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# Cisco MediaSense Version 11.5

# Product Overview

Cisco<sup>®</sup> MediaSense helps businesses and organizations deliver a connected digital experience, enabling you to provide contextual, continuous, and capability-rich journeys for your customers, across time and channels. Cisco MediaSense is an open-standards, network-based platform that supports recording, playback, live streaming, and storage of media, including audio and video, with rich recording metadata. It provides an efficient, cost-effective platform for capturing business conversations, including customer service interactions.

# **Business Value**

Businesses and organizations need to record calls for a variety of reasons, including regulatory compliance, quality management, legal discovery, employee education, business intelligence, and customer service optimization. Unfortunately, traditional recording solutions can make recording difficult and expensive to implement. Cisco MediaSense solves these challenges by recording audio and video on the network, simplifying the architecture, lowering costs, and providing optimum scalability across a variety of scenarios such as selective recording, call transfers, site-based recording, and multiparty conferences. MediaSense offers built-in search and play of recordings, and you can easily use it in customer service interactions through its integration with the Cisco Finesse<sup>®</sup> Agent Desktop.

In addition to recording and playback, Cisco MediaSense provides media streaming on the network, supporting video on hold (VoH) with Cisco Unified Communications Manager, video in queue (ViQ) with Cisco Remote Expert and Cisco Unified Customer Voice Portal (Unified CVP), video greeting with Cisco Unity<sup>®</sup> Connection, and live monitoring of customer service calls.

The MediaSense network-based architecture allows for quick availability of the captured media for different applications, regardless of location, through simple application programming interfaces (APIs). These interfaces implement open web standards, enabling a rich ecosystem of applications from Cisco technology partners, including quality management (QM) and advanced quality management (AQM) solutions.

With Cisco MediaSense, gaining value from business conversations is no longer a daunting challenge.

Table 1 lists the new features and benefits available in the latest release of Cisco MediaSense, and Table 2 lists its continuing features and benefits.

Feature	Benefits
Single sign-on	<ul> <li>MediaSense gadgets in the Cisco Finesse agent desktop can use single sign-on.</li> </ul>
Secure RTP media	MediaSense can capture secure RTP audio when deployed with Cisco Unified Communications Manager.
IPv6 endpoints	MediaSense supports capturing media from IPv6 phones in a Cisco customer care solution.
Controlled access to recordings	<ul> <li>Supervisors can be limited to having access only to recordings associated with teams they are configured for. Agents can be limited to having access only to recordings in which they are a participant.</li> </ul>
Delete recordings	<ul> <li>The built-in MediaSense Search and Play web application can be configured to allow supervisors to delete recordings.</li> </ul>

 Table 1.
 New Features and Benefits of Cisco MediaSense 11.5

Feature	Benefits
Audio streaming for CVP	<ul> <li>MediaSense provides audio-in-queue with Cisco Unified CVP, enabling businesses to create customizable playlists while callers are waiting in queue.</li> </ul>
More video streams	• The number of VoH and ViQ sessions per MediaSense node when using 480p video resolution is approximately 50% greater than when using 1080p.
Video messaging for Cisco Unity Connection	Cisco Unity Connection can now use MediaSense to record and play back video greetings.

#### Table 2. Continuing Features and Benefits of Cisco MediaSense

Feature	Benefits
Product Baseline Features	3
Audio recording Audio live monitor Audio play	• The unified network platform performs dual audio stream recording of conversations (that is, it records both sides of the conversation as separate but correlated entities), facilitating speech analytics.
	<ul> <li>Audio recording is lossless (that is, no data is thrown out), helping ensure that each recording is of the highest possible quality.</li> </ul>
	• Live monitoring allows customer care supervisors to listen to a caller or agent conversation even while the conversation is being recorded.
	<ul> <li>Audio play functions support straightforward playback of recorded conversations.</li> </ul>
Single-party video recording	<ul> <li>The unified network platform supports single-party video recording (for example, video blogging).</li> </ul>
Video conversation recording	<ul> <li>MediaSense uses the media forking capability of Cisco Unified Border Element (CUBE) to record up to two video and two audio tracks per conversation. Video can be recorded up to 1080p resolution, and recorded video and audio tracks can be played back using MediaSense or exported to other systems.</li> </ul>
Video on hold (VoH)	• MediaSense supports streaming video when a call is put on hold by Cisco Unified Communications Manager.
Video in queue (ViQ)	<ul> <li>MediaSense performs upload and streaming of prerecorded video files to provide ViQ to callers. This feature allows businesses to provide information and advertising to callers waiting for a video-enabled agent or expert. For information about supported video endpoints, consult the Cisco MediaSense Solution Reference Network Design at: <a href="http://www.cisco.com/en/US/products/ps11389/products_implementation_design_guides_list.html">http://www.cisco.com/en/US/products/ps11389/products_implementation_design_guides_list.html</a>.</li> </ul>
Video auto-attendant	<ul> <li>MediaSense can upload recorded video greetings to Cisco Unity Connection. The audio text manager (ATM) tool has been enhanced to enable uploaded videos to be used for Cisco Unity Connection auto-attendant functions.</li> </ul>
Remote expert recording	<ul> <li>MediaSense provides audio-only recording of calls from select video devices in remote expert scenarios (for example, a customer at a branch office or retail site consults a remote agent through a video kiosk).</li> </ul>
	<b>Note:</b> CUBE is required to provide the audio forking (splitting). For information about supported video devices and Cisco IOS <sup>®</sup> Software Release versions, consult the Cisco MediaSense Solution Reference Network Design at: <a href="http://www.cisco.com/en/US/products/ps11389/products_implementation_design_guides_list.html">http://www.cisco.com/en/US/products/ps11389/products_implementation_design_guides_list.html</a> .
Open Web 2.0 APIs	<ul> <li>APIs simplify the development and integration of value-added applications by Cisco partners.</li> <li>APIs are at a high or conceptual level, in effect hiding the complexity of the underlying architecture and functions and reducing the need for detailed telephony or recording expertise, thereby allowing Cisco partners to take advantage of pervasive web developer talent to create speech and video search, playback, analytics, and live monitoring applications.</li> </ul>
Streaming support	<ul> <li>The solution uses forking of the media stream of the conversation, which supports live monitor and the use of real-time audio and video analytics applications, even during recording.</li> <li>Real-Time Streaming Protocol (RTSP) support provides fast-forward and rewind "seek" capabilities during playback of recorded media, plus live monitoring support.</li> </ul>
	Note: Separate applications are required to control the live monitoring, search, and playback functions.
Media Access Control (MAC)	<ul> <li>Load balancing between MediaSense servers for record and playback optimizes platform resources. Controlled access to media streams helps ensure the security of conversations.</li> </ul>
Playback: General	<ul> <li>Playback of recorded media is supported through multiple methods:</li> <li>RTSP</li> <li>HTTP, by direct access to the raw recording (also known as "fast HTTP" access), or by transcoding to Advanced Audio Coding (AAC) in an MP4 container</li> </ul>
Search and Play	<ul> <li>This built-in application makes MediaSense a complete recording solution for many businesses. If more capabilities are required, however, MediaSense still enables best-in-class recording and analytics applications from a variety of Cisco technology partners. Built-in search-and-play functions of Cisco MediaSense include:</li> <li>Compound searches and search by tag</li> <li>Native Cisco Finesse desktop search gadget, which includes search by agent ID</li> <li>Enhanced media player</li> <li>Support for AAC playback</li> <li>Ability to save media files as .way or MP4 files</li> </ul>

Feature	Benefits
	<ul> <li>Administrators can control whether recording playback is through the traditional Java applet download or optionally using HTML5 in-browser play. Note: Archived recordings can be played back only by using the HTML5 in-browser method.</li> </ul>
	<ul> <li>You can search for recordings by various types of agent data, such as agent ID, agent extension, or agent first or last name.</li> </ul>
	<ul> <li>Administrators can configure the specific agent data to be displayed with recordings.</li> </ul>
Scalability	<ul> <li>The Cisco MediaSense platform supports up to 1000 simultaneous audio sessions per MediaSense cluster, where a session includes recording, playback, and live streaming.</li> </ul>
Supported Applications	
SolutionsPlus applications	<ul> <li>Recording and quality-management applications from Calabrio and NICE are now offered with MediaSense on the Cisco Price List through the SolutionsPlus program. Analytics applications from NICE are also offered with MediaSense through this program.</li> </ul>
Third-party applications	<ul> <li>Third-party applications (for example, for speech or video analytics) taking advantage of the open APIs of the product are supported through the Cisco Developer Network. For information about supported application partners, visit the Cisco Developer Network at: <a href="https://marketplace.cisco.com/catalog">https://marketplace.cisco.com/catalog</a>.</li> </ul>
	<ul> <li>A list of Cisco technology partners that have announced products and support for Cisco MediaSense is available at: <u>https://communities.cisco.com/docs/DOC-25924</u>.</li> </ul>
Media Capture	
Audio	<ul> <li>You can make recordings for the most common uncompressed and compressed audio formats, including G.711 a-law, mu-law, G.722, and G.729a/b.</li> </ul>
Video	Video recording is supported for MPEG-4 AVC/H.264.
	MediaSense supports video resolutions up to and including 1080p.
Media Storage and Manage	ement
Basic archival of recordings	<ul> <li>Cisco MediaSense can archive old recordings to secure FTP (SFTP) locations. The recordings are exported as MP4 files, along with associated metadata in text file format, allowing easy search capability.</li> </ul>
Fibre Channel storage area network (SAN)	<ul> <li>MediaSense supports Fibre Channel SAN, providing gigabit-level recording speeds over fiber-optic cable and traditional twisted-pair copper wire.</li> </ul>
	• This feature supports extended storage of recordings in a manner consistent with Cisco data center solutions.
SAN storage capacity	The Cisco MediaSense platform supports SAN storage of up to 60 terabytes.
Media-retention rules	<ul> <li>Retention policies provide storage for a configurable period, with automated deletion on a rolling basis (for example, every day all recordings older than a specified number of days are deleted).</li> </ul>
	<ul> <li>Operating modes allow you to decide whether to optimize storage for new conversations ("recording priority") or preserve existing ones ("retention priority").</li> </ul>
Encoding and export	<ul> <li>You can transcode recorded audio to AAC with an MP4 container, enabling easy export and access by other applications.</li> </ul>
Application APIs	Application APIs provide straightforward functions to delete or copy recorded media.
Metadata Storage and Sea	rch
Associate recording sessions with calls	• Metadata is associated with each recording session, enabling easy search by any of multiple criteria.
Query API	An API allows external applications to search for recorded and live calls.
Tagging API	<ul> <li>An API allows real-time tagging of calls to facilitate subsequent search and playback. For example, a customer service agent could tag a call as being associated with a certain type of technical or sales support.</li> </ul>
Operating Environment	
Cisco Unified Communications Voice Operating System (VOS) 9.0	<ul> <li>MediaSense supports the standard Cisco Unified Communications VOS, providing a common interface and consistent operation, administration, management, and provisioning (OAM&amp;P) with other Cisco products.</li> </ul>
Cisco Unified Computing System <sup>™</sup> (Cisco UCS <sup>®</sup> )	• The cost per server is lower with Cisco UCS servers.
C-Series and B-Series servers	

Feature	Benefits
Browser support	<ul> <li>Support for Internet Explorer Versions 9 and 11.</li> </ul>
	• Support for Firefox Versions 24 and later.
VMware support	Support for VMware ESXi 5.5 offers more deployment options on fewer boxes.
Enhanced virtualization	<ul> <li>More flexible configuration and implementation of MediaSense on virtual machines is supported, including resource reservation to enable the use of multiple virtual machines on the same server. MediaSense is deployable on select HP and IBM servers in addition to Cisco UCS servers. Server specifications are located at: <a href="http://docwiki.cisco.com/wiki/UC">http://docwiki.cisco.com/wiki/UC</a> Virtualization Supported Hardware.</li></ul>
Product Compatibility	
Phones	<ul> <li>Recording is supported with the Cisco Unified Communications Manager Session Initiation Protocol (SIP) recording API, using phones with built-in bridge media forking (the phone splits or "forks" of the media to be recorded). Supported phone models are listed at: <u>http://developer.cisco.com/web/sip/wikidocs/bibdevices</u>.</li> </ul>
Expanded network- based recording	<ul> <li>Using capabilities in Cisco Unified Communications Manager Version 10.0 (and later), MediaSense can record calls between endpoints registered to Cisco Unified Communications Manager, regardless of the devices or their locations. This feature allows use of a convenient, centralized recording policy.</li> </ul>
Cisco Unified Border Element Enterprise Edition recording	<ul> <li>Network-based recording is supported with CUBE Enterprise Edition using standard dial peers to fork session media to the MediaSense platform.</li> <li>Use of CUBE Enterprise Edition provides highly efficient recording of conversations to and from remote endpoints, supporting a diverse range of recording scenarios including mobile compliance, home customer care agents, hosted recording, outsourced contact centers, and third-party devices.</li> <li>CUBE Enterprise Edition supports end-to-end call recording, regardless of where the call might be transferred to. It also enables centralized recording architectures, helping lower operating costs.</li> </ul>
Router-blade deployment	<ul> <li>You can deploy MediaSense on Cisco UCS E-Series Server modules with Cisco Integrated Services Routers Generation 2 (ISR G2) routers, so you can use the application efficiently in small-scale and distributed branch- office deployments on a local-site router.</li> <li>Note: Media forking still occurs at the phone or at CUBE, as described in this section of this table. For information about supported server modules, consult the Cisco MediaSense Solution Reference Network Design at: http://www.cisco.com/en/US/products/ps11389/products implementation design guides list.html.</li> </ul>
Recording with Cisco Unified Contact Center Express (UCCX)	<ul> <li>Cisco UCCX agents and supervisors can make recordings with MediaSense through the UCCX workflow editor (for selective call recording) or Unified Communications Manager (for 100% call recording). Search and play of recordings is through the MediaSense Search and Play application, a gadget on the Cisco Finesse agent desktop.</li> </ul>
Call association with UCCX	<ul> <li>MediaSense supports association of calls with UCCX, allowing easy search and play of recordings of related UCCX calls.</li> </ul>
Agent association with UCCX	<ul> <li>MediaSense collects and stores UCCX agent information as metadata, allowing agent information such as agent ID to be used when searching and playing recordings.</li> </ul>
Cisco Unity Connection video greeting	<ul> <li>Cisco Unity Connection users with video endpoints can use MediaSense to record a video greeting to callers for play when they're not available.</li> </ul>
Architecture	
High availability and failover	<ul> <li>The network-based architecture of the platform provides robust failover capabilities. For example, if a network recording element is taken out of service, subsequent calls can still be recorded using different network assets.</li> <li>Active-active server load balancing and failover are supported for the capture layer and client applications.</li> </ul>
Management	
Cisco Real-Time Monitoring Tool (RTMT)	<ul> <li>Operational management is enhanced through integration with RTMT, providing platform-specific alerts to simplify maintenance.</li> </ul>
Simple Network Management Protocol (SNMP)	• SNMP with an associated MIB is supported through the VOS.
Upgrades	Built-in upgrade support enables straightforward migration to newer versions of the platform.
Call-legs association	<ul> <li>Contact center supervisors can view all legs of a call as associated entities, for all recording topologies (that is, using the built-in bridge of the phone, CUBE dial-peer forking, and network-based Cisco Unified Communications Manager).</li> </ul>
Reporting	
Cisco Unified Intelligence Center	• You can optionally purchase Cisco Unified Intelligence Center to create customizable reports of recording events.
Unified Communications	Integration
Cisco solution releases	<ul> <li>This product is fully tested with other Cisco Unified Communications products (for example, Cisco Unified Communications Manager) as part of each Cisco Unified Communications release, helping assure customers of robust, fully supported end-to-end solutions.</li> </ul>

# Platform Support, Compatibility, and Specifications

Consult the hardware and system software specifications for hardware and operating system requirements for compatibility with other Cisco and third-party products, and for additional product specifications.

#### Licensing

This product is licensed by the number of concurrent recordings.

# Warranty Information

You can find warranty information on Cisco.com at the Product Warranties page.

# **Ordering Information**

To place an order, visit the Cisco Ordering Home Page. To download software, visit the Cisco Software Center.

# **Cisco Services**

Cisco Services adapt to market changes while increasing productivity, improving competitive advantage, and delivering a rich-media experience across any workspace.

The combined strengths of Cisco and our partners provide a portfolio of services that can help you prepare your infrastructure for future changes aligning to long-term business goals.

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For more information about Cisco Unified Contact Center Services, please visit <u>http://www.cisco.com/go/uccservices</u>.

# **Cisco Technology Partners**

Many of our technology partners have announced products and support for MediaSense. A current list is available at: <u>https://communities.cisco.com/docs/DOC-25924</u>.

# **Cisco ATP Partners**

Cisco Authorized Technology Provider (ATP) Partners have completed rigorous training and validation of their knowledge of Cisco contact center products and can offer customers some or all of the following capabilities:

- Planning
- Design
- Implementation
- Operation
- Optimization
- Product resale
- Professional services
- Post sale support

Information about our contact center ATP partners is available at: http://www.cisco.com/web/partners/pr11/atp/ucc\_enterprise/index.html.

# **Cisco Developer Network Partners**

The Cisco Developer Network program offers a formalized means for developers to certify value-added applications and solutions for use with this product. Information about Cisco Developer Network partners is available at <a href="https://marketplace.cisco.com/catalog">https://marketplace.cisco.com/catalog</a>.

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