



Customer Guide to Cisco MediaSense Integrations

www.incontact.com

Recording

Customer Guide to Cisco MediaSense Integrations

- **Revision** — March 2016
- **About inContact** — inContact (NASDAQ: [SAAS](#)) is leader in cloud contact center software, helping organizations around the globe create customer and contact center employee experiences that are more personalized, more empowering and more engaging today, tomorrow and in the future. inContact focuses on continuous innovation and is the only provider to offer core contact center infrastructure, workforce optimization plus an enterprise-class telecommunications network for the most complete customer journey management. inContact offers customers a choice of deployment options. To learn more, visit www.inContact.com.
- **Copyright** — ©2016 inContact, Inc.
- **Disclaimer** — inContact reserves the right to update or append this document, as needed.
- **Contact** — Send suggestions or corrections regarding this guide to documentationsrequest-discover@incontact.com.

Table of Contents

Introduction	5
Audience.....	5
Goals.....	5
Assumptions.....	5
Need-to-Knows	5
Terminology.....	6
Customer Responsibilities	6
Cisco MediaSense Integration Overview	7
Supported Configurations	7
Known Limitations and Considerations.....	9
Cisco Requirements.....	10
Hardware	10
Software	10
Licensing	10
inContact WFO Requirements.....	10
Network.....	10
Hardware	10
Software	10
Licensing	10
Customer Configuration Overview.....	11
Customer Integration Tasks	12
Customer Administration Tasks.....	13

Document Revision History 14

Introduction

Audience

This document is written for customers and prospective customers interested in using inContact WFO Call Recording in a Cisco MediaSense telephony environment. Readers who will perform procedures in this guide should have a basic level of familiarity with IP telephony, general networking, the Windows operating system, Cisco MediaSense, and inContact WFO.

Goals

The goal of this document is to provide knowledge, reference, and procedural information necessary to understand a proposed Cisco/inContact WFO integration using MediaSense, and to configure the Cisco equipment to support the integration.

This document is NOT intended as a specific system or network design document. If further clarification is needed, consult with your telephony vendor(s).

Assumptions

This document assumes the reader has access to an inContact WFO Sales Engineer, Project Manager, or other resource to assist in applying this information to the reader's environment.

Need-to-Knows



To facilitate ease of use, this document takes advantage of PDF bookmarks. By opening the bookmark pane, readers can easily refer to the portion(s) of the guide that are relevant to their needs. For example, the inContact WFO application administrator can click on the **Customer Administration Tasks** bookmark to jump directly to that section.

To expand and collapse the bookmark pane, click on the bookmark icon on the left side of the document window.

For questions related to inContact WFO configuration, consult the inContact WFO installation team.

Customer Guide to Cisco MediaSense Integrations

Cisco MediaSense can also be used with Cisco TAPI-BiB, Cisco UCCX, or both. In this scenario, refer to the *inContact WFO Customer Guide to Cisco TAPI-BiB Integrations*, the *inContact WFO Customer Guide to Cisco UCCX Integrations*, or both, as appropriate.

Terminology

To ensure a common frame of reference, this guide uses the following terms:

- **CUCM:** Cisco Unified Communications Manager. CUCM is a software-based call-processing system that includes gateways, routers, phones, voicemail boxes, and a variety of other VoIP components. Sometimes referred to as CallManager.
- **MediaSense:** Cisco's open-standards platform that allows for recording on the network level rather than the device level.
- **CUBE:** Cisco Unified Border Element. CUBE is a session border controller that provides voice and video connectivity from the enterprise IP network to service provider SIP trunks. Sometimes used with MediaSense.
- **UCCE:** Unified Contact Center Enterprise. UCCE delivers intelligent contact routing, call treatment, network-to-desktop CTI, and multichannel contact management over an IP infrastructure. It combines multichannel ACD functionality with IP telephony in a single solution.
- **UCCX:** Unified Contact Center Express. UCCX is a single-server customer interaction management solution for up to 400 agents.
- **TAPI:** Telephony Application Programming Interface. Like JTAPI, Cisco TAPI allows custom applications to monitor and interact with the CUCM and Cisco IP phones.
- **BiB:** Built-in Bridge. Capability of some Cisco IP phone models to fork the media stream and deliver audio from both sides of a phone call to an alternate destination (for example, inContact WFO).

Customer Responsibilities

You are responsible for supplying the physical and/or IP connection(s) to your telephone system and LAN, and for obtaining and loading any licensing required by Cisco. You are also responsible for configuring Cisco system components to support the recording integration. See the [Customer Integration Tasks](#) section for additional information.

Cisco MediaSense Integration Overview

In the Cisco MediaSense integration, calls are actually recorded by the Cisco MediaSense platform. Audio files are downloaded from MediaSense to inContact WFO via an HTTP session after the files are complete. inContact WFO combines these files with call metadata and (if applicable) a screen capture file to create a standard CCA file which is then available for playback, quality monitoring, and other purposes. inContact WFO is completely dependent on MediaSense for the audio and metadata.

i inContact WFO receives a confirmation if the entire audio file is downloaded successfully; otherwise, it attempts to download the file again.

inContact WFO tracks calls based on last-call-retrieval time to identify periods when calls were not downloaded due to **CTI Core** failure or network failure. If it identifies such a period, it tries three times to download calls for that period.

inContact WFO makes three attempts to download a call recording file regardless of the reason for the download failures.

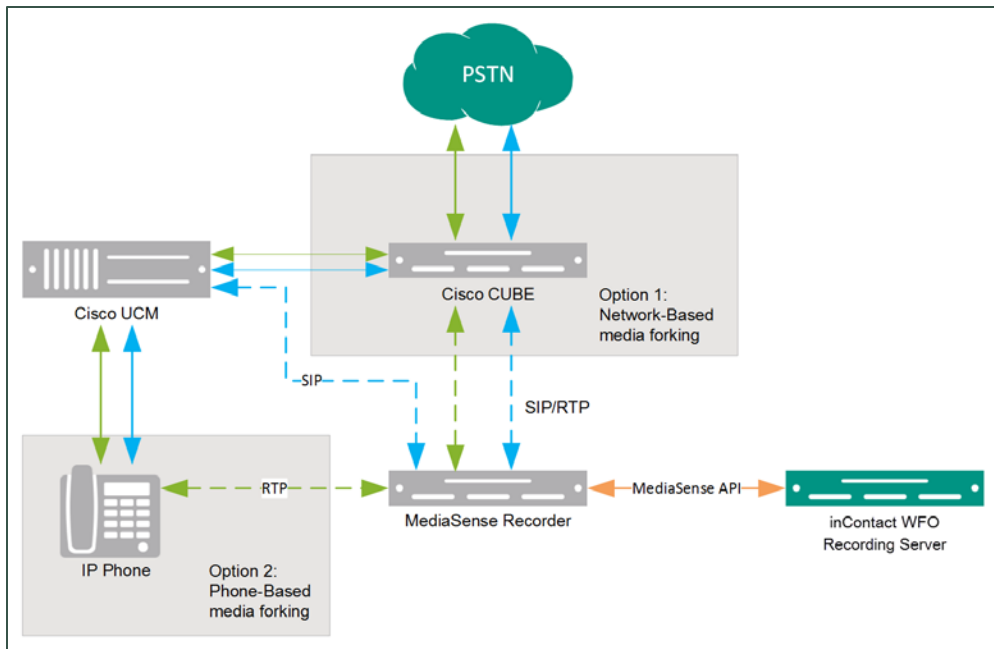
Supported Configurations

inContact WFO supports these configurations for integration with Cisco MediaSense:

- **Network-based media forking:** calls are recorded by MediaSense on the network level, via a SIP trunk from either the Cisco UCM or Cisco CUBE. MediaSense sends inContact WFO a call start event, call update events (if they occur), and a call end event. inContact WFO uses the first event to determine whether live monitoring or screen capture should occur, and uses the call end event to determine whether it should request the audio file from MediaSense. In this configuration, inContact WFO can also integrate with CUCM via TAPI-BiB and UCCX for additional call metadata. This would require you to complete the tasks specified for those integrations in addition to tasks in this guide.
- **Phone-based media forking:** calls are forwarded to MediaSense using the built-in bridge capability of some Cisco phones, based on call events from the UCM, and MediaSense records the calls. The same call events are sent to inContact WFO and the same decisions are made regarding screen capture, live monitoring, and whether to request the audio file as well as whether to collect CTI data from the Cisco UCM. In this configuration, inContact WFO can also integrate with CUCM via TAPI-BiB and UCCE or UCCX for additional call metadata. This would require you to complete the tasks specified for those integrations in addition to tasks in this guide.

The following diagram shows both options, although a typical system would use one or the other.

Customer Guide to Cisco MediaSense Integrations



General architectural example of the Cisco MediaSense integration

Component	Function
Cisco MediaSense Recorder	Records calls and sends call start, update, and end events to inContact WFO. Receives requests from inContact WFO to copy call records, enable live monitoring, and enable screen capture. Deletes call records after they are successfully copied. Integration is done via the MediaSense API.
Cisco CUBE	Session border controller that provides voice and video connectivity from the enterprise IP network to service provider SIP trunks. May be used with network-based media forking as the audio source.
Cisco UCM	Optional in this integration. May be used with network-based media forking as the audio source. May be used with either network-based or phone-based media forking to provide events and metadata.
inContact WFO Server	The inContact WFO server performs these integration-specific functions: <ul style="list-style-type: none"> • Requests call audio files from MediaSense. • Sends requests to MediaSense to delete unused call records. • Manages live monitoring of agents. • Captures agents' desktop screens. • Captures call metadata from CUCM, UCCX, or UCCE if applicable. • Combines audio, metadata, and screen capture into one file.

Known Limitations and Considerations

- Configuration settings on the CUCM or CUBE determine which calls are recorded.
- With CUCM, phones must have automatic call recording enabled, which records every call. inContact WFO can be configured to selectively retain some calls and purge the remainder.
- Customers must plan the available MediaSense disk space for recordings and how long those recordings will be retained.
- All call recording requires bandwidth. Neither MediaSense nor inContact WFO can control when audio files are sent to inContact WFO. Customers should carefully consider the network bandwidth needed for copying call files and the possibility of spikes in bandwidth usage if multiple or large files are copied at one time.
- MediaSense does not support real-time blackouts or call-associated blackouts.
- MediaSense does not support API or On-Demand initiated recording.
- When the source audio is CUCM, MediaSense creates separate recording files for calls that are transferred, forwarded, put on hold, conferenced, or some combination of these. In other words, what a user experiences as one call may be recorded in multiple files. There is no way to combine the separate files into one. Users must listen to each call recording in inContact WFO separately.
- With CUBE, MediaSense makes one recording regardless of holds or transfers. There is no way to separate files.
- Additional software and configuration of MediaSense is required to determine whether it is actively recording calls. Not knowing whether MediaSense is recording may make troubleshooting difficult.
- There is typically a delay of seven to ten seconds when initiating live monitoring.
- For deployments using CUCM and BiB phones, inContact WFO can also integrate with the CUCM using TAPI, as well as with Cisco UCCX or UCCE, for additional metadata.
- For deployments using Cisco CUBE, inContact WFO can integrate with the CUCM using TAPI, as well as with Cisco UCCX, for additional metadata.
- For deployments with Cisco UCCX or UCCE, TAPI is required.
- For deployments using Cisco CUBE, inContact WFO does not receive call direction information (in other words, indication of whether the call was inbound or outbound).
- For deployments using Cisco CUBE, screen capture and live monitoring are not supported.

Cisco Requirements

Hardware

This integration requires no additional hardware other than that outlined in the Cisco documentation.

Software

- Cisco MediaSense v9.x

Licensing

This integration does not require any additional Cisco licenses for inContact WFO.

See Cisco documentation for licenses needed for recording with MediaSense.

inContact WFO Requirements

Network

Sufficient network bandwidth is required to support file transfer between the MediaSense Recorder and inContact WFO.

Hardware

inContact WFO hardware requirements vary depending on system configurations. Appropriate hardware is identified during the system implementation process.

Software

- inContact WFO, v5.6 or higher

Licensing

Your inContact WFO Sales Engineer will provide appropriate licensing information.

Customer Configuration Overview

The following table provides a high-level overview of the customer configuration steps in Cisco MediaSense integrations.

Customer Configuration Steps for Cisco MediaSense Integrations	
1	Complete all necessary physical and IP connections between the recording server(s) and the LAN.
2	Obtain any necessary Cisco software and licensing.
3	Install and configure all Cisco components according to Cisco's instructions, including MediaSense, UCM, and CUBE as needed.
4	Create a user account for inContact WFO on the UCM and provision that account to work with MediaSense. Refer to Cisco documentation for procedural details.
5	Provide the following information to the inContact WFO deployment team: <ul style="list-style-type: none"> • Username for the CUCM account created for inContact WFO to use • Password associated with the CUCM account created for inContact WFO to use • IP address of the MediaSense server

Customer Integration Tasks

Recordings are copied from the MediaSense recorder to inContact WFO by means of inContact WFO's integration to the MediaSense API. If MediaSense is recording as planned, there are no customer-specific tasks required for this integration other than the inContact WFO account configuration listed in the [Customer Configuration Overview](#).

If your site is using MediaSense together with Cisco TAPI-BiB, UCCX, UCCE, or some combination of these, refer to the *inContact WFO Customer Guide to Cisco TAPI-BiB Integrations*, the *inContact WFO Customer Guide to Cisco UCCX Integrations*, or the *inContact WFO Customer Guide to Cisco UCCE Integrations*, as appropriate.

Customer Administration Tasks

Recordings are copied from the MediaSense recorder to inContact WFO by means of inContact WFO's integration to the MediaSense API. If MediaSense is recording as desired, there are typically no customer-specific tasks required for this integration.

Copying of call records from MediaSense to inContact WFO is controlled by a recording schedule. Only call records that match the schedule criteria are copied. The schedule **Type** can be *Set Number*, *Percentage*, or *Agent Percentage*. Call recording schedules and screen capture schedules use Device ID (that is, the identifier associated with the physical phone) and Device Alias (that is, the identifier associated with the agent). These options vary depending on your configuration of CUCM, UCCX, and UCCE.

If calls are being missed, refer to the **Recording Schedules** topics in the online help for inContact WFO or contact inContact WFO Support for assistance.

Document Revision History

Revision	Change Description	Effective Date
0	Initial version for this release	2016-04-08