l2-vpn xconnect mpls-vc-map modem-mac verbose commands are the same for dot1q L2VPN service.
CSCub43248	DOCSIS 3.0 modem registers with the wrong number of RF channels in its RCS, which is not specified by TLV56, when TLV56 is configured.
CSCub43273	The CPU usage of hardware API background process is more than 50%.
CSCub43358	The codewords are not counted for ranging requests on Cisco uBR-MC3GX60V, Cisco UBR-MC20X20V, and Cisco uBR-MC88V line cards.
CSCub43523	Switchover fails during the Cisco UBR-RFSW-ADV image upgrade.
CSCub43540	CMTS crashes after the do test hccp rfsw relay x command is executed in configuration mode.
CSCub44765	CM cannot get all the IPv4 and IPv6 address via MIB cdxCmToCpeTable when more than 255 IPv6 and IPv4 addresses exist in hosts under one CM.
CSCub44885	The L2TPv3 tunnel does not come up on the Cisco CMTS. Error messages are displayed.
CSCub45028	The pending counter does not clear on channel shutdown.
CSCub45231	IPv6 ACL with UDP Routing Information Protocol (RIP) field does not work.
CSCub46811	The xconnect type L2VPN is not synchronized with the protect card.
CSCub47047	The shutdown and no shutdown of Cisco uBR-MC3GX60V GE (SFP) port causes insert OIR event in call home.

Bug ID	Description
CSCub47647	When the protect line card is down and the line card switches over, the CM or CPE goes offline. However, the show ipv6 dhcp relay binding and show ipv6 route static commands still show the PD route.
CSCub50729	IPv6 can crash without reset interrupt.
CSCub52401	IPv6 spoof MAC detection is not available in IPv6 calling path.
CSCub54680	When then cable ipv6 source verify dhcp command is executed on the CMTS bundle interface, CPU utilization increases to 99% with DHCPV6LQ QUEUEFULL ERROR for the large scale IPv6.
CSCub55685	If the download is interrupted for a longer period such that the CMTS stops communicating with Cisco UBR-RFSW-ADV switch ,it stays in the state where it cannot copy any more images.
CSCub57143	The second BG cannot be selected after line card switchover.
CSCub57956	Memory leak is observed on Cisco uBR10012 router when PRE switches over in RPR redundancy mode.
CSCub57967	One Cisco uBR-MC3GX60V line card works as the modular host line card of SPA and protect card at the same time.
CSCub58043	Traceback is observed when the line card is reset and PRE switches over.
CSCub58534	Ping fails on modem after multiple line card switchover.
CSCub59823	The value of docsIf3BondingGrpCfgChList using SNMP GET is null for cross controller.
CSCub60220	The show logging onboard temperature/voltage summary command does not display any output when Onboard Failure Logging (OBFL) is configured.
CSCub60558	The value of entPhysicalHardwareRev of the Cisco SIP-600 is not the same as hardwareversion shown in the show diag command.
CSCub62559	IPv6 packet is dropped by failed RPF in PXF. However, when the no service pxf command is executed, the IPv6 packets are forwarded by RP.
CSCub62885	After DBC changes the transmit channel set (TCS) of the modem to upstream channel set, the partial mode information is not erased.
CSCub64405	A wrong "IP MTU" configuration message appears in interface configuration when 10 Gigabit Ethernet SPA is configured with MTU and the 10 Gigabit Ethernet SPA interface is removed and added.
CSCub64465	The show pxf cpu mpls command displays incorrect VRF table IDs for MPLS labels.
CSCub64722	LBG assignment cannot be performed for DOCSIS 3.0 CM after PRE switchover and modular-cable interface is configured with dynamic DEPI session.
CSCub64959	If an EtherChannel interface is shut down through SNMP, after PRE switchover, EtherChannel state is up instead of down.
CSCub64990	The standby PRE crashes after the modem configuration file that includes multicast static TLV is changed and line card switches over.
CSCub65411	All routed packets are incorrectly counted in the show interface stats command on tunnel interface.
CSCub66606	CMTS PXF crashes when sending large packet through IPv6 IP tunnel.
CSCub66706	Some packets are lost during ping when the modems come online with RF-span.

Bug ID	Description
CSCub67166	The show hccp brief command does not show active line card after the PRE switches over when standby PRE CPU utilization is high. All line cards are shown as standby.
CSCub67370	IPv6 ACL cannot be applied to GRE tunnel interface through startup-config file after reboot.
CSCub69510	If DBC is enabled and DBC receive channel configuration (RCC) is performed, when DS service flow information of CM exceeds the maximum TLV buffer, the line card crashes.
CSCub69512	Error message and tracebacks are observed when configuring Q-in-Q backhaul sub-interfaces.
CSCub70942	Spurious memory access error is observed.
CSCub72694	A CMTS reload or PRE switchover takes approximately 10 minutes or more when high number of IPv4/IPv6 cable filters are configured.
CSCub76172	Memory leakage occurs when the virtual bundle fails.
CSCub76665	After the global SFAC threshold is changed when the protect card is active, global AC threshold does not synchronize from active protect card to standby working card.
CSCub78418	Traffic breaks when any of the following commands are executed at a tunnel interface: <ul style="list-style-type: none"> • no ipv6 enable • no ipv6 address • no ipv4 address
CSCub78454	The docsSubmgt3CpeIpAddr MIB object does not display all the IPv6 CPE information.
CSCub81383	Error messages and Traceback is seen when ipv6 dhcp relay destination command is configured.
CSCub81852	Spurious memory access seen with high CPU utilization when cable upstream power-level command is configured on the Cisco CMTS.
CSCub83278	The Supervisor card switchover may cause the Cisco CMTS line card switchover with the following error message on the Cisco CMTS console: "%HCCP-5-LC_ACTIVE: HCCP card 5/1 Mbr 61 Protect: change state to active due to: APP Switch."
CSCub89046	CPE is added to wrong CM after leasequery.
CSCub91406	The output of show pxf cable feature-table does not distinguish between DHCPv4 and DHCPv6 source verify inquiries when the source verification of the IPv6 packets is configured on the bundle interface.
CSCub92892	IPv6-enabled DOCSIS2.0 compliant modems in multicast DSID forwarding (MDF) explicit mode are not reachable.

Resolved Caveats—Cisco IOS Release 12.2(33)SCF4

Bug ID	Description
CSCta46405	Spurious memory access is seen with IPv6 packets on the Cisco CMTS router.
CSCtc42278	Data corruption and data inconsistency messages are seen for incoming ISDN calls.
CSCtg47129	<p>The Cisco IOS Software implementation of the virtual routing and forwarding (VRF) aware network address translation (NAT) feature contains a vulnerability when translating IP packets that could allow an unauthenticated, remote attacker to cause a denial of service (DoS) condition.</p> <p>Cisco has released free software updates that address this vulnerability. Workarounds that mitigate this vulnerability are not available.</p> <p>This advisory is available at the following link: http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20130327-nat</p> <p>Note: The March 27, 2013, Cisco IOS Software Security Advisory bundled publication includes seven Cisco Security Advisories. All advisories address vulnerabilities in Cisco IOS Software. Each Cisco IOS Software Security Advisory lists the Cisco IOS Software releases that correct the vulnerability or vulnerabilities detailed in the advisory as well as the Cisco IOS Software releases that correct all Cisco IOS Software vulnerabilities in the March 2013 bundled publication.</p> <p>Individual publication links are in “Cisco Event Response: Semiannual Cisco IOS Software Security Advisory Bundled Publication” at the following link: http://www.cisco.com/web/about/security/intelligence/Cisco_ERP_mar13.html</p>
CSCtg47944	A RP crash was observed on the Cisco CMTS after removing a bundle subinterface with IPv6 parameters.
CSCtk10254	The CPE does not get an IPv6 address from the DHCP server because of the MPLS core between the Cisco CMTS and CNR.
CSCtn74216	Memory fragmentation is observed on the Cisco CMTS when cable modems are configured with classifiers.
CSCto57723	<p>Cisco IOS Software and Cisco IOS XE Software contain a vulnerability that could allow an unauthenticated, remote attacker to cause a denial of service (DoS) condition. An attacker could exploit this vulnerability by sending a crafted request to an affected device that has the DHCP version 6 (DHCPv6) server feature enabled, causing a reload.</p> <p>Cisco has released free software updates that address this vulnerability. This advisory is available at the following link: http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20120926-dhcpv6</p>
CSCts68630	IPv6 ACL may not match the traffic as per the configuration when there is an ACL configuration change.
CSCtu05895	Spurious memory access observed on the Cisco CMTS after clear cable host command is executed.

Bug ID	Description
CSCtx41292	Upstream channels in TCS that are in error state are selected for service flow (SF) when modems create Real-Time Polling Service (rtPS) SF.
CSCtx41484	Duplicate IPv4 address is added to different CPEs.
CSCtx66940	Some cable modems fail ping test although DOCSIS ping is successful.
CSCtx79299	Cable modem goes offline after doing manual HCCP switchover and revertback.
CSCty69249	"%HCCP-3-CFG_FAIL: Configuration failed. with error 16" is observed.
CSCty75552	The standby PRE does not have the Baseline Privacy Interface (BPI) CA Cert that the active primary PRE has.
CSCty81694	Policy-based Routing (PBR) with 'set interface null0' does not drop the packet even though the match counter in the show route-map command output is incremented.
CSCty98950	CMTS crashes when external factors such as DBC make queue is removed from the list that has this queue node.
CSCtz00354	PRE crashes when a DQoS type gate using PCMM message is deleted.
CSCtz14080	Traceback observed on the Cisco CMTS when IP MAC address is updated.
CSCtz21072	CPE or multimedia terminal adapters (MTA) device classification is lost after the modem is moved by load balancing.
CSCtz25042	Active and standby PRE modules crash on the Cisco CMTS during ISSU negotiation.
CSCtz43528	The show cable load-balance load command displays incorrect upstream counter values. The DOCSIS load-balancing interface status is down.
CSCtz43906	The order of DOCSIS classifiers is reversed after line card switchover.
CSCtz53324	Looping or duplication while polling cdxCmToCpeInetAddress and cdxCmToCpeInetAddressType MIB OIDs on a Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCE5 with ESR-PRE4 and seven Cisco uBR-MC3GX60V line cards.
CSCtz57981	PRE reloads when 384 IPv6 rules are configured and after PRE switchover.
CSCtz64901	Cisco uBR-MC3GX60V line card crashes with %SYS-2-FREEBAD: Attempted to free memory at FD on a Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCF2.
CSCtz68155	The Cisco CMTS does not display the primary downstream IPv6 route in the VPN Routing and Forwarding (VRF) interface when DHCPv6 relay packet is configured.
CSCtz80020	The source address of cable modem DHCPv6 REQUEST packets is not that of the first sub-bundle.
CSCtz82526	The adjacency event history is not displayed in the show tech-support command on the Cisco CMTS.
CSCtz84668	Cable logging configurations are disabled or reverted back to their default after reload.
CSCtz93547	Repeated Cisco uBR-MC3GX60V line card switchovers cause the downstream LED on the Next Generation RF Switch Advanced (NGRFSW-ADV) to be stuck at BLUE (protected mode).

Bug ID	Description
CSCtz95968	Dual stack CPEs cannot acquire IPv4 or IPv6 address they are moved from one modem to another modem and changed to IPv4- only or IPv6-only mode within same MAC-domain.
CSCtz99874	The Cisco CMTS does not initiate an N+1 failover when the Gigabit Ethernet link is down.
CSCua01485	The MAC domain downstream service group identifiers of DOCSIS 3.0 compliant modems are incorrect.
CSCua02128	Parallel Express Forwarding (PXF) errors causes the Cisco uBR10012 router to crash.
CSCua03712	Equivalent for the <code>cmts_remove_stale_entr()</code> for IPv6 for all IPv6 address paths does not exist.
CSCua05551	<code>%HCCP-3-CFG_FAIL</code> : Configuration failed error messages are displayed on the PRE module. The error occurs during protect line card bootup.
CSCua10865	Cisco CMTS reloads after uninstalling a Cisco Wideband SPA card.
CSCua11702	Standby PRE reloads when HCCP is unconfigured on the Cisco CMTS.
CSCua13393	No support for the show interface cablex/y/z modem ipv6 command.
CSCua13563	VRF Steering works with a non-existent VRF.
CSCua15201	The cable modem cannot get a correct IPv6 address nor get online due to wrong link address and source address.
CSCua19957	OctetsPassed and BytesPassed in the records for a specific Service flow decrease instead if increasing over a period of time.
CSCua20447	Advanced Spectrum Management does not work on the Cisco uBR-MC3GX60V line cards.
CSCua30576	Only a small percentage of CMs are registered or come online after a period of time.
CSCua39480	The Cisco uBR-MC3GX60V line card crashes due to "SegV exception" error.
CSCua39574	CM goes offline when RF impairment is restored.
CSCua40213	Configuration of cable source-verify dhcp fails.
CSCua43342	PRE crashes with the following logs in the crash file: %UBR10000-4-OVERLAPIP_CM: Interface Cable6/0/3, IP address 10.36.174.226 assigned to CM 0024.d118.62d8 has been reassigned.
CSCua49207	The ARP entries are not deleted on the Cisco CMTS after VRF steering is configured.
CSCua51426	Multicast does not work when CPEs in different sub-bundles join the same multicast group.
CSCua56220	The receive channel configuration (RCC) of the route processor incorrectly shows downstream channels as non-primary capable.
CSCua59740	The wideband bandwidth of the RF channel does not change even when the bandwidth percentage is modified.
CSCua70748	The Cisco uBR-MC3GX60V line card crashes showing <code>%SYS-3-BADMAGIC</code> : Corrupt block error.

Bug ID	Description
CSCUa71403	IPDR Exporter stops sending records to the secondary collector. The secondary collector cannot connect to the Cisco CMTS when primary session is not active.
CSCUa74814	Memory loss occurs on the Cisco CMTS due to memory RP classifier update on the cable modem.
CSCUa78236	The upstream frequencies on the Cisco CMTS are not set when docsIfUpChannelFrequency MIB object is used.
CSCUa83610	%SYS-3-MEMLITE error message displayed on the Cisco CMTS when memory type is set to chunk on the Cisco CMTS.
CSCUa91625	The single stack IPv6 CPE keeps changing its state when moving from path to another.
CSCUb01259	The Cisco uBR-MC3GX60V line card crashes after a switchover when there are many CPEs behind a cable modem.
CSCUb09851	Line card crash observed on the Cisco CMTS due to error interrupt.
CSCUb13419	The Source Address Verification (SAV) IPv6 prefixes in the static source-verify group are not correct.
CSCUb27091	The Cisco CMTS crashes unexpectedly when IPv6 Bidirectional Protocol Independent Multicast (PIM) is enabled on the interfaces.
CSCUb27775	The multicast QoS service IDs for single flows are not allocated to the new cable modems after a PRE module switchover.
CSCUb30207	A DHCPv6 Leasequery (LQv6) is issued when a CPE is getting into the IPv6 online state using DHCPv6 relay path.
CSCUb45040	The Cisco CMTS crashes when many DOCSIS Set-Top Gateway (DSG) tunnel groups with the same DSG are configured.
CSCUb55129	Synchronization between secondary and active PRE modules does not occur, when the DEPI CPU threshold values are modified.
CSCUb60453	The cable router (where the router is the CPE and integrated in the CM) is able to get an IP address for the CM but not for the CPE (the integrated router).

Open Caveats—Cisco IOS Release 12.2(33)SCF3

Bug ID	Description
CSCsy84798	QoS classification is not working at the multilink frame-relay (MFR) interface for IPv6 packets.
CSCsz60746	A static route configured through an unnumbered interface does not show up in Routing Information Base (RIB).
CSCta43825	High CPU usage with CMTS or SNMP walk of the ARP table.
CSCtc40730	Not able to format disk partitions that are less than 3 MB in size.
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
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.
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.
CSCtf74986	Memory usage increased from configured threshold levels causing a memory event trigger.
CSCtg47668	The show cr10k cable mac command does not display any output.
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.
CSCth79635	The following message is displayed: %SYS-3-INVMEMINT: Invalid memory action (free) at interrupt level.
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.
CSCti41752	The static-group physical interface does not support all the subinterface numbers unlike the IOS.
CSCti73720	The multicast service flow counters are incorrect after a PRE switchover when active guardian is different from the configured guardian.
CSCtj25815	Multicast service flow counters fluctuate after a remote Guardian N+1 switchover.
CSCtj39203	The active PRE crashes on running the show cable multicast db command.
CSCtj69254	CPU HOG messages and traceback occur during a line card switchover.
CSCtj87847	Phy static-mcast should be configured on fwd_intf for static-mcast TLV.
CSCtk15093	CPE, in one multicast VPN, incorrectly receives traffic destined to a CPE in another multicast VPN.
CSCtl22266	The DOCSIS general load balancing group information is lost from the mac domain cable modem service group after a PRE switchover occurs.
CSCtl46180	The show pxf cable multicast-echo command output for physical/logical static-mcast is empty after Cisco CMTS bootup.
CSCtl50170	During stress testing, CPUHOG is observed during Subscriber Account Management Interface Specification (SAMIS) operations which eventually causes PRE crash.
CSCtl54475	Cisco CMTS does not recognize TLV64.
CSCtl92608	The show cable dsg tunnel statistics command does not display service flow or drop counter information.
CSCtn96470	The carrier-to-noise ratio (CNR) accuracy varies on the Cisco uBR-MC3GX60V line card.

Bug ID	Description
CSCto02925	The Cisco CMTS cannot handle re-admission of admitted service identifiers (SID) after a CMTS reboot. The messages are observed after power cycling the modems.
CSCto47940	The downstream channel IDs are reordered while they are unique.
CSCto55350	The HCCP configuration fails when the no cable downstream-channel-id automatic command is issued followed by the cable downstream-channel-id automatic command.
CSCto67613	Debug counters show incorrect information.
CSCto76438	Downstream Channel Descriptor (DCD) messages are not sent out on cable downstream channels.
CSCto81183	The dynamic modulation is able to DG but not UG if the spectrum group is configured.
CSCto88136	Cable modems drop offline when the cable tftp-enforce and cable dynamic-secret mark commands are configured, and line card switchover is performed.
CSCtq07315	Memory leak is observed on Cisco CMTS when multicast QoS is configured on the cable interface line card, and online insertion and removal of line card is performed.
CSCtq37505	The downstream identifier for the static multicast spa interface changes on a line card or PRE switchover impacting traffic.
CSCtq43624	Continuous IPC send failure messages seen after a PRE switchover.
CSCtq43664	Cable modems on a non-guardian line card go offline after a line card switchover.
CSCtq45452	CPE may not receive multicast packets after a line card HA.
CSCtq47712	The show cable filter verbose command shows incorrect counters.
CSCtq56204	The Standby PRE crashes when debug cr10k ha-msg command is enabled.
CSCtq58228	RCC ID mismatch is seen between the cable modem and the line card due to a Dynamic Bonding Change (DBC) failure.
CSCtq67631	Traceback is observed at "wb_stat_set_gur_idx_reg".
CSCtq79702	Explicit Tracking Database displays broadcast address as a source of multicast.
CSCtq80033	Physical Port Administrative State Down alarm failure observed on Standby PRE for Gigabit Ethernet line cards.
CSCtq83148	Additional downstream service identifiers and Explicit Tracking Database (ETDB) entries are seen on the standby PRE after a channel change.
CSCtq86879	The Cisco CMTS does not display IPv6 CPE data when scm ipv6 cpe command is issued.
CSCtr15894	The standby PRE resets with configuration mismatch error message when the cable igmp static-group subinterface was deleted prior to a PRE switchover.
CSCtr32001	After a line card switchover, the working line card interface configuration is not applied correctly to the protect line card causing the modems to go offline.
CSCtr44534	The docsQosParamSet MIB object or the docsIetfQosParamSetTable MIB object returns the next entry when the background synchronization is activated.

Bug ID	Description
CSCtr57548	The show cable leasequery filter command does not display the correct lease query counter.
CSCtr61197	HCCP FAIL error message is displayed on the Cisco uBR10012 router after a PRE switchover.
CSCtr90943	The "max sustained rate" and "max rate" service flow settings are not enforced on the cable modems.
CSCts18692	The Cisco CMTS assigns CPE MAC and IP address into wrong CM.
CSCts20435	CPE schema record contains IPv6 link-local address (LLA) address of the CPE.
CSCts23073	The no cable dsgrtg command returns a wrong partial route calculation (PRC) value.
CSCts25440	Wideband bonding group attribute mask is checked for load-balancing.
CSCts25806	The show depi session command output does not show Downstream External PHY Interface (DEPI) EQAM statistics.
CSCts27743	Downstream Packet Intercept stops working after PXF reload.
CSCts31485	IPv6 traffic stops between CPE and CMTS when CPE is running dual-stack.
CSCts34313	The order of the DOCSIS classifiers is inverse after a route processor or line card switchover.
CSCts34791	The host is visible after enabling verification of IP addresses for cable modems using the cable source-verify command.
CSCts35917	Cable modems are getting stuck in init(io).
CSCts39254	Executing microcode reload all command in Cisco uBR10012 router is causing Service Independent Intercept (SII) failure.
CSCts42106	EEPROM contents on route processor (RP) for Cisco uBR10-MC5X20 line card is incorrect.
CSCts42241	DOCSIS 3.0 cable modem is not seen on modem list.
CSCts48474	General Load Balance Group (GLBG) assignment fails for DOCSIS 3.0 cable modems that are coming back online after line card switchover and PRE switchover.
CSCts55186	A CPE cannot receive multicast traffic when group encryption is configured.
CSCts57957	The DEPI session configuration on the EQAM cannot be changed immediately after removing the DEPI configuration on the Cisco CMTS router.
CSCts66074	DOCSIS 3.0 cable modems are not balanced on the Cisco CMTS router when one of the upstream channels is shut down in the MAC domain.
CSCts74849	Inconsistency in the DSG configuration is observed between the route processor and the line card.
CSCts85204	The IPv6 packets may match to wrong DOCSIS downstream classifiers on PRE2.
CSCts87338	For IPv6 traffic, if the input QoS packet marking is executed, the output QoS packet marking is skipped.
CSCts88376	Cable modem goes to reject(c) mode during a downstream channel bonding (DSCB) static service flow permit test.
CSCtt04589	After a PRE switchover, %SCHED-3-STILLWATCHING traceback is seen on the active PRE.

Bug ID	Description
CSCtt11573	The PRE configuration is not matching the upstream configuration of line card.
CSCtt24798	Traceback is observed when removing a tunnel interface with policy-based routing (PBR) configured.
CSCtt40993	Topology records may not be created, if you configure an IPDR session with topology schema and logical upstream channels.
CSCtt70223	There is inconsistent Cisco uBR-MC3GX60V controller RF-channel configuration between the active and standby route processors.
CSCtu04096	Sometimes, IPv6 traffic is matched to IPv4 class map for the TCP/UDP port range.
CSCtu04125	Modular QoS CLI (MQC) does not work for IPv6 traffic when you disable PXF forwarding.
CSCtu06022	The SNMP ifOutOctets counter burst occurs during microcode reload.
CSCtu06071	IPC traceback is observed when you reset Cisco SIP-600 and Cisco Wideband SPA for multiple times.
CSCtu23677	DEPI session generated via "snmp set" is not reflected on the standby Cisco uBR-MC3GX60V line card after a line card switchover.
CSCtu26682	The MCAST_IPC_HEADER_ADD_FAILURE and traceback at cmts_mcast_return_ctrlpkt_dsid_info is observed after performing a PRE switchover.
CSCtu36182	Duplicate RCC IDs are seen on certain MAC domains.
CSCtu37762	The route processor may fail when repeating the no form of the card command.
CSCtu41290	The forwarding wideband interface reported in the update message log of dynamic multicast is incorrect.
CSCtv12661	CPUHOG and related traceback are observed even after clearing the respective counters.
CSCtw44593	The SPA GigE interface is displayed as 1/0/0:0 instead of 1/0/0 after SPA OIR (install/upgrade) and executing the no card command.
CSCtw44697	Spurious tracebacks are observed after a SPA online insertion and removal (OIR).
CSCtw47052	The hw-module pre shutdown command does not work after a CMTS reload.
CSCtw48441	Syslog "ENT_API-4-NOPARENT" occurs as SIP and SPA reloads many times.
CSCtw49597	Some keywords of the debug ipv6 dhcp command are not displayed.
CSCtw60150	All line cards crash after coredump is configured and the crash is tested on the standby PRE.
CSCtw61104	The Cisco CMTS router crashes after changing a specific configuration of a dual stack CPE router.
CSCtw66583	Invalid unicast IP addresses are allowed to be configured as source IP in the DOCSIS Set-Top Gateway (DSG) classifier (cfr) configuration.
CSCtw66769	The Cisco uBR-MC3GX60V line card IPC timeout causes a line card switchover or a line card reload.
CSCtw67106	The show cable mac-domain rcc command displays an invalid RCC template.
CSCtw68746	The Cisco CMTS failed to create a pxf queue.

Bug ID	Description
CSCtw77179	Multiple IPv6 static Global Unicast Address (GUA) are observed on the CPE with the same MAC address.
CSCtw79787	The following traceback is observed when the standby PRE takes over: %SCHEM-7-WATCH: Attempt to enqueue uninitialized watched queue (address 0). -Process= "CR10K RP HA", ipl= 0, pid= 72 -Traceback= 40AF6614 40C3F180 404243F0 40424460 401FD4A4 400EEC3C 400EEE1C
CSCtw91856	Invalid DSG classifier "src-ip" and "src-prefix-len" can be configured through SNMP when the classifier is disabled.
CSCtw92186	MAC based classification fails for CPE after PRE switchover.
CSCtw98544	Error message is seen on standby PRE.
CSCtw99846	The Cisco uBR10-MC5X20H line card crashes while running SNMP query.
CSCtx02442	Traceback is observed during single step ISSU.
CSCtx07373	MAC-domain interface is shutdown after migration from Cisco uBR10-MC5X20 line card to Cisco UBR-MC20X20V line card.
CSCtx10124	Service flow ID is missed for the tunnel whose classifier has both destination and source IP out of source-specific multicast (SSM) range of IP multicast addresses.
CSCtx11732	The PRE serial number shown in the output of the show diagnostic result pre command is not correct.
CSCtx11981	Traceback is observed while configuring 'ippolicyroute-map' for management interface.'
CSCtx14448	Multicast DSID is lost after RP switchover.
CSCtx18475	Traceback is observed after creating or deleting sub-interface on the management port.
CSCtx26044	SNMP traceback is observed after moving line card from slot 8/1 to slot 8/0.
CSCtx34060	Static multicast service flow (SF) is lost during ISSU.
CSCtx37531	The Cisco uBR-MC3GX60V line card logs a message (%BCM3142-3-READ_ERR_SEQ) and stops passing traffic.
CSCtx41292	Upstream channels in TCS that are in error state are selected for service flow (SF) when modems create Real-Time Polling Service (rtPS) SF.
CSCtx41484	Duplicate IPv4 address is added to different CPEs.
CSCtx44487	License info is NULL and traceback is observed on the active PRE.
CSCtx66940	Some cable modems fail ping test although DOCSIS ping is successful.
CSCtx68722	The voice unsolicited grant service (UGS) flows are not receiving any packet.
CSCtx69734	Invalid src-prefix-len in DOCSIS Set-Top Gateway (DSG) classifier can be configured via SNMP.
CSCtx73018	The docsIf3DsBondingGrpStatusTable is not using the correct bonding group channel set id.
CSCtx79299	Cable modem goes offline after doing manual HCCP switchover and revertback.
CSCtx87435	Neighbor cache is incorrectly created for prefix address.

Bug ID	Description
CSCtx88572	CPUHOG is seen when `dsg tgisremovedfromtheMAC-domain.'
CSCty02741	Cannot log into line card through BPE and IPC timeout error message is displayed.
CSCty03857	Memory leak is observed at obfl_enqueue_env_event.
CSCty11985	The hw-mod slot 1 shut command shuts down the DTCC in 2/1.
CSCty18719	Cisco IOS may crash while configuring ACLs from multiple CLI terminals at the same time.
CSCty26542	High CPU usage when 100k static IPv6 hosts are set up on ixia, and they connect to TenGig ports on the CMTS, the CPU utilization reaches 90% in the beginning, which lasts for 15 seconds and then starts becoming less.
CSCty33610	"Unrecognized DSID Encoding" is observed for subtype 2 and 4 in the debug log messages during CM registration with the CMTS.
CSCty34896	Synchronization fails while setting entPhysicalAlias via SNMP.
CSCty65044	Incorrect delta on ServiceOctetsPassed counters on a Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCE4 with IPDR exporter in progress.
CSCty69249	"%HCCP-3-CFG_FAIL: Configuration failed. with error 16" is observed.
CSCty75552	The standby PRE does not have the Baseline Privacy Interface (BPI) CA Cert that the active primary PRE has.
CSCty81694	Policy-based Routing (PBR) with 'set interface null0' does not drop the packet even though the match counter in the show route-map command output is incremented.
CSCty87445	DCC and LB are not prohibited when static l2vpn provisioning is configured for a cable modem with xconnect type or dot1q type.
CSCty95775	Cable line cards are forced to power cycle during CMTS reboot after LCHUNG message is displayed.
CSCty98950	CMTS crashes when external factors such as DBC make queue is removed from the list that has this queue node.
CSCtz00354	PRE crashes when a DQoS type gate using PCMM message is deleted.
CSCtz01536	Wideband cable modems are shown as online even though there is no L3 connection.
CSCtz01786	PRE5 might crash when it receives bad SNMP bgsync packets.
CSCtz02213	The show run command output has empty init-tech-list. Also, invalid range such as 100-0 is accepted by the init-tech-list.
CSCtz11975	The downstream RF configuration of the fiber-node is not synchronized with the line card.
CSCtz11996	Modems are marked offline when the issue line changever all command is executed.
CSCtz14185	The show cable load docsis-group fn 1 md command is not parsed in user exec mode.
CSCtz14627	After GigEthernet port is shut down, DEPI sessions are not removed when DEPI is configured in DEPI control plane mode.

Bug ID	Description
CSCtz18278	IPDR Export XMLs may have service flows with ServiceOutOctets less than ServiceOutPacket.
CSCtz21072	CPE or multimedia terminal adapters (MTA) device classification is lost after the modem is moved by load balancing.
CSCtz25782	Cannot upgrade firmware on PRE2 when the FPD file is located in the bootflash.
CSCtz28429	%ISSU-3-DEBUG_ERROR is prompted during system bootup.
CSCtz28512	IPDR schema does not work.
CSCtz32084	The clear cable modem all delete command does not delete modems from the modem list.
CSCtz33956	The oui is accepted without error check.
CSCtz35327	Upgrading a Cisco uBR-MC3GX60V line card license fails on a Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCE2 due to Count Violation even though the number of active DS and US is less than the number that you are trying to upgrade to.
CSCtz36802	The show cable modem cable x/y/z upstream us domain-name command does not work.
CSCtz42496	Packet loss is observed on the upstream ports on the Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCF2 having Cisco UBR-MC20X20V line card and Cisco uBR-MC3GX60V line card. This issue is observed during ixia testing with packets smaller than 200 bytes.
CSCtz43906	The order of DOCSIS classifiers is reversed after line card switchover.
CSCtz43913	IP Protocol Type 257 in the classifier is deleted during line card switchover or Dynamic channel change (DCC).
CSCtz53324	Looping or duplication while polling cdxCmToCpeInetAddress and cdxCmToCpeInetAddressType MIB OIDs on a Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCE5 with ESR-PRE4 and seven Cisco uBR-MC3GX60V line cards.
CSCtz57981	PRE reloads when 384 IPv6 rules are configured and after PRE switchover.
CSCtz59978	The clear cable modem command with the following keywords do not work: <ul style="list-style-type: none"> • rcs-counts • all rcs-counts and • IPV4 address
CSCtz64901	Cisco uBR-MC3GX60V line card crashes with %SYS-2-FREEBAD: Attempted to free memory at FD on a Cisco uBR10012 router running Cisco IOS Release 12.2(33)SCF2.
CSCtz76036	Tracebacks are observed and cable modems fail to go online due to missing DSID resources.
CSCtz80020	The source address of cable modem DHCPv6 REQUEST packets is not that of the first sub-bundle.

Bug ID	Description
CSCtz80409	The show cable modem CM mac command shows some cable modems as not registered even though they are displayed in the show cable modem command output when cable privacy hotlist cm cpe mac is configured.
CSCtz84668	Cable logging configurations are disabled or reverted back to their default after reload.

Resolved Caveats—Cisco IOS Releases 12.2(33)SCF3

Bug ID	Description
CSCsi06186	The IPv6 extended ping command is not using the selected source address.
CSCtj48387	After a few days of operation, a Cisco ASR router running as an LNS box, crashes with DHCP related errors when DHCP enabled and sessions get DHCP information from a RADIUS server.
CSCtl12572	An assert is triggered in "lb_cm_can_move()".
CSCtl53607	After a cable modem resets, the IPv6 CPE behind the modem is not removed from the configuration.
CSCtn15504	A Cisco router may hang and become unresponsive when configured with L2TP.
CSCtn43256	The Cisco PSIRT has assigned this bug the following CVSS version 2 score. The Base and Temporal CVSS scores as of the time of evaluation are 2.6/2.1: https://intellishield.cisco.com/security/alertmanager/cvssCalculator.do?dispatch=1&version=2&vector=AV:N/AC:H/Au:N/C:N/I:N/A:P/E:F/RL:OF/RC:C No CVE ID has been assigned to this issue. Additional information on CiscossecurityvulnerabilitypolicycanbefoundatthefollowingURL: http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html
CSCtn64461	The CPE may not receive multicast traffic when the MQoS is configured.
CSCtr15141	Internet Group Management Protocol (IGMP) version3 multicast client may timeout when the maximum response time of the Cisco uBR10012 router is set to a value greater than 12 seconds.
CSCtr73136	The DEPI Path Redundancy (DPR) line card failover on the protect Cisco uBR-MC3GX60V line card is falsely triggered.
CSCtr94721	The Jib3 upstream driver details are missing from the register display.
CSCts04951	Encrypted traffic is blocked after line card switchover for DOCSIS3.0 CM CPE
CSCts49786	The default priority for DOCSIS downstream classifier is incorrect.
CSCts54310	The IPv6 output for MAC PI is not working when access control list (ACL) or cable filter is enabled.
CSCts67443	Cable modem loses Layer 3 connectivity after line card switchover.
CSCts68020	The admin state of rf-channel may not be correct when Downstream External PHY Interface (DEPI) session is not established.
CSCts95882	The IP input process is high on the route processor when sending multicast traffic.
CSCtt15429	A line card switchover occurs during an online insertion-removal (OIR) of an active PRE, and the RF switch incorrectly switches over to the protect line card.

Bug ID	Description
CSCtt19430	Spectrum errors are observed on the Cisco CMTS router when running the spectrum analyzer. This issue is observed on the Cisco uBR-MC3GX60V line card.
CSCtt24077	ServiceFlowChSet in exported records is empty for upstream dynamic Service-Flow.
CSCtt29620	The SAS feature causes the DHCPv6 Lease Query to fail if two-link addresses are configured.
CSCtt30287	An IPC error occurred during a fully loaded Cisco CMTS router reboot.
CSCtt99712	The internal router is getting a private IP address instead of a public IP address.
CSCtu14142	The route processor (RP) crashes after line card and RP switchover.
CSCtu14539	The Cisco uBR-MC3GX60V line card evaluation license expires without a Systole expiration notification, when a permanent license exists on the line card.
CSCtu15787	Restricted load balancing group (RLBG) assignment is not working with complex fiber nodes involving an upstream overlay.
CSCtu26597	The cable modem gets into a reject state, when using a cable modem interface mask classification.
CSCtu28044	After a PRE switchover, the cable modem database is corrupt on the active PRE.
CSCtu30636	CPU hog and traceback are seen when a fiber-node is modified on the Cisco CMTS causing a line card crash. This issue is observed when the cable downstream channel-id command is configured.
CSCtu49786	Cannot ping from a switch to a directly connected Cisco CMTS router GigE interface when a QoS policy is applied on the interface of the router.
CSCtu74059	When installing a line card, the line card switchover occurs to protect from the Ironbus fault.
CSCtw16264	No traffic is observed on the SPA 5-GigE interface.
CSCtw29777	The Cisco uBR-MC3GX60V line card on a cable modem with more than eight multicast sessions crashes.
CSCtw45540	The show cable load-balance group load command displays an incorrect value for the total modem count for legacy load balancing groups.
CSCtw45980	The 5x1GigE SPA interface does not forward dot1q L2VPN traffic after running the hw-module bay reload command.
CSCtw48088	The packet loss duration is more than 10 seconds after the online insertion-removal (OIR) of the active PRE.
CSCtw59911	After a PRE switchover, the modems disappear from PRE modem database, but are available line card modem database.
CSCtw61348	Silent reload of the secondary PRE is observed when editing the modulation profiles in quick succession.
CSCtw62654	The standby PRE crashes several times at the c10k_remote_pre_attention_interrupt.
CSCtw65650	Pinging narrowband cable modems fails after replacing a Cisco uBR10-MC5x20 line card configured with HCCP and protected by a Cisco UBR-MC20X20V line card with a Cisco UBR-MC20X20V line card.

Bug ID	Description
CSCtw70380	Traceback is observed after configuring the cable modem remote-query src-ip command.
CSCtw71277	After a route processor switchover, the show cable l2-vpn xcon dot1q ver command displays an incorrect CMIM value.
CSCtw79606	Downstream classifiers do not take effect after a line card switchover.
CSCtw80211	The docsQos3ServiceFlowChSetId of the upstream service flow is incorrect for upstream channel-bonded modems.
CSCtw80492	Forwarding processor (FP) classifier list for modem with active classifiers is not updated.
CSCtw82788	Traceback is observed at the p_unqueue on the protect Cisco uBR-MC3GX60V line card.
CSCtw89857	The show cable modem mac service-flow command indicates the "Requests" counter stuck at value 532, however, the value for the "Grants" is incrementing, resulting in disproportionate bandwidth requests and grants causing network monitor software to show unidentified traffic utilization
CSCtw91555	DOCSIS Set-Top Gateway (DSG) configuration on MAC domain is lost after a line card and PRE switchover.
CSCtw93256	During system bootup, packets are dropped due to input queue full with the following error message SNMP-3-INPUT_QFULL_ERR.
CSCtw93494	The Cisco uBR10-MC5X20 line card crashed after running the show interface cable key sid command.
CSCtw93504	Traceback is observed at cr10k_rp_ha_send_sync_pak during system bootup.
CSCtw93644	%SYS-2-MALLOCFAIL is observed on the line card during system bootup.
CSCtw95110	Active line card is moved to protect line card with the following message C10KEVENTMGR-4-IRONBUS_FAULT: PXF Nickel Ironbus Length Hi Non Zero 6/1, Restarting Ironbus
CSCtw97705	Standby PRE crashes when no cable bundle is present.
CSCtw98821	The Cisco uBR-MC3GX60V line card crashes at cr10k_clc_pre_poll after multiple line card and PRE failovers.
CSCtx01420	The Cisco CMTS does not forward the "Confirm" messages sent by the IPv6 CPE to the DHCP server.
CSCtx01526	The Cisco CMTS does not delete the TEK-REQ message has been in queue for longer than 10 seconds (default value).
CSCtx02628	Packets drop and there is low downstream throughput from wideband modems after a Cisco uBR-MC3GX60V line card failover.
CSCtx03129	The docsIf3DsChSetChList MIB object does not populate the bonding group channel set on the Cisco CMTS router.
CSCtx05188	The show inventory command shows empty "PID" field for SFP inserted into SPA card.
CSCtx05426	Throughput is not stable for modems that are using remote channels.
CSCtx07280	Crash observed on the Cisco uBR-MC3GX60V line card. This issue was observed when multicast QoS with encryption is configured.
CSCtx10320	PRE crashes when the primary downstream channel is removed.

Bug ID	Description
CSCtx11745	The route processor (RP) crashes and switches over to the standby PRE when cdxCmCpeEntry is queried via SNMP.
CSCtx11805	The output of the show running config command shows rf-adapt as enabled, even though the rf-adapt feature is disabled.
CSCtx12599	Cisco uBR10012 router displays the following message during reload: Error in license_ipc_delayed_init: Lic: End of delayed init: Platform IPC Failed to Init
CSCtx24404	The Downstream Unencrypted Traffic (DUT) information is changed after a line card switchover.
CSCtx25983	The DOCSIS 3.0 Modems are going to reject(c) state.
CSCtx30085	The Cisco uBR10-MC5X20 line card crashed with corrupted program counter.
CSCtx33532	CPU usage is high when some static-groups are preconfigured. This was observed when 5000 CPEs joined groups and during the response period for a general query.
CSCtx39816	The standby PRE cannot bootup after a switchover.
CSCtx64394	The narrowband cable modem total is incorrect in the show cable load-balance load command output.
CSCtx75906	The Cisco uBR-MC3GX60V line card crashes during switchover if two modems have 63 IPv6 CPEs.
CSCtx78552	Line card reports memory leak after upgrading to Cisco IOS Release 12.2(33)SCE5.
CSCtx81047	Dynamic Message Integrity Check (DMIC) performance is slow when a specific CM configuration file is used for each customer.
CSCtx81924	The cable multicast auth enable default-action deny max-sessions 0 command fails to stop multicast sessions.
CSCtx82632	Cable modems are unreachable when the cable modem reports a downstream service identifier (DSID) sequence error message.
CSCtx90159	The isis MIB is not supported on the Cisco uBR10012 router.
CSCtx92091	The Cisco uBR-MC3GX60V line card crashes after the dynamic modulation is changed from 64-QAM to 16-QAM.
CSCtx99507	Error message and traceback are observed while copying a config file with HCCP configuration to the running-config file.
CSCty06206	The docsL2vpnCmTable is lost after line card switchover and revertback.
CSCty08824	CMTS may not assign cable modems to a superset bonding group during upstream channel bonding transmit channel set (TCS) determination.
CSCty14040	The Cisco uBR10012 router loaded with Cisco UBR-MC20X20V line card running Cisco IOS Release 12.2(33)SCE4 reports full index table and modems are falling offline.
CSCty15526	Spurious memory access traceback is observed on the standby PRE.
CSCty22787	ISIS adjacency is not formed between multi-topology transition and single-topology peers. The "Local mode (unknown mode), remote mode (IP, IPv6)" message is displayed.
CSCty30365	CPU usage increases by more than 25% when IPv6 Lease Query feature is enabled on using IPv6 Source Verify.

Bug ID	Description
CSCty33499	Ping or DOCSIS 2.0 fragment packet fails due to AES encryption algorithm.
CSCty34512	DHCP fails during line card OIR when ARP with an IP not in the same subnet of the bundle interface of the CMTS is sent followed by DHCP with the MAC.
CSCty36693	Modular interface has incorrect maximum reserved bandwidth.
CSCty43288	DOCSIS 3.0 Set-Top Gateway (DSG) fails to obtain an IPv6 address.
CSCty43772	The show run all command executed to show the default IP provisioning mode on the cable interface, does not show the cable ip-init ipv4 output.
CSCty59967	Line card switchover is disabled when the system is in Route Processor Redundancy (RPR) mode.
CSCty65613	The Embedded Media Terminal Adapters (eMTAs) are unacceptable after some time.
CSCty71531	ISSU negotiation fails and displays the following error message: %ISSU-3-ERP_CLIENT: For context ID 1310720, Timer event and %IPC-3-ISSU_ERROR for smaller slot/subslot; And NOOPENAPI errmsg on larger slot/subslot;
CSCty71535	DOCSIS 3.0 modems move to reject(c) state.
CSCty78199	Cable modems having Cisco uBR-MC3GX60V line card have no license.
CSCty84672	The show cable modem domain-name and show cable modem domain-name cable x/y/z upstream us domain-name command show no output and the show host command displays duplicate DHCPv6 address.
CSCty90513	A cable modem with the same priority may be always moved in the DOCSIS load balancing process.
CSCty98781	The Cisco CMTS router may fail to collect service flow statistics from the remote line card after an RF impairment on the primary wideband bonding group.
CSCtz19605	The route processor might crash when running the show tech-support command without installing line cards on the Cisco CMTS router.
CSCtz24967	The Cisco CMTS router may crash when an upstream service flow is moved to another upstream bonding group using the Dynamic Bonding Change (DBC) feature.
CSCtz30053	A traceback error is observed on the standby route processor while removing the port channel.
CSCtz32044	The TOS-based classification does not work as expected on the Cisco CMTS router.
CSCtz35683	The cable ipv6 pd-route command does not allow configuration of a bundle subinterface.
CSCtz36422	An unwanted debug log is printed after a line card switchover with IPDR CPE enabled.
CSCtz50913	The IPv6 downstream traffic loss occurs due to ipv6_rp_glean diversions.
CSCtz51025	Layer 3 may drop on the Gigabit Ethernet interface when adding the Cisco uBR-MC3GX60V line card or Cisco Wideband SPA to the router.

Open Caveats—Cisco IOS Release 12.2(33)SCF2

Bug ID	Description
CSCsv14637	The cable power command returns an unexpected error.
CSCsy84798	QoS classification is not working at the multilink frame-relay (MFR) interface for IPv6 packets.
CSCsz60746	A static route configured through an unnumbered interface does not show up in Routing Information Base (RIB).
CSCtc62096	Dynamic multicast service flow and reserved bandwidth exist even after the removal of the multicast QoS (MQoS) configuration from the second bonding group.
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.
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.
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.
CSCtf74986	Memory usage increased from configured threshold levels causing a memory event trigger.
CSCtf88832	Traceback occurs when a cable modem is reset.
CSCtg47668	The show cr10k cable mac command does not display any output.
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.
CSCth79635	The following message is displayed: %SYS-3-INVMEMINT: Invalid memory action (free) at interrupt level.
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.
CSCti41752	The static-group physical interface does not support all the subinterface numbers unlike the IOS.
CSCti73720	The multicast service flow counters are incorrect after a PRE switchover when active guardian is different from the configured guardian.
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.
CSCtj25815	Multicast service flow counters fluctuate after a remote Guardian N+1 switchover.
CSCtj39203	The active PRE crashes on running the show cable multicast db command.
CSCtj69254	CPU HOG messages and traceback occur during a line card switchover.

Bug ID	Description
CSCtj87847	Phy static-mcast should be configured on fwd_intf for static-mcast TLV.
CSCtk15093	CPE, in one multicast VPN, incorrectly receives traffic destined to a CPE in another multicast VPN.
CSCtl06275	Some of the call home events are not triggered properly during SPA online insertion and removal (OIR).
CSCtl12572	An assert is triggered in "lb_cm_can_move()".
CSCtl22266	The DOCSIS general load balancing group information is lost from the mac domain cable modem service group after a PRE switchover occurs.
CSCtl46180	The show pxf cable multicast-echo command output for physical/logical static-mcast is empty after Cisco CMTS bootup.
CSCtl50170	During stress testing, CPUHOG is observed during Subscriber Account Management Interface Specification (SAMIS) operations which eventually causes PRE crash.
CSCtl53607	After a cable modem resets, the IPv6 CPE behind the modem is not removed from the configuration.
CSCtl54475	Cisco CMTS does not recognize TLV64.
CSCtl92608	The show cable dsd tunnel statistics command does not display service flow or drop counter information.
CSCtn64461	The CPE may not receive multicast traffic when the MQoS is configured.
CSCtn90850	Downstream reserved bandwidth is not shown correctly after a line card switchover resulting in CIR oversubscription.
CSCtn96470	The carrier-to-noise ratio (CNR) accuracy varies on the Cisco uBR-MC3GX60 line card.
CSCto02925	The Cisco CMTS cannot handle re-admission of admitted service identifiers (SID) after a CMTS reboot. The messages are observed after power cycling the modems.
CSCto47940	The downstream channel IDs are reordered while they are unique.
CSCto55350	The HCCP configuration fails when the no cable downstream-channel-id automatic command is issued followed by the cable downstream-channel-id automatic command.
CSCto67613	Debug counters show incorrect information.
CSCto76438	Downstream Channel Descriptor (DCD) messages are not sent out on cable downstream channels.
CSCto81183	The dynamic modulation is able to DG but not UG if the spectrum group is configured.
CSCto88136	Cable modems drop offline when the cable tftp-enforce and cable dynamic-secret mark commands are configured, and line card switchover is performed.
CSCtq07315	Memory leak is observed on Cisco CMTS when multicast QoS is configured on the cable interface line card, and online insertion and removal of line card is performed.
CSCtq37505	The downstream identifier for the static multicast spa interface changes on a line card or PRE switchover impacting traffic.
CSCtq43624	Continuous IPC send failure messages seen after a PRE switchover.

Bug ID	Description
CSCtq43664	Cable modems on a non-guardian line card go offline after a line card switchover.
CSCtq45452	CPE may not receive multicast packets after a line card HA.
CSCtq47712	The show cable filter verbose command shows incorrect counters.
CSCtq56204	The Standby PRE crashes when debug cr10k ha-msg command is enabled.
CSCtq58228	RCC ID mismatch is seen between the cable modem and the line card due to a Dynamic Bonding Change (DBC) failure.
CSCtq67631	Traceback is observed at "wb_stat_set_gur_idx_reg".
CSCtq79702	Explicit Tracking Database displays broadcast address as a source of multicast.
CSCtq80033	Physical Port Administrative State Down alarm failure observed on Standby PRE for Gigabit Ethernet line cards.
CSCtq83148	Additional downstream service identifiers and Explicit Tracking Database (ETDB) entries are seen on the standby PRE after a channel change.
CSCtq86879	The Cisco CMTS does not display IPv6 CPE data when scm ipv6 cpe command is issued.
CSCtr15141	Internet Group Management Protocol (IGMP) version3 multicast client may timeout when the maximum response time of the Cisco uBR10012 router is set to a value greater than 12 seconds.
CSCtr15894	The standby PRE resets with configuration mismatch error message when the cable igmp static-group subinterface was deleted prior to a PRE switchover.
CSCtr32001	After a line card switchover, the working line card interface configuration is not applied correctly to the protect line card causing the modems to go offline.
CSCtr44534	The docsQosParamSet MIB object or the docsIetfQosParamSetTable MIB object returns the next entry when the background synchronization is activated.
CSCtr57548	The show cable leasequery filter command does not display the correct lease query counter.
CSCtr61197	HCCP FAIL error message is displayed on the Cisco uBR10012 router after a PRE switchover.
CSCtr73136	The DEPI Path Redundancy (DPR) line card failover on the protect Cisco uBR-MC3GX60 line card is falsely triggered.
CSCtr75646	The cable bundle stopped processing IPv6 traffic.
CSCtr90943	The "max sustained rate" and "max rate" service flow settings are not enforced on the cable modems.
CSCtr94721	The Jib3 upstream driver details are missing from the register display.
CSCts02767	Multicast packets received by cable modems are not ordered.
CSCts04951	Encrypted traffic is blocked after line card switchover for DOCSIS3.0 CM CPE
CSCts18692	The Cisco CMTS assigns CPE MAC and IP address into wrong CM.
CSCts20435	CPE schema record contains IPv6 link-local address (LLA) address of the CPE.
CSCts23073	The no cable dsq tg command returns a wrong partial route calculation (PRC) value.
CSCts25440	Wideband bonding group attribute mask is checked for load-balancing.

Bug ID	Description
CSCts25806	The show depi session command output does not show Downstream External PHY Interface (DEPI) EQAM statistics.
CSCts27743	Downstream Packet Intercept stops working after PXF reload.
CSCts31485	IPv6 traffic stops between CPE and CMTS when CPE is running dual-stack.
CSCts34313	The order of the DOCSIS classifiers is inverse after a route processor or line card switchover.
CSCts34791	The host is visible after enabling verification of IP addresses for cable modems using the cable source-verify command.
CSCts35917	Cable modems are getting stuck in init(io).
CSCts39254	Executing microcode reload all command in Cisco uBR10012 router is causing Service Independent Intercept (SII) failure.
CSCts42106	EEPROM contents on route processor (RP) for Cisco uBR10-MC5X20 line card is incorrect.
CSCts42241	DOCSIS 3.0 cable modem is not seen on modem list.
CSCts48474	General Load Balance Group (GLBG) assignment fails for DOCSIS 3.0 cable modems that are coming back online after line card switchover and PRE switchover.
CSCts49786	The default priority for DOCSIS downstream classifier is incorrect.
CSCts54310	The IPv6 output for MAC PI is not working when access control list (ACL) or cable filter is enabled.
CSCts55186	A CPE cannot receive multicast traffic when group encryption is configured.
CSCts57957	The DEPI session configuration on the EQAM cannot be changed immediately after removing the DEPI configuration on the Cisco CMTS router.
CSCts61883	DHCPv6-related tracebacks are observed when debugging is enabled.
CSCts66074	DOCSIS 3.0 cable modems are not balanced on the Cisco CMTS router when one of the upstream channels is shut down in the MAC domain.
CSCts67443	Cable modem loses Layer 3 connectivity after line card switchover.
CSCts68020	The admin state of rf-channel may not be correct when Downstream External PHY Interface (DEPI) session is not established.
CSCts74849	Inconsistency in the DSG configuration is observed between the route processor and the line card.
CSCts85204	The IPv6 packets may match to wrong DOCSIS downstream classifiers on PRE2.
CSCts87338	For IPv6 traffic, if the input QoS packet marking is executed, the output QoS packet marking is skipped.
CSCts88376	Cable modem goes to reject(c) mode during a downstream channel bonding (DSCB) static service flow permit test.
CSCts95882	The IP input process is high on the route processor when sending multicast traffic.
CSCtt04589	After a PRE switchover, %SCHED-3-STILLWATCHING traceback is seen on the active PRE.
CSCtt15429	A line card switchover occurs during an online insertion-removal (OIR) of an active PRE, and the RF switch incorrectly switches over to the protect line card.

Bug ID	Description
CSCtt24798	Traceback is observed when removing a tunnel interface with policy-based routing (PBR) configured.
CSCtt29620	The SAS feature causes the DHCPv6 Lease Query to fail if two-link addresses are configured.
CSCtt30287	An IPC error occurred during a fully loaded Cisco CMTS router reboot.
CSCtt40993	Topology records may not be created, if you configure an IPDR session with topology schema and logical upstream channels.
CSCtt70223	There is inconsistent Cisco uBR-MC3GX60V controller RF-channel configuration between the active and standby route processors.
CSCtt99712	The internal router is getting a private IP address instead of a public IP address.
CSCtu02253	Dynamic channel change (DCC) failure is observed on high upstream usage.
CSCtu04096	Sometimes, IPv6 traffic is matched to IPv4 class map for the TCP/UDP port range.
CSCtu04125	Modular QoS CLI (MQC) does not work for IPv6 traffic when you disable PXF forwarding.
CSCtu06022	The SNMP ifOutOctets counter burst occurs during microcode reload.
CSCtu06071	IPC traceback is observed when you reset Cisco SIP-600 and Cisco Wideband SPA for multiple times.
CSCtu15787	Restricted load balancing group (RLBG) assignment is not working with complex fiber nodes involving an upstream overlay.
CSCtu23677	DEPI session generated via "snmp set" is not reflected on the standby Cisco uBR-MC3GX60V line card after a line card switchover.
CSCtu26597	The cable modem gets into a reject state, when using a cable modem interface mask classification.
CSCtu26682	The MCAST_IPC_HEADER_ADD_FAILURE and traceback at cmts_mcast_return_ctrlpkt_dsid_info is observed after performing a PRE switchover.
CSCtu28044	After a PRE switchover, the cable modem database is corrupt on the active PRE.
CSCtu36182	Duplicate RCC IDs are seen on certain MAC domains.
CSCtu37762	The route processor may fail when repeating the no form of the card command.
CSCtu41290	The forwarding wideband interface reported in the update message log of dynamic multicast is incorrect.
CSCtu43882	Different upstream codeword counter values are reported for the same cable modem.
CSCtu49786	Cannot ping from a switch to a directly connected Cisco CMTS router GigE interface when a QoS policy is applied on the interface of the router.
CSCtu74059	When installing a line card, the line card switchover occurs to protect from the Ironbus fault.
CSCtv12661	CPUHOG and related traceback are observed even after clearing the respective counters.
CSCtw16264	No traffic is observed on the SPA 5-GigE interface.
CSCtw44697	Spurious tracebacks are observed after a SPA online insertion and removal (OIR).

Bug ID	Description
CSCtw45540	The show cable load-balance group load command displays an incorrect value for the total modem count for legacy load balancing groups.
CSCtw45980	The 5x1GigE SPA interface does not forward dot1q L2VPN traffic after running the hw-module bay reload command.
CSCtw47052	The hw-module pre shutdown command does not work after a CMTS reload.
CSCtw48088	The packet loss duration is more than 10 seconds after the online insertion-removal (OIR) of the active PRE.
CSCtw49597	Some keywords of the debug ipv6 dhcp command are not displayed.
CSCtw50393	The Cisco uBR10-MC5X20 line card crashed.
CSCtw56127	The Cisco interface line card crashed on the <code>cmnts_flap_list_cm_add_event</code> process.
CSCtw59911	After a PRE switchover, the modems disappear from PRE modem database, but are available line card modem database.
CSCtw60150	All line cards crash after coredump is configured and the crash is tested on the standby PRE.
CSCtw61348	Silent reload of the secondary PRE is observed when editing the modulation profiles in quick succession.
CSCtw62654	The standby PRE crashes several times at the <code>c10k_remote_pre_attention_interrupt</code> .
CSCtw65343	The Cisco CMTS does not send the lease query to Cisco Network Registrar (CNR) when the <code>source-verify dhcp</code> is enabled.
CSCtw66583	Invalid unicast IP addresses are allowed to be configured as source IP in the DOCSIS Set-Top Gateway (DSG) classifier (<code>cfr</code>) configuration.
CSCtw66769	The Cisco uBR-MC3GX60V line card IPC timeout causes a line card switchover or a line card reload.
CSCtw67106	The show cable mac-domain rcc command displays an invalid RCC template.
CSCtw68746	The Cisco CMTS failed to create a pxf queue.
CSCtw70380	Traceback is observed after configuring the cable modem remote-query src-ip command.
CSCtw71277	After a route processor switchover, the show cable l2-vpn xcon dot1q ver command displays an incorrect CMIM value.
CSCtw77179	Multiple IPv6 static Global Unicast Address (GUA) are observed on the CPE with the same MAC address.
CSCtw79606	Downstream classifiers do not take effect after a line card switchover.
CSCtw79787	The following traceback is observed when the standby PRE takes over: <pre>%SCHED-7-WATCH: Attempt to enqueue uninitialized watched queue (address 0). -Process= "CR10K RP HA", ipl= 0, pid= 72 -Traceback= 40AF6614 40C3F180 404243F0 40424460 401FD4A4 400EEC3C 400EEE1C</pre>
CSCtw80211	The <code>docsQos3ServiceFlowChSetId</code> of the upstream service flow is incorrect for upstream channel-bonded modems.
CSCtw80492	Forwarding processor (FP) classifier list for modem with active classifiers is not updated.

Bug ID	Description
CSCtw82788	Traceback is observed at the p_unqueue on the protect Cisco uBR-MC3GX60V line card.
CSCtw89857	The show cable modem mac service-flow command indicates the "Requests" counter stuck at value 532, however, the value for the "Grants" is incrementing, resulting in: <ul style="list-style-type: none"> disproportionate bandwidth requests and grants causing network monitor software to show unidentified traffic utilization
CSCtw89888	Cable modems go in init(o) and (io) state after the CMTS is reloaded, or when the frequency is changed on the controller.
CSCtw91555	DOCSIS Set-Top Gateway (DSG) configuration on MAC domain is lost after a line card and PRE switchover.
CSCtw91856	Invalid DSG classifier "src-ip" and "src-prefix-len" can be configured through SNMP when the classifier is disabled.
CSCtw93256	During system bootup, packets are dropped due to input queue full with the following error message: SNMP-3-INPUT_QFULL_ERR:
CSCtw93402	Traceback is observed at PXF_NICKEL-3-STT_PORT_ERROR during system bootup.
CSCtw93494	The Cisco uBR10-MC5X20 line card crashed after running the show interface cable key sid command.
CSCtw93504	Traceback is observed at cr10k_rp_ha_send_sync_pak during system bootup.
CSCtw93644	%SYS-2-MALLOCFAIL is observed on the line card during system bootup.
CSCtw95110	Active line card is moved to protect line card with the following message: C10KEVENTMGR-4-IRONBUS_FAULT: PXF Nickel Ironbus Length Hi Non Zero 6/1, Restarting Ironbus
CSCtw95683	Traceback is observed at cr10k_message_send_rpc_blocked after a line card and PRE switchover.
CSCtw97705	Standby PRE crashes when no cable bundle is present.
CSCtw98821	The Cisco uBR-MC3GX60V line card crashes at cr10k_clc_pre_poll after multiple line card and PRE failovers.
CSCtx01526	The Cisco CMTS does not delete the TEK-REQ message has been in queue for longer than 10 seconds (default value).
CSCtx02628	Packets drop and there is low downstream throughput from wideband modems after a Cisco uBR-MC3GX60V line card failover.
CSCtx08280	DOCSIS 2.0 and DOCSIS 3.0 modems are not Layer 3 pingable after a Cisco uBR-MC3GX60V line card switchover.
CSCtx10124	Service flow ID is missed for the tunnel whose classifier has both destination and source IP out of source-specific multicast (SSM) range of IP multicast addresses.
CSCtx11745	The route processor (RP) crashes and switches over to the standby PRE when cdxCmCpeEntry is queried via SNMP.
CSCtx11805	The output of the show running config command shows rf-adapt as enabled, even though the rf-adapt feature is disabled.

Resolved Caveats—Cisco IOS Release 12.2(33)SCF2

Bug ID	Description
CSCsk69275	The IGMP query interval is changed when running with IGMPv2.
CSCtf71673	A Cisco router shows a PRE crash due to memory corruption with block overrun.
CSCtl11293	Multicast traffic with MQoS applied may not adhere to the MQoS configuration.
CSCtl90291	The Cisco uBR-MC5x20H line card crashed after an upstream service flow was deleted when the bandwidth request was received for the same service flow.
CSCtl97410	All line cards crash when the reload of the chassis is performed.
CSCto85792	Configuring 16-channel bonding groups causes multiple line card crashes when 16-channel modems attempt to register with the M-CMTS.
CSCto97035	The cable filter groups do not work correctly for traffic handled by the Route Processor.
CSCtq53429	Traffic rate on the remote bonding group service flows is incorrect.
CSCtq55998	The route processor CPU is observed to be 99% and the CMTS multicast Q process is observed to be 90% when configuring nearly 100 subinterfaces with a VRF.
CSCtq56713	During service flow creation when the CIR utilization for a WB interface is close to its maximum limit, the following error message is displayed: UBR10K-3-QALLOCFAIL: Failure to allocate QoS queue for service flow
CSCtq70677	Additional dummy ETDB entries are listed for the static-multicast after VDOC configuration on the standby PRE.
CSCtq71852	After transferring a license from one line card to another line card, show license detail and show license all commands do not display accurate output.
CSCtq80874	The CMTS reports two DHCPv6 IA_NA addresses assigned as a router instead of one router.
CSCtq87508	Dynamic Bonding Change (DBC) failure occurs even though a primary downstream exists in the RCC template.
CSCtq96786	The cable modem is assigned a different load balancing group after a line card switchover.
CSCtr16525	The standby PRE reloads automatically due to spectrum-group configuration mismatch.
CSCtr28857	A vulnerability in the Multicast Source Discovery Protocol (MSDP) implementation of Cisco IOS Software and Cisco IOS XE Software could allow a remote, unauthenticated attacker to cause a reload of an affected device. Repeated attempts to exploit this vulnerability could result in a sustained denial of service (DoS) condition. Cisco has released free software updates that address this vulnerability. Workarounds that mitigate this vulnerability are available. This advisory is available at the following link: http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20120328-msdp

Bug ID	Description
CSCtr44902	Cable modems are assigned incorrect Restricted Load Balancing Group (RLBG) when not assigned to the fiber node configuration.
CSCtr57476	The Cisco uBR10012 router crashes due to memory corruption when the show cable memory command is issued.
CSCtr73677	Performance Routing Engine (PRE) shows high CPU usage when modular and wideband interfaces are shutdown.
CSCtr82685	Duplicate IPv6 link local addresses are learnt as cable modems or CPE entries. This causes the show commands to display incorrect entries.
CSCtr91106	<p>A vulnerability exists in the Cisco IOS Software that may allow a remote application or device to exceed its authorization level when authentication, authorization, and accounting (AAA) authorization is used. This vulnerability requires that the HTTP or HTTPS server is enabled on the Cisco IOS device.</p> <p>Products that are not running Cisco IOS Software are not vulnerable.</p> <p>Cisco has released free software updates that address these vulnerabilities.</p> <p>The HTTP server may be disabled as a workaround for the vulnerability described in this advisory.</p> <p>This advisory is available at the following link: http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20120328-pai</p>
CSCtr92542	The show interface upstream causes a crash on Cisco uBR-MC3GX60 line card.
CSCtr96070	Internet Protocol Detail Record (IPDR) processing stops due to an unknown reason.
CSCtr97838	Cisco CMTS is behaving in an inconsistent manner when ciaddr is set to 0.0.0.0
CSCts12466	SAMIS is unable to collect all IPv4 address of CPEs under the cable modems, when dual stack CPEs exist.
CSCts12799	The route processor crashes after configuring `cable metering filesystem.'
CSCts14620	Garbage multicast entries on standby PRE.
CSCts15892	The CM on the modular interface may go offline during In-Service Software Upgrade (ISSU).
CSCts17208	Replacement of the Cisco Wideband SPA causes the line card to crash and the PRE to become unresponsive.
CSCts17247	The Cisco uBR10012 router is unable to communicate with external IP address via Ethernet interface on HHGE.
CSCts18030	DOCSIS Set-Top Gateway (DSG) classifier group address check is incorrect.
CSCts19608	Modems on the same cable interfaces or mac-domains do not come online on wideband or narrowband interfaces. The RCC-IDs are not displayed in the show cable mac-domain output.
CSCts23681	Wrong Packet Size Distribution in histogram for Netflow.
CSCts28796	DOCSIS Set-Top Gateway (DSG) cannot be configured on the cable interface.
CSCts30602	The no ipdr session id or no ipdr collector name commands reloads the standby PRE

Bug ID	Description
CSCts33841	%ALIGN-3-CORRECT and %ALIGN-3-TRACE error message and traceback occurs during a line card crash.
CSCts36709	Wrong load balance group is created automatically.
CSCts38429	The Cisco IOS Software Internet Key Exchange (IKE) feature contains a denial of service (DoS) vulnerability. Cisco has released free software updates that address this vulnerability. This advisory is available at the following link: http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20120328-ike
CSCts38683	Cisco uBR-MC3GX60 line card loses rf-channel packets.
CSCts42512	The SNMP object ccacUsBEntry has a slow response with upstream bonding groups.
CSCts43778	With multicast DSIDs, a single seq-out-of-range message may impact many cable modems and result in packet drops.
CSCts45273	Continuos display of traceback message: %SYS-2-BADSHARE.
CSCts55072	Wideband cable modems go offline on a Cisco uBR10-MC20X20 line card.
CSCts58257	When a layer 3 IPv6 configuration on the bundle interface changes, the IPv4 cable modems also go offline.
CSCts63955	The output of the show cable modem wideband and show cable mac-domain cable rcc is not matching the receive channel configuration (RCC) ID and MAC Domain Downstream Service Group ID (MD-DS-SG) in an uBR10012 router running Cisco IOS Release 12.2(33)SCF.
CSCts84076	Upstream channel bonded modems (USCB) do not always select the most appropriate multi-channel bonding group as the Transmit Channel Set (TCS).
CSCts96422	%C4K_HWPORTMAN-4-BLOCKEDTXQUEUE error occur on the GigE link between RF Gateway 10 and the Cisco uBR10012.
CSCtt07648	Configuration details under the DOCSIS load balance group are displayed without DOCSIS group title.
CSCtt07649	The CM steering feature does not work if there is even one DOCSIS 3.0 modem with RF issues in the plant.
CSCtt11926	Dynamic Service flows for PCMM voice fail due to "0" length TLV sent by the Cisco CMTS.
CSCtt33821	The Cisco UBR-MC20X20 line card crashes to ROMMON prompt when the format bootflash command is executed on the line card.
CSCtt34778	Defaults values for the switchover pxf restart are not displayed in the output for the show run all command.
CSCtt41533	Service flow attribute masks with service class names are not considered when assigning receive channel configurations (RCCs).
CSCtt41551	The NMS application generates false alarms when MIB objects are created for pre-provisioned cards that are not physically present in the chassis.
CSCtt43134	"Spurious Memory access" traceback is sometimes observed after running the test cable dbc command.

Bug ID	Description
CSCtt46542	In a redundant SSO failover setup, the active PRE4 may hang due to Cisco uBR10-MC5X20 line card crash.
CSCtt62387	Packet counters do not match with MPEG frames when the ccwbrRFChannelMpegPkts MIB is used on the Cisco uBR-MC3GX60V line card.
CSCtt70139	The following error message occurs on Cisco uBR-MC3GX60V line card: SLOT 7/1: %SANTANA-3-DS_JIB_ERROR: DS JIB Santana FPGA Error detected and corrected
CSCtt96252	When pinging from the Cisco CMTS to the next hop Provider Edge (PE) router in Multiprotocol Label Switching (MPLS), the label is not correctly imposed when using Differential Services Code Point (DSCP) value of 0, 1, or 2.
CSCtu00845	High CPU causes DEPI session flaps resulting in false detection of failure and N+1 line card failover.
CSCtu01325	Upstream frequency overlapping is observed with spectrum group configuration.
CSCtu04464	The SIP-600 card fails to get interprocess communication (IPC) information from the route processor (RP) after performing ISSU MDR several times.
CSCtu05703	Standby PRE sometimes cannot take over from the Active PRE through send break.
CSCtu05781	The Cisco CMTS crashes during voice calls.
CSCtu16849	All cable line cards fail after a PRE failure, if only one PRE is detected.
CSCtu26804	DHCPv6 failure is observed for the CPE connected to the first subbundle interface, if the DHCPv6 server is different for the subbundle interfaces.
CSCtu29682	The SNMP set operation on the docsLoadBalChnPairsRowStatus object fails.
CSCtu32391	The IPC of SPA interface processors (SIPs) and DTCC cards are lost with IGMP leave or join requests.
CSCtu42671	PRE crashed with illegal access to a low address.
CSCtu43595	When a cable modem is registered with DOCSIS 1.0 configuration file, the downstream MaxSusRate is changed unexpectedly by the enforced QoS profile.
CSCtu45811	For an IPv6 provisioned modem, the IPv6 address is offered by CNR server. However, object docsIfCmtsCmStatusInetAddress displays the linklocal address for the modem instead of the address assigned by CNR server.
CSCtw18354	The show inventory command does not display the right card type for each either PRE2 (PCMCIA card) or PRE4 (compact flash card).
CSCtw34735	The ccsCmFlapTable does not display modems that use the modular-cable primary downstream channels; however, the show cable modem flap command displays the cable modems that use the modular-cable primary downstream channels.
CSCtw56705	Duplicate RCCs are observed on the route processor (RP) when executing the show cable mac-domain cable x/y/z rcc rp command on a MAC domain.
CSCtw59788	The Cisco uBR-MC3GX60V line card does not display information about RCC-Template Wideband interface on the PRE.
CSCtw60629	The Cisco CMTS overwrites vendor-specific information when it acts as a DHCPv6 relay.
CSCtw97051	The no card command fails for the Cisco uBR10-MC5X20H/U line cards.

Open Caveats—Cisco IOS Release 12.2(33)SCF1

Bug ID	Description
CSCsy84798	QoS classification is not working at the multilink frame-relay (MFR) interface for IPv6 packets.
CSCtc62096	Dynamic multicast service flow and reserved bandwidth exist even after the removal of the multicast QoS (MQoS) configuration from the second bonding group.
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.
CSCtf74986	Memory usage increased from configured threshold levels causing a memory event trigger.
CSCtg47668	The show cr10k cable mac command does not display any output.
CSCth96329	The cable modems in Subscriber Traffic Management (STM) is not getting out of penalty after the PRE or line card switchover.
CSCti12590	Querying “getnext” with ipCidrRouteDest returns an OID that is not lexicographically larger than the queried OID.
CSCti28695	The ipv6ScopeZoneIndexTable shows null interface.
CSCti41752	The static-group physical interface does not support all the subinterface numbers unlike the IOS.
CSCti77209	CPUHOG messages may be seen when SNMP polling is performed with load balancing enabled.
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.
CSCtj17350	Traceback occurs when show depi tunnel command is configured without DEPI Control Plane.
CSCtj43383	DOCSIS load balance CM list is lost upon line card switchover and revertback.
CSCtj69254	CPU HOG messages and traceback occur during a line card switchover.
CSCtj87847	Phy static-mcast should be configured on fwd_intf for static-mcast TLV.
CSCtk15093	CPE, in one multicast VPN, incorrectly receives traffic destined to a CPE in another multicast VPN.
CSCtl06275	Some of the call home events are not triggered properly during SPA online insertion and removal (OIR).
CSCtl11293	Multicast traffic with MQoS applied may not adhere to the MQoS configuration.
CSCtl22266	The DOCSIS general load balancing group information is lost from the mac domain cable modem service group after a PRE switchover occurs.
CSCtl46180	The show pxf cable multicast-echo command output for physical/logical static-mcast is empty after Cisco CMTS bootup.
CSCtl50170	During stress testing, CPUHOG is observed during Subscriber Account Management Interface Specification (SAMIS) operations which eventually causes PRE crash.

Bug ID	Description
CSCtI53607	After a cable modem resets, the IPv6 CPE behind the modem is not removed from the configuration.
CSCtI54475	Cisco CMTS does not recognize TLV64.
CSCtI90291	The Cisco uBR-MC5x20H line card crashed after an upstream service flow was deleted when the bandwidth request was received for the same service flow.
CSCtI92608	The show cable dsq tunnel statistics command does not display service flow or drop counter information.
CSCtI97410	All line cards crash when the reload of the chassis is performed.
CSCtn64257	The following error message is seen indicating that the DEPI session could not be found for deletion: 00:03:17: %RFGW-4-LINECARD_ERRMSG_WARNING: SLOT 3:can not find DEPI session 1073742199 (0x40000177) for deletion
CSCtn64461	The CPE may not receive multicast traffic when the MQoS is configured.
CSCtn90850	Downstream reserved bandwidth is not shown correctly after a line card switchover resulting in CIR oversubscription.
CSCtn96470	The carrier-to-noise ratio (CNR) accuracy varies on the Cisco uBR-MC3GX60 line card.
CSCto02925	The Cisco CMTS cannot handle re-admission of admitted service identifiers (SID) after a CMTS reboot. The messages are observed after power cycling the modems.
CSCto29526	The show cable modem command fails to collect service flow statistics from remote line card (LC) when wideband interface is shutdown.
CSCto47940	The downstream channel IDs are reordered while they are unique.
CSCto55350	The HCCP configuration fails when the no cable downstream-channel-id automatic command is issued followed by the cable downstream-channel-id automatic command.
CSCto66674	Traceback was observed on the Cisco CMTS after large number of wideband connections were configured.
CSCto67613	Debug counters show incorrect information.
CSCto76438	Downstream Channel Descriptor (DCD) messages are not sent out on cable downstream channels.
CSCto79524	High CPU usage was observed when working with the cpwVcMplsNonTeMappingEntry SNMP tables.
CSCto81183	The dynamic modulation is able to DG but not UG if the spectrum group is configured.
CSCto88136	Cable modems drop offline when the cable tftp-enforce and cable dynamic-secret mark commands are configured, and line card switchover is performed.
CSCto97035	The cable filter groups do not work correctly for traffic handled by the Route Processor.
CSCtq07315	Memory leak is observed on Cisco CMTS when multicast QoS is configured on the cable interface line card, and online insertion and removal of line card is performed.

Bug ID	Description
CSCtq37505	The downstream identifier for the static multicast spa interface changes on a line card or PRE switchover impacting traffic.
CSCtq43624	Continuous IPC send failure messages seen after a PRE switchover.
CSCtq43664	Cable modems on a non-guardian line card go offline after a line card switchover.
CSCtq45452	CPE may not receive multicast packets after a line card HA.
CSCtq47448	High upstream utilization is observed on a Cisco uBR-MC20X20V line card after fail over to the protect line card.
CSCtq47712	The show cable filter verbose command shows incorrect counters.
CSCtq55998	The route processor CPU is observed to be 99% and the CMTS multicast Q process is observed to be 90% when configuring nearly 100 subinterfaces with a VRF.
CSCtq56204	The Standby PRE crashes when debug cr10k ha-msg command is enabled.
CSCtq56713	During service flow creation when the CIR utilization for a WB interface is close to its maximum limit, the following error message is displayed: UBR10K-3-QALLOCFAIL: Failure to allocate QoS queue for service flow
CSCtq58228	RCC ID mismatch is seen between the cable modem and the line card due to a Dynamic Bonding Change (DBC) failure.
CSCtq70677	Additional dummy ETDB entries are listed for the static-multicast after VDOC configuration on the standby PRE.
CSCtq79702	Explicit Tracking Database displays broadcast address as a source of multicast.
CSCtq80033	Physical Port Administrative State Down alarm failure observed on Standby PRE for Gigabit Ethernet line cards.
CSCtq80874	The CMTS reports two DHCPv6 IA_NA addresses assigned as a router instead of one router.
CSCtq83148	Additional downstream service identifiers and Explicit Tracking Database (ETDB) entries are seen on the standby PRE after a channel change.
CSCtq86879	The Cisco CMTS does not display IPv6 CPE data when scm ipv6 cpe command is issued.
CSCtq87508	Dynamic Bonding Change (DBC) failure occurs even though a primary downstream exists in the RCC template.
CSCtq96786	The cable modem is assigned a different load balancing group after a line card switchover.
CSCtr15141	Internet Group Management Protocol (IGMP) version3 multicast client may timeout when the maximum response time of the Cisco uBR10012 router is set to a value greater than 12 seconds.
CSCtr15894	The standby PRE resets with configuration mismatch error message when the cable igmp static-group subinterface was deleted prior to a PRE switchover.
CSCtr16525	The standby PRE reloads automatically due to spectrum-group configuration mismatch.
CSCtr32001	After a line card switchover, the working line card interface configuration is not applied correctly to the protect line card causing the modems to go offline.

Bug ID	Description
CSCtr44534	The docsQosParamSet MIB object or the docsIetfQosParamSetTable MIB object returns the next entry when the background synchronization is activated.
CSCtr44902	Cable modems are assigned incorrect Restricted Load Balancing Group (RLBG) when not assigned to the fiber node configuration.
CSCtr57476	The Cisco uBR10012 router crashes due to memory corruption when the show cable memory command is issued.
CSCtr57548	The show cable leasequery filter command does not display the correct lease query counter.
CSCtr58721	The dfo-retry-count is not working for narrowband (NB) cable modem.
CSCtr61197	HCCP FAIL error message is displayed on the Cisco uBR10012 router after a PRE switchover.
CSCtr63868	The encrypted multicast traffic for DOCSIS 3.0 compliant cable modems is blocked after a line card switchover.
CSCtr73136	The DEPI Path Redundancy (DPR) line card failover on the protect Cisco uBR-MC3GX60 line card is falsely triggered.
CSCtr73677	Performance Routing Engine (PRE) shows high CPU usage when modular and wideband interfaces are shutdown.
CSCtr75646	The cable bundle stopped processing IPv6 traffic.
CSCtr82685	Duplicate IPv6 link local addresses are learnt as cable modems or CPE entries. This causes the show commands to display incorrect entries.
CSCtr83400	The working line card shows memory allocation error after a protect line card failure causing the wideband modems to drop offline.
CSCtr90943	The “max sustained rate” and “max rate” service flow settings are not enforced on the cable modems.
CSCtr92542	The show interface upstream causes a crash on Cisco uBR-MC3GX60 line card.
CSCtr94721	The Jib3 upstream driver details are missing from the register display.
CSCtr96070	Internet Protocol Detail Record (IPDR) processing stops due to an unknown reason.
CSCtr97838	Cisco CMTS is behaving in an inconsistent manner when ciaddr is set to 0.0.0.0
CSCts02767	Multicast packets received by cable modems are not ordered.
CSCts04951	Encrypted traffic is blocked after line card switchover for DOCSIS3.0 CM CPE
CSCts12466	SAMIS is unable to collect all IPv4 address of CPEs under the cable modems, when dual stack CPEs exist.
CSCts12799	The route processor crashes after configuring ‘cable metering filesystem’.
CSCts14620	Garbage multicast entries on standby PRE.
CSCts15707	Cable modems on the protect line card can be reached on DOCSIS but not reachable with the IP address.
CSCts15892	The CM on the modular interface may go offline during In-Service Software Upgrade (ISSU).
CSCts17208	Replacement of the Cisco Wideband SPA causes the line card to crash and the PRE to become unresponsive.

Bug ID	Description
CSCts17247	The Cisco uBR10012 router is unable to communicate with external IP address via Ethernet interface on HHGE.
CSCts18030	DOCSIS Set-Top Gateway (DSG) classifier group address check is incorrect.
CSCts18692	The Cisco CMTS assigns CPE MAC and IP address into wrong CM.
CSCts18821	Standby PRE crashes due to cr10k HA checkpoint entity process.
CSCts19608	Modems on the same cable interfaces or mac-domains do not come online on wideband or narrowband interfaces. The RCC-IDs are not displayed in the show cable mac-domain output.
CSCts20435	CPE schema record contains IPv6 link-local address (LLA) address of the CPE.
CSCts23073	The no cable dsd tg command returns a wrong partial route calculation (PRC) value.
CSCts23681	Wrong Packet Size Distribution in histogram for Netflow.
CSCts25440	Wideband bonding group attribute mask is checked for load-balancing.
CSCts27080	PRE crashes after removing "BGP router" process.
CSCts27743	Downstream Packet Intercept stops working after PXF reload.
CSCts28796	DOCSIS Set-Top Gateway (DSG) cannot be configured on the cable interface.
CSCts30602	The no ipdr session id or no ipdr collector name commands reloads the standby PRE
CSCts31485	IPv6 traffic stops between CPE and CMTS when CPE is running dual-stack.
CSCts33841	%ALIGN-3-CORRECT and %ALIGN-3-TRACE error message and traceback occurs during a line card crash.
CSCts35917	Cable modems are getting stuck in init(io).
CSCts36709	Wrong load balance group is created automatically.
CSCts38683	Cisco uBR-MC3GX60 line card loses rf-channel packets.
CSCts39254	Executing microcode reload all command in Cisco uBR10012 router is causing Service Independent Intercept (SII) failure.
CSCts39452	The active PRE is not responding and the stateful switchover (SSO) failover is not working.
CSCts42106	EEPROM contents on route processor (RP) for Cisco uBR10-MC5X20 line card is incorrect.
CSCts42200	The IPv6 downstream traffic is matched to the wrong classifier.
CSCts42241	DOCSIS 3.0 cable modem is not seen on modem list.
CSCts42512	The SNMP object ccacUsBEntry has a slow response with upstream bonding groups.
CSCts44077	The clear cable modem all delete command is not clearing all the counters of wideband upstream.
CSCts45273	Continuos display of traceback message: %SYS-2-BADSHARE.
CSCts48474	General Load Balance Group (GLBG) assignment fails for DOCSIS 3.0 cable modems that are coming back online after line card switchover and PRE switchover.

Bug ID	Description
CSCts49749	The following error messages are observed after deleting cable modems: %UBR7200-4-LB_CM_LIST_MISMATCH_ENTRY
CSCts49786	The default priority for DOCSIS downstream classifier is incorrect.
CSCts54310	The IPv6 output for MAC PI is not working when access control list (ACL) or cable filter is enabled.
CSCts63955	The output of the show cable modem wideband and show cable mac-domain cable rcc is not matching the receive channel configuration (RCC) ID and MAC Domain Downstream Service Group ID (MD-DS-SG) in an uBR10012 router running Cisco IOS Release 12.2(33)SCF.
CSCts67443	Cable modem loses Layer 3 connectivity after line card switchover.
CSCts68020	The admin state of rf-channel may not be correct when Downstream External PHY Interface (DEPI) session is not established.
CSCts72177	DBC operation triggered by load balance fails when rcc-template is configured.
CSCts76005	The following error message is observed on Cisco CMTS: SYS-2-BADSHARE: Bad refcount in datagram_done

Resolved Caveats—Cisco IOS Release 12.2(33)SCF1

Bug ID	Description
CSCsi02752	An IOS device crashes when traffic is routed under certain conditions.
CSCsi18054	A local user created with a one-time keyword is removed after an unsuccessful login attempt.
CSCso52837	The copy run disk0:test command returns a parsing error.
CSCsq78343	Netflow enabled catalyst 6500 switch reloads due to a bus error.
CSCtg48785	The show x25 hunt-group command generates the following error: %DATACORRUPTION-1-DATAINCONSISTENCY: copy error
CSCtg94250	Removal of a virtual routing and forwarding (VRF) address family causes a Border Gateway Protocol (BGP) crash.
CSCth87458	Memory leak observed in the SSH (Secure Shell) process (ssh_buffer_get_string).
CSCti96353	It is observed that EPC-3000 modems that use SPA DS as primary may be assigned with AES keys instead of 56DES.
CSCtk54576	PRE crashes when QoS enforce-rule is unconfigured.
CSCtk65147	DOCSIS 3.0 general load balancing group (GLBG) disappears after line card revert switchover.
CSCtl89525	The TCS of cable modem remains unchanged when Dynamic Bonding Change (DBC) moves the cable modem to a new primary downstream.
CSCtn08001	Cable modems that are online but have dropped out of the DS load-balancing group over time are not correctly counted in that group when the show cable modem summery total command is executed.

Bug ID	Description
CSCtn30971	Downstreams from other MAC domains are wrongly included in the DOCSIS 3.0 General Load Balancing Group (GLBG).
CSCtn31333	High CPU usage is observed on the Cisco CMTS router used for L2TP network server (LNS) due to the Net Background process.
CSCtn78957	High CPU usage is observed during IPv6 neighbor resolution.
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.
CSCtn95480	The show facility-alarm status command output remains unchanged even after clearing the facility alarms.
CSCto01086	The SPA multicast service-flow statistics is incorrect.
CSCto31597	The SPA keys do not synchronize with the local keys communicated to the CM resulting in L3 connectivity loss and additional TEK requests.
CSCto43724	The status of facility alarm and LED is partly synchronized to standby PRE thus the output is inconsistent.
CSCto55495	The restricted load balancing group (RLBG) ID for a narrowband cable modem changes to the previous RLBG ID after a line card switchover.
CSCto55828	The static multicast configuration is not present and the CPE cannot receive multicast traffic after the is PRE configured with high availability and static multicast (TLV64).
CSCto68265	The DPC3925 and 3825 cable modems are not parsed, and the cable helper address is ignored for these devices.
CSCto86829	Cable modems may fail to come online when provisioned QoS parameters and active QoS parameters are not same.
CSCto87640	Memory leak may be observed on the Cisco uBR-MC5X20U line card.
CSCto87882	Standby PRE reload is observed when Transport Stream Identifier (TSID) is un-configured for a DEPI tunnel, under the modular-controller configuration.
CSCtq06765	Policy based routing (PBR), applied on bundle interface, does not work when router is reloaded.
CSCtq09066	Wideband cable modems could not be located after multiple line card or PRE switchovers are performed.
CSCtq13394	The cdxCmToCpeEntry MIB returns the link-local address (LLA) for the CPE IPv6 address.
CSCtq21291	MIR does not work for aggregate MQoS if service class with max burst rate is configured.
CSCtq21532	Incomplete MIB information is received for the offline cable modems when MIB objects docsIfCmtsCmStatusEntry and docsIf3CmtsCmRegStatusEntry are queried.
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.

Bug ID	Description
CSCtq28643	Multicast address shows up wrongly as source address instead of unicast address.
CSCtq29580	The clear counters cable command clears the cable modem uptime value (Total Time Online), which is not an expected behavior.
CSCtq34214	IPv6 load balancing on Cisco CMTS does not function properly.
CSCtq35285	The change-trigger value does not reach the CMTS when the cable modem is in partial mode and voice flows are forwarded over the wideband interface.
CSCtq36837	The QoS group option in the modular QoS does not work when used in classmap or policymap.
CSCtq43885	The Service Flow Admission Control (SFAC) classification on the PacketCable MultiMedia (PCMM) priority is not working properly.
CSCtq50496	Additional DSID entries and statistics indices are created for the active protect line card on the Standby Route Processor.
CSCtq50591	Multicast packets are wrongly forwarding using the default service flow after line card HA.
CSCtq51989	The PRE4 crashes when it is triggered by show diag x/y conlog command in multiple telnet sessions simultaneously.
CSCtq57310	Cable modems do not come online when using the ip dhcp compatibility lease-query client command to enable RFC 4388 in standard mode.
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.
CSCtq62767	The PRE may crash with infinite loop during the DHCP configuration.
CSCtq63696	The IPv6 packets may not get TCP or UDP ports when their extension header is 40 bytes.
CSCtq64130	Event-driven database (ETDB) entries may be missing after PRE HA.
CSCtq64515	A memory leak is observed on the cable line card when Dynamic Bonding Change (DBC) operation is invoked for a WB modem.
CSCtq67275	The Cisco uBR10012 router might crash when using the show run and write memory commands.
CSCtq77150	An invalid XML file is generated when the call volume is high.
CSCtq82748	All packets are dropped when multicast and unicast traffic oversubscribes the bonding group line rate on the Cisco uBR-MC3GX60V line card.
CSCtq84113	The standby route processor crashes when the file nvram: docsBpi2_mib is present.
CSCtq89146	The Cisco uBR-MC5X20H cannot boot continuously during initial deployment when auto ROMMON upgrade feature is turned on.
CSCtq93929	Cable modems within a fiber node are moved to another restricted load balancing group in another fiber node when load balancing is configured on the Cisco uBR10012 router.
CSCtq94616	Cable modems are not in w-online state and channel bonding association entries are not displayed. This issue is seen on Cisco uBR10012 router with a Cisco Wideband SPA.

Bug ID	Description
CSCtq96578	After performing an online insertion and removal (OIR) of a Cisco SIP-600, the show inventory command and the SNMP polls still display the part number and the serial number of the SIP.
CSCtq97047	Traceback of SNMP MIB sync failure occurs on Standby PRE while setting the entPhysicalAlias.MIB object.
CSCtq98731	Route processor service flow error messages do not appear on the console when default MQoS is configured.
CSCtq99064	Service flow and MAC state information of the cable modem failed to sync with the standby route processor.
CSCtr01822	“%SYS-3-CPUHOG” task is triggered and runs for more than 2000 ms after a line card switchover to the protect line card.
CSCtr07526	The ToS overwrite value and masks are lost, and the packets are not tagged with the correct values on the Cisco uBR10012 router.
CSCtr08434	An SNMP query to the ccwbFiberNodeDescrTable causes a memory leak.
CSCtr15555	DOCSIS 3.0 cable modems do not lock up to a bonded interface.
CSCtr18675	When Layer 2 VPN is configured, the CPEs using secondary service flows do not get a DHCP IP addresses.
CSCtr25442	The Cisco uBR10012 router may crash due to memory allocation failure.
CSCtr29844	The Cisco CMTS router does not drop a Multicast Listener Discovery (MLD) report from an MDF-disabled cable modem.
CSCtr30705	The Cisco uBR-MC3GX60V line card crashes due to an internal FPGA error.
CSCtr39356	The Cisco CMTS crashes due to a multicast DOSCIS bonding change call back.
CSCtr44391	Multicast traffic is interrupted after a line card switchover.
CSCtr45474	Some counters are reset to zero after specifying the DCC initialization technique number.
CSCtr47118	Policy routed packets are not forwarding traffic when the outgoing interface is Multiprotocol Label Switching (MPLS) TE.
CSCtr48541	The DSG channel is lost after a switchover when a MAC domain interface with remote modular interfaces are configured.
CSCtr50236	The Cisco CMTS router crashes after changing a specific configuration of a dual stack CPE router.
CSCtr53013	Unable to remove the L2TP class associated with the DEPI tunnel.
CSCtr57109	The following error messages are displayed on the Cisco uBR10012 router: No information on VLAN
CSCtr57160	Data from direct memory access (DMA) is not getting saved completely to log file.
CSCtr59593	When copying a configuration file to the startup configuration, the startup configuration allows the same DOCSIS Setup Gateway (DSG) channels to be configured to multiple mac-domains.
CSCtr75390	Inter Process Communication (IPC) goes down between the line card and the guardian line card after an upgrade.
CSCtr87580	Parallel Express Forwarding (PXF) stops working correctly when multicast packets are routed to the PBR which has set vrf/global action configured.

Bug ID	Description
CSCtr90121	The DCD counter in the DSG tunnel does not work correctly.
CSCtr92123	The dual-stack CPE IP address cannot be reacquired by the CMTS thus the show cable modem cpe command displays no output.
CSCtr96100	Unexpected debug messages and tracebacks are shown on the console during a line card switchover.
CSCtr98694	The PacketCable Multimedia (PCMM) Gate-Set messages are rejected by the Cisco CMTS router when the CPE is not directly connected to the router.
CSCts11717	Cable modem upstream interfaces on the Cisco uBR-MC3GX60 line card are not available for SNMP polling.
CSCts11965	The HCCP-3-CFG_FAIL message is seen during line card switchover and the general load balancing group (GLBG) configuration is corrupted on the standby route processor.
CSCts12275	Policy-based routing does not work with cable intercept functionality on the Cisco CMTS router.
CSCts22179	Cisco uBR-MC3GX60 line card performs a silent reload.

Open Caveats—Cisco IOS Release 12.2(33)SCF

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.
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.
CSCth96329	The cable modems in Subscriber Traffic Management (STM) is not getting out of penalty after the PRE or line card switchover.
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.
CSCti41752	The static-group physical interface does not support all the subinterface numbers unlike the IOS.
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.
CSCti77209	CPUHOG messages may be seen when SNMP polling is performed with load balancing enabled.

Bug ID	Description
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.
CSCti96353	It is observed that EPC-3000 modems that use SPA DS as primary may be assigned with AES keys instead of 56DES.
CSCtj17350	Traceback occurs when show depi tunnel command is configured without DEPI Control Plane.
CSCtj39177	The output of the show interface Wideband-Cable1/1/0:0 service-flow sfid counters command fluctuates. The multicast service flow statistics, displayed in the output do not give accurate meaningful flow data.
CSCtj43383	DOCSIS load balance CM list is lost upon line card switchover and revertback.
CSCtj69254	CPU HOG messages and traceback occur during a line card switchover.
CSCtj86115	IOS mroute entry may not be deleted even when the last CPE member “left”.
CSCtj87847	Phy static-mcast should be configured on fwd_intf for static-mcast TLV.
CSCtk15093	CPE, in one multicast VPN, incorrectly receives traffic destined to a CPE in another multicast VPN.
CSCtk36030	In certain cases, the forwarding rates on the show interface cable-interface command are not consistent with the actual multicast traffic forwarding data rate.
CSCtk54576	PRE crashes when QoS enforce-rule is unconfigured.
CSCtk65147	DOCSIS 3.0 general load balancing group (GLBG) disappears after line card revert switchover.
CSCtl06275	Some of the call home events are not triggered properly during SPA online insertion and removal (OIR).
CSCtl11293	Multicast traffic with MQoS applied may not adhere to the MQoS configuration.
CSCtl22266	The DOCSIS general load balancing group information is lost from the mac domain cable modem service group after a PRE switchover occurs.
CSCtl46180	The show pxf cable multicast-echo command output for physical/ logical static-mcast is empty after Cisco CMTS bootup.
CSCtl50170	During stress testing, CPUHOG is observed during Subscriber Account Management Interface Specification (SAMIS) operations which eventually causes PRE crash.
CSCtl54475	Cisco CMTS does not recognize TLV64.
CSCtl87156	CMTS returns an ICMP NA response for an IPv6 enabled branch router during duplicate address detection (DAD), causing branch router to deny the address assignment.
CSCtl90291	The Cisco uBR-MC5x20H line card crashed after an upstream service flow was deleted when the bandwidth request was received for the same service flow.
CSCtl92608	The show cable dsd tunnel statistics command does not display service flow or drop counter information.
CSCtl97410	All line cards crash when the reload of the chassis is performed.
CSCtn01028	The nRTPS traffic is not getting the desired bandwidth after the total min-reserved-rate is configured on the CM.

Bug ID	Description
CSCtn08001	Cable modems that are online but have dropped out of the DS load-balancing group over time are not correctly counted in that group when the show cable modem summery total command is executed.
CSCtn30971	Downstreams from other MAC domains are wrongly included in the DOCSIS 3.0 General Load Balancing Group (GLBG).
CSCtn57973	Various show cable commands and SNMP MIB outputs does not display all CPEs known to the CMTS in the output.
CSCtn62327	CMTS may crash when it is configured as 6VPE router and when many routes have been populated in the CMTS.
CSCtn64257	The following error message is seen indicating that the DEPI session could not be found for deletion: 00:03:17: %RFGW-4-LINECARD_ERRMSG_WARNING: SLOT 3:can not find DEPI session 1073742199 (0x40000177) for deletion
CSCtn64461	The CPE may not receive multicast traffic when the MQoS is configured.
CSCtn86863	DSG TG tunnels are not added to the line card cable interface. The following error message is displayed. Won't be able to enable the rule. There is a non-DSG static join.
CSCtn90850	Downstream reserved bandwidth is not shown correctly after a line card switchover resulting in CIR oversubscription.
CSCtn96470	The carrier-to-noise ratio (CNR) accuracy varies on the Cisco uBR-MC3GX60 line card.
CSCtn97181	The cable modems could not receive the multicast traffic. This issue was observed on the Cisco UBR-MC20X20V line card on the Integrated cable forwarding interface.
CSCto01086	The SPA multicast service-flow statistics is incorrect.
CSCto02925	The Cisco CMTS cannot handle re-admission of admitted service identifiers (SID) after a CMTS reboot. The messages are observed after power cycling the modems.
CSCto13222	The fiber node configuration is not displayed in the show load command output and in show running configuration command output. This issue occurs on the Cisco uBR-3GX60V line card with DOCSIS 3.0 general load balancing group configuration.
CSCto31597	The SPA keys do not synchronize with the local keys communicated to the CM resulting in L3 connectivity loss and additional TEK requests.
CSCto46625	Channel changes in multicast VPN setup causes cable modems and the cable bundle IP to be unreachable.
CSCto47940	The downstream channel IDs are reordered while they are unique.
CSCto55350	The HCCP configuration fails when the no cable downstream-channel-id automatic command is issued followed by the cable downstream-channel-id automatic command.
CSCto55495	The restricted load balancing group (RLBG) ID for a narrowband cable modem changes to the previous RLBG ID after a line card switchover.

Bug ID	Description
CSCto55828	The static multicast configuration is not present and the CPE cannot receive multicast traffic after the is PRE configured with high availability and static multicast (TLV64).
CSCto56261	The cable modems reset on the CMTS due to hw-module reset of a line card when the DEPI session disconnects and connects again.
CSCto57940	When the cable monitor is configured, the PXF may crash after shut/unshut of the SPA.
CSCto58021	Multicast encryption does not work after a line card switchover occurs.
CSCto66576	Corruption messages from license storage device are displayed on the Cisco CMTS when the license on the line card is revoked.
CSCto66674	Traceback was observed on the Cisco CMTS after large number of wideband connections were configured.
CSCto67613	Debug counters show incorrect information.
CSCto76438	Downstream Channel Descriptor (DCD) messages are not sent out on cable downstream channels.
CSCto79524	High CPU usage was observed when working with the cpwVcMplsNonTeMappingEntry SNMP tables.
CSCto80968	Continuous flow of bug information is displayed after running the debug cable hw-spectrum command.
CSCto81183	The dynamic modulation is able to DG but not UG if the spectrum group is configured.
CSCto82890	The standby RF Gateway PRE gets reloaded when configuring the DEPI class.
CSCto84676	A traceback is observed on the Cisco CMTS when a crypto trustpoint is configured.
CSCto86829	Cable modems may fail to come online when provisioned QoS parameters and active QoS parameters are not same.
CSCto87640	Memory leak may be observed on the Cisco uBR-MC5X20U line card.
CSCto87882	Standby PRE reload is observed when Transport Stream Identifier (TSID) is un-configured for a DEPI tunnel, under the modular-controller configuration.
CSCto88136	Cable modems drop offline when the cable tftp-enforce and cable dynamic-secret mark commands are configured, and line card switchover is performed.
CSCto89600	The Cisco UBR-MC20x20V line card takes some time to boot up on a PRE2 after reload. High CPU utilization on IP Input and CMTS multicast queue process is also observed during that boot up period.
CSCto97035	The cable filter groups do not work correctly for traffic handled by the Route Processor.
CSCtq01069	Secondary PRE crash is observed when PacketCable Multimedia (PCMM) multicast gate is synchronized.
CSCtq06765	Policy based routing (PBR), applied on bundle interface, does not work when router is reloaded.

Bug ID	Description
CSCtq07315	Memory leak is observed on Cisco CMTS when multicast QoS is configured on the cable interface line card, and online insertion and removal of line card is performed.
CSCtq09066	Wideband cable modems could not be located after multiple line card or PRE switchovers are performed.
CSCtq09884	A Cisco uBR-MC5X20 line card crash is observed during voice calls.
CSCtq15313	Multicast traffic from a particular Internet Group Management Protocol (IGMPv3) exclude source is continued to be wrongly forwarded.
CSCtq21532	Incomplete MIB information is received for the offline cable modems when MIB objects docsIfCmtsCmStatusEntry and docsIf3CmtsCmRegStatusEntry are queried.
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.
CSCtq28643	Multicast address shows up wrongly as source address instead of unicast address.
CSCtq29447	When static load balancing with the utilization method is enabled, the Cisco CMTS does not correctly send DS override message to the cable modem, which is connecting to an interface having a load balancing target.
CSCtq34214	IPv6 load balancing on Cisco CMTS does not function properly.
CSCtq35257	Cisco uBR10012 router may crash due to memory allocation failure.
CSCtq35285	The change-trigger value does not reach the CMTS when the cable modem is in partial mode and voice flows are forwarded over the wideband interface.
CSCtq36735	There is no Intermediate System-to-Intermediate System (IS-IS) connection over the 10-Gigabit Ethernet interface in the uBR10012 routers.
CSCtq41613	All cable modems on a Cisco uBR-MC5X20 line card lose connectivity. This is preceded by multiple "%UBR10000-4-BADTXOFFSET:" log messages.
CSCtq43885	The Service Flow Admission Control (SFAC) classification on the PacketCable MultiMedia (PCMM) priority is not working properly.
CSCtq45452	CPE may not receive multicast packets after a line card HA.
CSCtq47448	High upstream utilization is observed on a Cisco uBR-MC20x20V line card after fail over to the protect line card.
CSCtq50591	Multicast packets are wrongly forwarding using the default service flow after line card HA.
CSCtq51989	The PRE4 crashes when it is triggered by show diag x/y conlog command in multiple telnet sessions simultaneously.
CSCtq56713	The following error message is displayed during service flow creation when the CIR utilization for a WB interface is close to its maximum limit. UBR10K-3-QALLOCFAIL: Failure to allocate QoS queue for service flow
CSCtq55998	The route processor CPU is observed to be 99% and the CMTS multicast Q process is observed to be 90% when configuring nearly 100 subinterfaces with a VRF.

Bug ID	Description
CSCtq62767	The PRE may crash with infinite loop during the DHCP configuration.
CSCtq64130	Event-driven database (ETDB) entries may be missing after PRE HA.
CSCtq70677	Additional dummy ETDB entries are listed for the static-multicast after VDOC configuration on the standby PRE.

Resolved Caveats—Cisco IOS Release 12.2(33)SCF

Bug ID	Description
CSCtb73450	Start-Control-Connection-Request (SCCRQ) packets may cause tunnel to reset after digest failure.
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.
CSCtd75033	Cisco IOS Software is affected by NTP mode 7 denial-of-service vulnerability.
CSCtf74999	A router configured for DLSw might crash when it receives a series of certain malformed packets. This issue requires a number of conditions and a narrow timing window.
CSCth25634	Password is prompted twice for authentication when login authentication has the line password as fallback and RADIUS as primary.
CSCti25339	Cisco IOS device may experience a device reload when the Cisco IOS device is configured for SNMP and receives certain SNMP packets from an authenticated user.
CSCtj56019	Mibwalk dot1dBridge using mst context does not return the correct information.
CSCtl72835	Few wideband cable modems intermittently come online in Partial-mode.
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.