



Introduction

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This introduction explains the objectives, intended audience, and organization of the *Cisco IOS CMTS Cable Command Reference*. It provides the following sections:

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Document Objectives



Note

Some of these products have reached End of Sale (EOS) or End of Life (EOL). For more information, refer to the Video, Cable, and Content Delivery End-of-Sale and End-of-Life Products site at: http://www.cisco.com/en/US/products/hw/video/prod_category_end_of_life.html

This guide describes the commands necessary to configure, maintain, and troubleshoot the following cable platforms:

- Cisco Cable Modem Termination Systems (CMTS)
 - Cisco uBR7100 series universal broadband routers, which include the Cisco uBR7111, the Cisco uBR7114, the Cisco uBR7111E, and the Cisco uBR7114E routers.
 - Cisco uBR7200 series universal broadband routers, which include the Cisco uBR7246, the Cisco uBR7246 VXR, and the Cisco uBR7225VXR routers.
 - Cisco uBR10012 universal broadband router.
- Cisco Cable Modems (CMs) and other Cable CPE Devices
 - Cisco uBR904, Cisco uBR905, Cisco uBR924, and Cisco uBR925 cable access routers.
 - Cisco CVA122 and Cisco CVA122E cable voice adapters.

**Note**

This guide documents only the cable specific commands. For information about all Cisco IOS commands, use the [Command Lookup Tool](#) or the [Cisco IOS Master Command List, All Releases](#).

Audience

This book is intended for system administrators and support engineers who configure and maintain the cable CMTS and CM devices.

Document Organization

This book is organized alphabetically. The first page of each chapter provides a command summary of all commands included in that chapter, as well as identification of any new, modified, obsolete, or replaced commands.

Debug commands and ROM monitor commands are included in separate appendixes at the end of the book.

New and Modified Commands by Release

This section identifies any new, modified, obsolete, or replaced commands. It includes the following topics:

**Note**

Command changes in Cisco IOS Release 12.3(23)BC, 12.3(23)BC1, and 12.3(23)BC2 do not apply to Cisco IOS Release 12.2(33)SCA.

- [New and Modified Commands in Cisco IOS Release 12.3BC](#), page 2
- [New and Modified Commands in Cisco IOS Release 12.2SC](#), page 6
- [Obsolete Commands](#), page 15
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New and Modified Commands in Cisco IOS Release 12.3BC

- [New and Modified Commands in Cisco IOS Release 12.3\(23\)BC7](#), page 3
- [New and Modified Commands in Cisco IOS Release 12.3\(23\)BC6](#), page 3
- [New and Modified Commands in Cisco IOS Release 12.3\(23\)BC5](#), page 3
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New and Modified Commands in Cisco IOS Release 12.3(23)BC7

New Commands in Cisco IOS Release 12.3(23)BC7

- cable upstream threshold hysteresis
- cable upstream equalization-error-recovery

Modified Commands in Cisco IOS Release 12.3(23)BC7

- cable upstream modulation
- show cable hop history
- show cable modem service-flow
- show tech-support

New and Modified Commands in Cisco IOS Release 12.3(23)BC6

Modified Commands in Cisco IOS Release 12.3(23)BC6

- show interface cable intercept
- show controllers modular-cable

New and Modified Commands in Cisco IOS Release 12.3(23)BC5



Note

Command changes in Cisco IOS Release 12.3(23)BC5 do not apply to Cisco IOS Release 12.2(33)SCA.

Modified Commands in Cisco IOS Release 12.3(23)BC5

- show cable logging
- show controllers modular-cable

New and Modified Commands in Cisco IOS Release 12.3(23)BC2



Note

Command changes in Cisco IOS Release 12.3(23)BC2 do not apply to Cisco IOS Release 12.2(33)SCA.

New Commands in Cisco IOS Release 12.3(23)BC2

- cable modem service-class-name
- cable upstream rate-adapt (global)
- cable upstream rate-adapt (interface)
- show cable rate-adapt
- weekend duration
- weekend off
- weekend peak-time1

Modified Commands in Cisco IOS Release 12.3(23)BC2

- **show cable qos enforce-rule**
- **show interface cable sid**
- **show interface cable upstream**

New and Modified Commands in Cisco IOS Release 12.3(23)BC1**Note**

Command changes in Cisco IOS Release 12.3(23)BC1 do not apply to Cisco IOS Release 12.2(33)SCA.

New Commands in Cisco IOS Release 12.3(23)BC1

- **cable dynamic-bw-sharing**
- **debug cr10k-rp dbs-queue**
- **packetcable gate send-subscriberID**
- **show pxf cable controller**

Modified Commands in Cisco IOS Release 12.3(23)BC1

- **cable rf-bandwidth-percent**
- **cable rf-channel**
- **show pxf cpu queue**

New and Modified Commands in Cisco IOS Release 12.3(23)BC**Note**

Command changes in Cisco IOS Release 12.3(23)BC do not apply to Cisco IOS Release 12.2(33)SCA.

New Commands in Cisco IOS Release 12.3(23)BC

- **cable clock dti**
- **cable clock dti clear-counters**
- **cable rf-bandwidth-percent**
- **cable service attribute ds-bonded downstream-type bonding-enabled**
- **cable service attribute non-ds-bonded downstream-type bonding-disabled**
- **cable service attribute non-ds-bonded legacy-ranging downstream-type**
- **cable service attribute voice-enabled**
- **clear cable modem voice**
- **debug cable service-ds-selection**
- **downstream local upstream**
- **downstream modular-cable rf-channel (interface)**
- **rf-channel network-delay**
- **show cable clock dti counters**
- **show cable clock dti status**

- **show cable ib-ipc**
- **show cable mac-domain cable forwarding**
- **show cable mac-domain cgd-associations**
- **show cable modem primary-channel**
- **show cable modem voice**
- **show cable modem wideband primary-channel**
- **show cable service-voice downstream-type**
- **show interface modular-cable**
- **show interface modular-cable accounting**
- **show interface modular-cable description**
- **show interface modular-cable downstream**
- **show interface modular-cable intercept**
- **show interface modular-cable stats**
- **show interface modular-cable summary**
- **show interface modular-cable switching**
- **show pxf cpu queue wb-spa**
- **test cable voice**

Modified Commands in Cisco IOS Release 12.3(23)BC

- **cable clock clear-counters**
- **cable fiber-node**
- **cable modem remote-query**
- **cable rf-channel**
- **cable wideband auto-reset**
- **clear cable modem delete**
- **clear cable modem reset**
- **rf-channel frequency**
- **rf-channel ip-address mac-address udp-port**
- **show cable admission-control**
- **show cable clock**
- **show cable mac-domain downstream-service-group**
- **show cable modem**
- **show cable modem remote-query**
- **show controllers cable**
- **show hw-module bay**

New and Modified Commands in Cisco IOS Release 12.2SC

- [New and Modified Commands in Cisco IOS Release 12.2\(33\)SCA, page 6](#)
- [New and Modified Commands in Cisco IOS Release 12.2\(33\)SCB, page 7](#)
- [New and Modified Commands in Cisco IOS Release 12.2\(33\)SCB1, page 11](#)
- [New and Modified Commands in Cisco IOS Release 12.2\(33\)SCB3, page 11](#)
- [New and Modified Commands in Cisco IOS Release 12.2\(33\)SCB4, page 11](#)
- [New and Modified Commands in Cisco IOS Release 12.2\(33\)SCC, page 11](#)

New and Modified Commands in Cisco IOS Release 12.2(33)SCA

New Commands in Cisco IOS Release 12.2(33)SCA

- **application-id**
- **cable ip-init**
- **cable ipv6 source-verify**
- **cable l2-vpn-service default-nsi**
- **cable multicast group-encryption**
- **cable multicast group-qos**
- **cable multicast qos group**
- **clear cable modem name**
- **debug cable ipv6**
- **debug ehsha**
- **session-range**
- **show cable modem domain-name**
- **show cable modem ipv6**
- **show cable modem type**
- **show interface bundle multicast-sessions**
- **show interface cable multicast-sessions**
- **show redundancy config-sync**
- **show redundancy platform**
- **tos (multicast qos)**
- **vrf (multicast qos)**

Modified Commands in Cisco IOS Release 12.2(33)SCA

- **cable application-type include**
- **cable event syslog-server**
- **cable filter group**
- **clear cable host**
- **clear cable modem delete**

- **clear cable modem reset**
- **mode (redundancy)**
- **ping docsis**
- **redundancy force-switchover**
- **service class**
- **show cable filter**
- **show cable l2-vpn dot1q-vc-map**
- **show cable modem**
- **show cable modem calls**
- **show cable modem classifiers**
- **show cable modem cnr**
- **show cable modem connectivity**
- **show cable modem counters**
- **show cable modem cpe**
- **show cable modem docsis device-class**
- **show cable modem errors**
- **show cable modem flap**
- **show cable modem mac**
- **show cable modem maintenance**
- **show cable modem offline**
- **show cable modem phy**
- **show cable modem qos**
- **show cable modem registered**
- **show cable modem rogue**
- **show cable modem unregistered**
- **show interface cable modem**
- **show interface cable sid**

New and Modified Commands in Cisco IOS Release 12.2(33)SCB

New Commands in Cisco IOS Release 12.2(33)SCB

- **cable attribute-mask**
- **cable cm-status enable**
- **cable divert-rate-limit**
- **cable docsis30-voice downstream req-attr-mask**
- **cable downstream attribute-mask**
- **cable load-balance docsis-policy**
- **cable load-balance rule**

- **cable multicast auth enable default-action**
- **cable multicast auth profile-name**
- **cable rcc-template**
- **cable rcp-control**
- **cable rf-change-dampen-time**
- **cable rf-change-trigger**
- **cable rsvp default-scen**
- **cable service type**
- **cable submgmt default**
- **cable upstream attribute-mask**
- **clear cable modem attribute-masks**
- **clear cable modem cm-status**
- **clear cable modem rcs-counts**
- **clear cable modem service-type-id**
- **clear cable rf-status**
- **clear pxf statistics drl cable-wan-ip**
- **clear pxf statistics drl wan-non-ip**
- **debug cable wbcmts resiliency**
- **ipdr associate**
- **ipdr collector**
- **ipdr exporter start**
- **ipdr session**
- **ipdr session (global configuration)**
- **ipdr template**
- **issu linecard abortversion**
- **issu linecard acceptversion**
- **issu linecard changeversion**
- **issu linecard loadversion**
- **issu linecard prepareversion**
- **issu linecard reloadversion**
- **issu linecard runversion**
- **match-rule**
- **rcp-id**
- **receive-channel**
- **receive-module**
- **service divert-rate-limit ip**
- **service divert-rate-limit ip trusted-site**
- **service divert-rate-limit non-ip**

- **service divert-rate-limit trusted-site**
- **show cable flap-list wb-rf**
- **show cable mac-domain rcc**
- **show cable modem service-type-id**
- **show cable modem summary wb-rf**
- **show cable modem wideband rcs-status**
- **show cable multicast authorization**
- **show cable multicast db**
- **show cable multicast dsid**
- **show cable multicast qos**
- **show cable rf-status**
- **show cable rsvp flow-db**
- **show interface rf-status**
- **show ipdr collector**
- **show ipdr exporter**
- **show ipdr session**
- **show ipdr session (collector)**
- **show ipdr session template**
- **show pxf cable multicast**
- **show pxf cpu drl-trusted-sites**

Modified Commands in Cisco IOS Release 12.2(33)SCB

- **cable ds-max-burst**
- **cable dynamic-bw-sharing**
- **cable multicast group-qos**
- **cable rf-bandwidth-percent**
- **cable rf-channel**
- **cable service class**
- **cable submgmt default**
- **card**
- **controller modular-cable**
- **debug cr10k-rp dbs-queue**
- **debug hw-module all upgrade**
- **debug hw-module bay**
- **debug hw-module subslot**
- **downstream local upstream**
- **downstream modular-cable rf-channel**
- **downstream modular-cable rf-channel (interface)**

- **flowcontrol**
- **hold-queue**
- **hw-module bay reload**
- **interface modular-cable**
- **interface wideband-cable**
- **ip accounting mac-address**
- **mac-address**
- **mtu**
- **negotiation auto**
- **packetcable gate send-subscriberID**
- **penalty-period**
- **plim qos input map**
- **rf-channel frequency**
- **rf-channel ip-address mac-address udp-port**
- **rf-channel network-delay**
- **show cable logging**
- **show cable mac-domain cgd-associations**
- **show cable mac-domain downstream-service-group**
- **show cable modem**
- **show cable modem wideband**
- **show cable qos enforce-rule**
- **show cable rate-adapt**
- **show cr10k-rp controller**
- **show cr10k-rp queue**
- **show hw-module all fpd**
- **show hw-module bay**
- **show hw-module bay oir**
- **show hw-module subslot fpd**
- **show interface cable service-flow**
- **show interface cable upstream**
- **show interface modular-cable**
- **show interface modular-cable accounting**
- **show interface modular-cable description**
- **show interface modular-cable downstream**
- **show interface modular-cable intercept**
- **show interface modular-cable stats**
- **show interface modular-cable summary**
- **show interface modular-cable switching**

- show interface wideband-cable
- show pxf cable
- show pxf cable controller
- show pxf cpu queue
- show pxf cpu statistics
- show upgrade fpd file
- show upgrade fpd package default
- show upgrade fpd progress
- show upgrade fpd table
- upgrade hw-module subslot fpd file
- upstream cable connector
- weekend duration
- weekend off
- weekend peak-time1

New and Modified Commands in Cisco IOS Release 12.2(33)SCB1

New Commands in Cisco IOS Release 12.2(33)SCB1

- show cable modem service-flow

Modified Commands in Cisco IOS Release 12.2(33)SCB1

- cable service class
- show tech support

New and Modified Commands in Cisco IOS Release 12.2(33)SCB3

Modified Commands in Cisco IOS Release 12.2(33)SCB3

- show processes cpu

New and Modified Commands in Cisco IOS Release 12.2(33)SCB4

New Commands in Cisco IOS Release 12.2(33)SCB4

- cable dsg tg

Modified Commands in Cisco IOS Release 12.2(33)SCB4

- cable upstream equalization-error-recovery
- show interface cable dsg downstream

New and Modified Commands in Cisco IOS Release 12.2(33)SCC

New Commands in Cisco IOS Release 12.2(33)SCC

- cable admission-control max-reserved-bandwidth

- **cable clock upgrade**
- **cable downstream qos wfq weight**
- **cable init-channel-timeout**
- **cable ipc-stats**
- **cable l2vpn**
- **cable l2-vpn-service xconnect**
- **cable load-balance d30-ggrp-default**
- **cable load-balance docsis-enable**
- **cable load-balance docsis-group**
- **cable load-balance modem max-failures**
- **cable load-balance restrict modem**
- **cable modulation-profile global-scheme**
- **cable mrc-mode**
- **cable mtc-mode**
- **cable privacy revocation crl skip-sig-check**
- **cable privacy revocation enable**
- **cable privacy revocation ocsip skip-sig-check**
- **cable privacy revocation skip-cm-cert**
- **cable privacy revocation timeout**
- **cable set mpls-experimental value**
- **cable sid-cluster-group**
- **cable sid-cluster-switching**
- **cable tag**
- **cable udc-capability**
- **cable udc-send-rules**
- **cable upstream active-codes**
- **cable upstream bonding-group**
- **cable upstream codes-per-minislot**
- **cable upstream max-codes-per-subframe**
- **cable upstream max-interleave-step**
- **cable upstream max-logical-chans**
- **cable upstream ranging-poll**
- **cable upstream resiliency**
- **cable upstream spreading-interval**
- **clear cable ipc-stats**
- **controller integrated cable**
- **debug cable cm-ctrl**
- **debug cable cm-status**

- **debug cable mdd**
- **debug cable md-sg**
- **debug cable ubg**
- **debug cable wbcmts admission-control**
- **debug pxf atom**
- **depi-class**
- **depi-tunnel**
- **dest-ip**
- **docsis-policy**
- **docsis-version**
- **downstream**
- **init-tech-list**
- **init-tech-ovr**
- **interval**
- **logging cmts sea**
- **method**
- **name**
- **oui**
- **output-rate**
- **override**
- **policy**
- **restricted**
- **rf-channel depi-tunnel**
- **rf-channel rf-power**
- **rf-channel rf-shutdown**
- **service instance**
- **service-class**
- **service-type-id**
- **service-type-id_(cmts-tag)**
- **show cable fiber-node**
- **show cable ipc-stats**
- **show cable l2-vpn xconnect**
- **show cable load-balance docsis-group**
- **show cable mac-domain upstream-service-group**
- **show cable rate-limit-ccf**
- **show cable signal-quality**
- **show cable spectrum-analysis**
- **show cable us-sg**

- **show controller integrated-cable**
- **show depi**
- **show diagnostic bootup**
- **show diagnostic content**
- **show diagnostic ood-status**
- **show diagnostic result**
- **show diagnostic schedule**
- **show interface cable upstream debug**
- **show interface modular-cable dlm**
- **show interface multicast-gcr**
- **tag**
- **threshold**
- **tos**
- **upstream**
- **upstream_(config-lb-group)**

Modified Commands in Cisco IOS Release 12.2(33)SCC

- **cable admission-control ds-bandwidth**
- **cable admission-control us-bandwidth**
- **cable cm-status enable**
- **cable helper-address**
- **cable load-balance docsis-policy**
- **cable load-balance rule**
- **cable multicast auth profile-name**
- **cable upstream channel-width**
- **cable upstream docsis-mode**
- **cable upstream modulation-profile**
- **cable upstream shutdown**
- **cable upstream threshold**
- **clear cable modem cm-status**
- **debug cable interface**
- **debug cable mac-scheduler**
- **debug cable tlvs**
- **ping docsis**
- **rf-channel network-delay**
- **show cable admission-control**
- **show cable flap-list**
- **show cable hop**

- `show cable load-balance`
- `show cable modem`
- `show cable modem cnr`
- `show cable modem flap`
- `show cable modem phy`
- `show cable modem qos`
- `show cable multicast dsid`
- `show cable service-class`
- `show controllers cable`
- `show controllers cable`
- `show controllers modular-cable`
- `show hccp`
- `show interface cable mac-scheduler`
- `show interface cable service-flow`
- `show interface cable upstream`

Obsolete Commands

The following commands have been removed from certain Cisco IOS software releases:

Obsolete Command	Effective Cisco IOS Release
<code>activate-rule-at-byte-count</code>	12.3(9a)BC
<code>annex modulation</code>	12.3(23)BC
<code>auto-sync</code>	12.2(33)SCA
<code>cable downstream dsg rule</code>	12.3(17a)BC2
<code>cable dsg</code>	12.3(13a)BC
<code>cable dsg keepalive</code>	12.3(13a)BC
<code>show cable dsg</code>	12.3(13a)BC
<code>show controllers cable upstream spectrum</code>	12.3(21)BC

Replaced Commands

The following commands have been replaced by new commands beginning in the following Cisco IOS software releases:

Command	Replacement Command	Beginning Cisco IOS Release
<code>annex modulation</code>	<code>rf-channel frequency</code>	12.3(23)BC
<code>enforced qos-profile</code>	<code>qos-profile enforced</code>	12.3(9a)BC
<code>monitoring-duration</code>	<code>duration</code>	12.3(9a)BC

Command	Replacement Command	Beginning Cisco IOS Release
registered qos-profile	qos-profile registered	12.3(9a)BC
show cable dsg	show cable dsg tunnel	12.3(13a)BC
service divert-rate limit	service divert-rate limit ip service divert-rate limit non-ip	12.2(33)SCB
cable l2-vpn-service default-nsi	cable l2-vpn-service xconnect	12.2(33)SCC

Related Documents

This section lists the documents that provide more detailed hardware and software information about the Cisco CMTS routers and Cisco Cable CPE devices documented in this guide. These documents are available on Cisco.com and the customer documentation CD-ROM.

Cisco CMTS Hardware Installation and Software Configuration Guides

For detailed information about the Cisco CMTS platforms, see the following documents:

- *Cisco uBR7100 Series Hardware Installation Guide*
- *Cisco uBR7100 Series Software Configuration Guide*
- *Cisco uBR7200 Series Universal Broadband Router Hardware Installation Guide*
- *Cisco uBR7200 Series Software Configuration Guide*
- *Cisco uBR10012 Universal Broadband Router Hardware Installation Guide*
- *Cisco uBR10012 Universal Broadband Router Software Configuration Guide*
- *Cisco IOS CMTS Cable Software Configuration Guide*
- *Cisco Cable Modem Termination System Feature Guide*
- *Network Processing Engine and Network Services Engine Installation and Configuration*
- *Upgrading to the Cisco uBR7246 VXR Universal Broadband Router*

Cisco Cable CPE Hardware Installation and Software Configuration Guides



Note

These products have reached End of Sale (EOS) or End of Life (EOL). For more information, refer to the Video, Cable, and Content Delivery End-of-Sale and End-of-Life Products site at: http://www.cisco.com/en/US/products/hw/video/prod_category_end_of_life.html

For detailed information about the Cisco cable CPE devices, see the following documents:

- *Cisco uBR904 Installation and Configuration Guide*
- *Cisco uBR905/uBR925 Software Configuration Guide*
- *Cisco uBR905 Hardware Installation Guide*
- *Cisco uBR924 Software Configuration Guide*

- [Cisco uBR924 Hardware Installation Guide](#)
- [Cisco uBR925 Hardware Installation Guide](#)
- [Cisco CVA122/CVA122E Features Guide](#)
- [Cisco CVA122/CVA122E Hardware Installation Guide](#)

Obtaining Documentation and Submitting a Service Request

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

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

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