Release Notes for Cisco MediaSense, Release 8.5(2)

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Contents

Introduction

Note Cisco MediaSense product documentation reflects the fields and names used in the application user interfaces and application programming interfaces of this product. Effective Release 8.5(2), these names are restricted to Cisco MediaSense and Open Recording Architecture (ORA/ora).

Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

Cisco MediaSense is a media recording platform which uses Web 2.0 Application Programming Interfaces (APIs) to expose its functionality to third-party customers so they can create custom applications.

Cisco MediaSense can be used by compliance recording companies whose regulatory environment requires all conversations to be recorded and maintained. These recordings can later be used by a compliance auditor or a contact center supervisor to resolve customer issues or for training purposes. These recordings can also be used by speech analytics servers or transcription engines.

Cisco MediaSense is not dependent on the use of any other contact center product. However, it is capable of working with all contact center products. Its only dependency is Unified Communication Manager (Unified CM), which is used to set up the recording profile and call control service connection (SIP trunk) information.

Related Documentation

Cisco MediaSense, Release 8.5(2), includes the following documents:

Document	URL
Cisco MediaSense 8.5 Solution Reference Network Design (SRND)	http://www.cisco.com/en/US/products/ps11389/products_implementation_design_guides_list.html
Release Notes for Cisco MediaSense, Release 8.5(2) - these release notes	http://www.cisco.com/en/US/products/ps11389/prod_release_notes_list.html
Open Source Used In Cisco MediaSense 8.5(2)	http://www.cisco.com/en/US/products/ps11389/products_licensing_information_listing.html
Installation and Administration Guide for Cisco MediaSense, Release 8.5(2)	http://www.cisco.com/en/US/products/ps11389/prod_installation_guides_list.html
Developer Guide for Cisco MediaSense, Release 8.5(2)	http://developer.cisco.com/web/mediasense/docs
Virtualization for Cisco MediaSense, Release 8.5(2)	http://docwiki.cisco.com/wiki/Virtualization_for_Cisco_MediaSense
Troubleshooting Tips for Cisco MediaSense, Release 8.5	http://docwiki.cisco.com/wiki/Troubleshooting_Tips_for_Cisco_MediaSense_8.5
Frequently Asked Questions for Cisco MediaSense	http://docwiki.cisco.com/wiki/FAQs_for_Cisco_MediaSense

Note The latest version of each document is available at http://www.cisco.com/en/US/products/ps11389/tsd_products_support_series_home.html or as identified below.

New and Changed Information

This section explains the features introduced in Cisco MediaSense, Release 8.5(2).

New Product Name

As of this release, the product is officially named *Cisco MediaSense*.

Scalability Enhancements

In Release 8.5(2), Cisco MediaSense increases its concurrent media handling capacity in two ways. First, each node can now support 340 concurrent media streams (up from 300 in Release 8.5(1)). This number represents the total of all recording, HTTP download, monitoring, and playback streams (20 playback streams per server). Since each call represents two streams, each server can record up to 170 calls at a time, assuming none of the other operations are active.

Cisco MediaSense now supports deployments of up to five servers. Of these, two servers are designated as Primary and Secondary servers, and all other servers are Expansion servers.

Together, these enhancements enable support for up to 1700 simultaneous media streams, which corresponds to a record-only capacity of up to 850 concurrent calls.

See the *Cisco MediaSense 8.5 Solution Reference Network Design (SRND)* at http://www.cisco.com/en/US/products/ps11389/products_implementation_design_guides_list.html.

New Virtualization-Related Hardware Options

Cisco MediaSense now supports 60 terabytes of storage space cluster-wide for recordings, using fiber channel attached SAN devices with SATA disks spinning at 7200 RPM or better, in a RAID-5 configuration (RAID-6 is not currently supported). Cisco provides new VMWare templates for 12TB, 24TB, and 60TB of total cluster-wide storage.

Additionally, you can deploy Cisco MediaSense on Cisco B-Series servers in addition to the C-Series servers available in Release 8.5(1). B-Series offers a blade format packaging for reduced rack space requirements. See *Virtualization for Cisco MediaSense, Release 8.5(2)* at http://docwiki.cisco.com/wiki/Virtualization_for_Cisco_MediaSense

VMWare Hypervisor Support

Cisco MediaSense is now supported on VMWare ESXi 4.1 in addition to ESXi 4.0

API Changes

In general, Cisco MediaSense's Web 2.0 API set is considered to be forward compatible—any enhancement or modification to the API does not impact the operation of any existing client.

However, for performance reasons, a list of sessionids that were deleted or pruned are now grouped and sent as a batch, rather than as a series of individual events. The **sessionIds** parameter contains an array of sessions that have been deleted or pruned.

Caution Client may need to modify the client code based on this change.

Note Other session event actions, such as STARTED, UPDATED, and ENDED, still use the scalar **sessionId** field.

Event Subscription

In Release 8.5(1), each client had only one event subscription, and could not specify the events. In Release 8.5(2), while a client continues to have only one subscription, the client can specify specific details on the kinds of events it wants to receive.

Events are divided into the following categories:

- RECORDING_EVENTS (real-time recording session activities)
- CLEANUP_EVENTS (indicate which recording sessions are pruned or deleted)
- TAG_EVENTS (refer to session tagging activities)
- STORAGE_EVENTS (announce the crossing of storage space thresholds).

Clients can subscribe to any or all event categories, to specific event types, or any combination of events. This can happen if a newer version of Cisco MediaSense (which defines additional event types within an existing category) is installed.

API Requests

The following new API requests have been implemented:

1. subscribeToEvents—similar to the original subscribeRecordingEvents, except for the additional **subscriptionFilters** parameter (allows clients to receive confirmation on the subscribed filters). A slight difference in the return code behavior indicates that it is no longer considered an error to re-subscribe. Re-subscription elicits a response code of 2006 (subscription updated) if the resulting list of filters has changed, or 2005 (already subscribed) if the action does not result in a changed list of filters.
2. unsubscribeFromEvents—similar to unsubscribeRecordingEvents, except that as with subscribeRecordingEvents (allows clients to specify a list of event categories or types).
3. verifyEventSubscription—similar to verifyRecordingEvents (allows clients to specify a list of event categories or types).

Note The older API requests (subscribeRecordingEvent, unsubscribeRecordingEvent, and verifyRecordingSubscription) have been deprecated for future use, but will continue to function as before.

4. getSystemTime API—returns the current system time in GMT. As all Cisco MediaSense servers are configured to a common NTP time source. The differences between their system clocks is not significant and consequently returns only one system time value.
5. deleteSessionTag API—deletes a specified session tag.

See *Part 2: List of APIs* in the *Developer Guide for Cisco MediaSense, Release 8.5(2)* at http://developer.cisco.com/web/mediasense/docs.

Raw File Download

Cisco MediaSense 8.5(2) allows clients to download individual recordings using HTTP. The appropriate URL for each track in each session was provided in the **downloadUrl** parameter. Previously, clients used this URL directly, without modification. As of Release 8.5(2), clients can add the URL **timeout** parameter, if the network or the client is slow to consume the downloaded file. Cisco MediaSense automatically closes the TCP connection and aborts the download if it is unable to write data into the socket within the specified seconds.

See the *Playing Back Recordings* section in the *Developer Guide for Cisco MediaSense, Release 8.5(2)* at http://developer.cisco.com/web/mediasense/docs.

Streaming Playback and Silence Suppression

In Cisco MediaSense 8.5(1), segments of silence within the recording were collapsed to roughly half a second when played back, irrespective of the amount of silent time which actually elapsed during the recording. Release 8.5(2) introduces the ability for streaming media clients to choose one of three ways of treating silence:

1. RTP stream pauses for the full silent period, then continues with a subsequent packet whose mark bit is set and whose timestamp reflects the elapsed silent period.
2. RTP stream does not pause, timestamp reflects the fact that there was no pause, but RTP packets contain “TIME” padding which includes the absolute UTC time at which the packet was recorded.
3. RTP stream compresses the silent period to roughly half a second, and in all other respects acts exactly like #1 above. This is the default behavior.

See the *Playing Back Recordings* section in the *Developer Guide for Cisco MediaSense, Release 8.5(2)* at http://developer.cisco.com/web/mediasense/docs.

Serviceability Enhancements

For system troubleshooting purposes, Cisco MediaSense supports a new capability to generate thread and memory dumps. These tools are available in the Cisco MediaSense Serviceability application’s **Tools > Performance Logging** menu. The output is stored locally within the system for which the dumps were initiated. You can then retrieve the output using RTMT’s normal log collection feature. See the *Performance Logging* section in the *Installation and Administration Guide for Cisco MediaSense, Release 8.5(2)* at http://www.cisco.com/en/US/products/ps11389/prod_installation_guides_list.html.

The RTMT Disk Usage display now includes information about all configured media storage partitions, in addition to the usual Common, Swap, and Spare partitions. You can display this information in both real-time and historical perspectives. See the *Obtaining Storage Usage Information Using RTMT* section in the *Installation and Administration Guide for Cisco MediaSense, Release 8.5(2)* at http://www.cisco.com/en/US/products/ps11389/prod_installation_guides_list.html.

The Cisco MediaSense RTMT client has been enhanced to coexist with the Unified CM RTMT software. An RTMT client which is downloaded from Unified CM 8.0 or 8.5 will work with Cisco MediaSense 8.5(2), and one which is downloaded from Cisco MediaSense 8.5(2) will work with Unified CM 8.0 or 8.5. It is no longer necessary to switch between two versions of RTMT in order to connect to both Unified CM 8.x and Cisco MediaSense 8.5(2).

UI Changes

The Cisco MediaSense Administration **Help** menu and the Cisco MediaSense Serviceability Administration **Help** menu contains two additional options:

1. To view the latest version of all documents for Release 8.5(2), click **Help > Cisco.com**.
   If you are connected to the external network, this link connects you to the home page for the Cisco MediaSense documentation:
   (http://www.cisco.com/en/US/products/ps11389/tsd_products_support_series_home.html).
2. To view the latest version of the troubleshooting tips for this release, click **Help > Troubleshooting Tips**.
   If you are connected to the external network, this link connects you to the home page for the Cisco MediaSense troubleshooting solution:
   (http://docwiki.cisco.com/wiki/Troubleshooting_Cisco_MediaSense).

See the *Cisco MediaSense Administration Main Menu* or the *Cisco MediaSense Serviceability Administration Main Menu* sections in the *Installation and Administration Guide for Cisco MediaSense, Release 8.5(2)* at http://www.cisco.com/en/US/products/ps11389/prod_installation_guides_list.html.

Software Upgrade

Cisco MediaSense 8.5(2) requires a fresh install—it does not provide an automated upgrade process from Release 8.5(1).

License Requirements

The primary licensing and feature activation method for Cisco MediaSense is trust-based licensing.

Cisco MediaSense does not require any licenses from Cisco Systems for this initial release.

System Requirements

Cisco MediaSense, Release 8.5(2) is packaged with the Linux-based Unified Communications Operating System (Unified OS), an appliance model developed by Cisco Systems. This appliance model provides a collection of frameworks, such as installation, serviceability, service management, and other services. Cisco MediaSense uses this model to integrate, communicate, and coordinate with Unified CM.

Memory Requirements

The Cisco MediaSense memory requirements are listed in the *Virtualization for Cisco MediaSense DocWiki* page at http://docwiki.cisco.com/wiki/Virtualization_for_Cisco_MediaSense.

Hardware Supported

Any Cisco MediaSense deployment must meet the following hardware requirements:

- All servers run on virtual machines using the Unified OS. For more information on virtual machines, see the *Unified Communications Virtualization* web page at http://cisco.com/go/uc-virtualized.
- Information specific to Cisco MediaSense is listed in the *Virtualization for Cisco MediaSense DocWiki* page at http://docwiki.cisco.com/wiki/Virtualization_for_Cisco_MediaSense
- Cisco MediaSense does not co-reside with any product, including Unified CM. Cisco MediaSense requires a dedicated server.

Software Supported

Any Cisco MediaSense deployment must meet the following software requirements:

- Unified CM must be configured and deployed before you set up Cisco MediaSense.
- The Cisco MediaSense Administration web interface uses approved web browsers.

Installation Notes

Cisco MediaSense is installed on a Virtual Machine (VM) and runs on the Cisco Unified Voice Operating System platform, similar to Cisco Unified Communications Manager (Unified CM). This platform does not support navigation into, or manipulation of, the file system.

To install Cisco MediaSense, you must first obtain the Cisco MediaSense ISO file and the Cisco MediaSense Virtual Server template (OVA) file. You can download both files from **Support > Download Software** on cisco.com.

You can find detailed installation instructions in the Installation and Administration Guide for Cisco MediaSense, which you can open from the Cisco MediaSense Documentation page on cisco.com (CDC).

Localization

Cisco MediaSense, Release 8.5(2) is only available in the English language. The user interface is not localized.

Accessibility Features for Cisco MediaSense

Cisco MediaSense extends accessibility to areas in the administration of the system which are interoperable with screen reader applications, thus allowing visually impaired people to administrate the system.

Many of the standard accessibility features can be used without requiring any special configuration.

The following features were tested by Cisco Systems:

- Keyboard: All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints.

- No Keyboard Trap: If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface.
- Page Titled: Web pages have titles that describe topic or purpose.
- On Focus: When any component receives focus, it does not initiate a change of context.
- On Input: Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behavior before using the component.

Cisco is committed to designing and delivering accessible products and technologies to meet the needs of your organization. You can find more information about Cisco and its commitment to accessibility at this URL: www.cisco.com/go/accessibility.

Limitations and Restrictions

This section only lists the limitations for Cisco MediaSense, Release 8.5(2). See the *Cisco MediaSense 8.5 Solution Reference Network Design (SRND)* at http://www.cisco.com/en/US/products/ps11389/products_implementation_design_guides_list.html for compatibility-related information.

Hardware Limitations

This section lists the hardware limitations for Cisco MediaSense, Release 8.5(2).

- Cisco MediaSense only supports built-in-bridge (BIB) phones.

Software Limitations

This section lists the software limitations for Cisco MediaSense, Release 8.5(2).

- Cisco MediaSense only supports IPv4.
- Cisco MediaSense does not support SRTP.
- Cisco MediaSense does not support RTCP.

Storage Limitations

This section lists the storage limitations for Cisco MediaSense, Release 8.5(2).

- Cisco MediaSense supports up to 12 TB of media storage per server at the VM level.

Caveats

Using Bug Toolkit

Known problems (bugs) are graded according to severity level. These release notes contain descriptions of the following:

- All severity level 1, 2, and 3 bugs.
- Significant severity level 4 bugs.

You can search for problems by using the Cisco Software Bug Toolkit.

Before You Begin

To access Bug Toolkit, you need internet connection and a Cisco.com (CDC) user ID and password.

Procedure

Step 1 To access the Bug Toolkit, go to http://tools.cisco.com/Support/BugToolKit/action.do?hdnAction=searchBugs.

Step 2 Log in with your Cisco.com user ID and password.

Step 3 To look for information about a specific problem, enter the bug ID number in the "Search for Bug ID" field, then click **Go**.

For information about how to search for bugs, create saved searches, and create bug groups, click **Help** in the Bug Toolkit page.

Open Caveats

The caveats in Table 1 describe possible unexpected behavior in the latest Cisco MediaSense release. Bugs are listed in order of severity and then in alphanumeric order by bug identifier.

Table 1 Open Caveats for Cisco MediaSense

CDETS Number	Severity	Component	Headline
CSCtn99831	2	admin	Secondary node activation fails when the Primary node has 75GB Data
CSCto60804	3	server	A lot of timeout errors, when opening RTSP session
CSCtj88691	6 (P2)	api	GetSessionsByMediaType spoils the system performance

Resolved Caveats

In general, you can find the latest resolved caveat information through Bug Toolkit, which is an online tool that is available for customers to query defects according to their own needs.

The caveats in Table 1 describe possible unexpected behavior in the latest Cisco MediaSense release. Bugs are listed in order of severity and then in alphanumeric order by bug identifier.

Table 2 Resolved Caveats for Cisco MediaSense , Release 8.5(2)

CDETS Number	Severity	Component	Headline
CSCtk19374	3	api	Missing events and closing subscription if a lot of sessions are deleted.
CSCtk35367	3	callcontrol-sip	Call Control Service assumes, API service is enabled on expansion node.
CSCtk16174	3	mma	Storage Management Agent attempts to clear un-raised system condition.
CSCtk58809	3	capture	Monitoring & playback of recording don't work intermittently upon reboot

Closed Caveats

Table 3 contains information about the known limitations in the latest Cisco MediaSense release. Cisco has evaluated these defects on a case-by-case basis. For each defect, we have determined that one of the following is true:

The software functions as designed.

The issue cannot be resolved.

Table 3 Closed Caveats for Cisco MediaSense, Release 8.5(2)

Identifier	Severity	Component	Headline
CSCtk55457	3	install	ORA Admin login returns unexpected system error.
CSCtk60933	3	capture	Failed to record entire conversation - Sip Service restarts

Documentation Updates

The latest version of all documents are available on Cisco.com (CDC) and DocWiki.

Documentation Feedback

You can provide comments about this document by sending e-mail to the following address:

mailto:ccbu_docfeedback@cisco.com

We appreciate your comments.

This document is to be used in conjunction with the documents listed in the "Related Documentation" section.

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