



UPTIVITY
Agile WFO for SMB

Customer Guide to Avaya DMS- MLS Integrations

March 2017

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Customer Guide to Avaya DMS-MLS Integrations

Version: This guide should be used with NICE Uptivity (formerly Uptivity WFO Premise) v5.6 and higher.

Revision: March 2017

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Introduction

Audience

This document is written for customers and prospective customers interested in using Uptivity Call Recording in an Avaya DMS-MLS 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, Avaya MLS, and Uptivity.

Goals

The goal of this document is to provide knowledge, reference, and procedural information necessary to understand a proposed Avaya/Uptivity integration using Avaya DMS, and to configure the Avaya 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 a NICE Uptivity 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 Uptivity 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 information and procedures related to Uptivity configuration, consult the Uptivity installation team.

Terminology

To ensure a common frame of reference, this guide uses the following terms in conjunction with this Avaya integration:

- **AACC** — Avaya Aura Contact Center. AACC is an Avaya contact center product that is common in VoIP environments and in multi-channel call centers due to its support for non-voice interactions.
- **AST** — Associated Set. This is a type of license available from Avaya. This integration requires either AST or CCMS DN licensing.
- **CCMS** — Contact Center Manager Server. Core software component of the AACC.
- **CS1000** — Legacy Nortel contact center PBX. It has been rebranded as Avaya and is still in use.
- **DMS** — Dual Media Stream. This functionality of the Avaya MLS server sends a duplicate stream of audio for every call and can be used for active recording.
- **MLS** — Meridian Link Services. MLS is a legacy Nortel product that has been rebranded as Avaya and is still widely used.

Customer Responsibilities

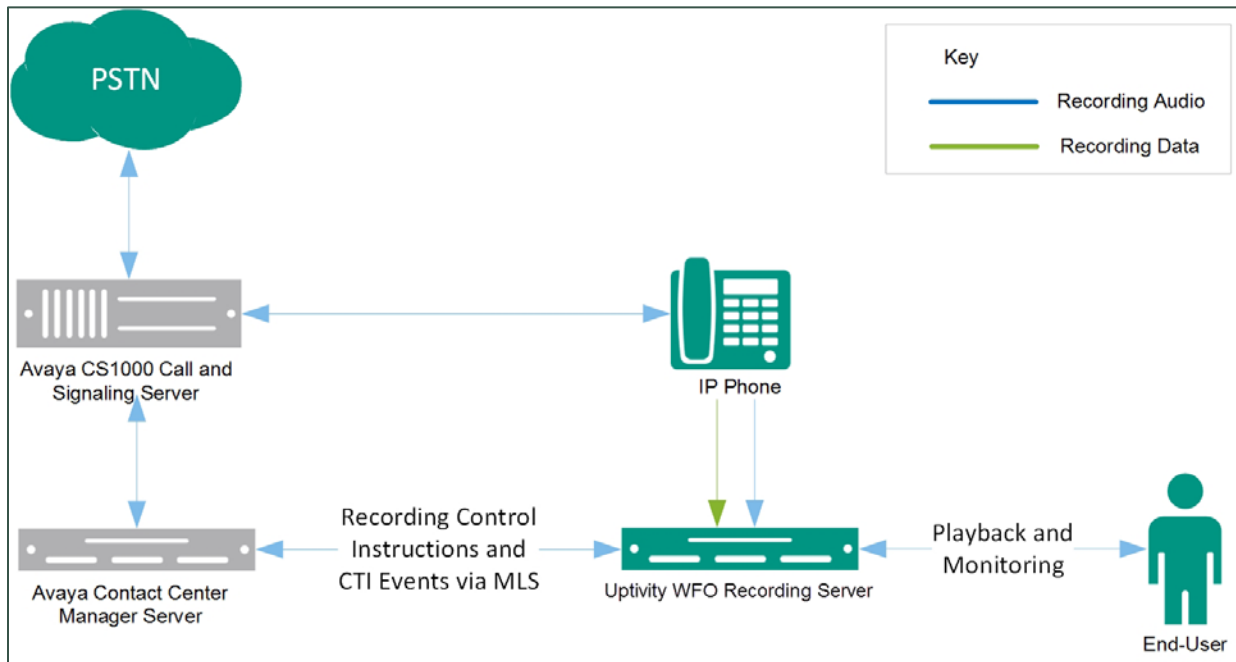
You are responsible for supplying the physical connection(s), the IP connection(s), or both to your telephone system, as well as any licensing required by Avaya. You may also be responsible for configuring Avaya system components to support the recording integration. See your specific integration in the [Customer Integration Tasks](#) section for additional information.

What's New in this Version

- Uptivity now supports recording all DNs for a given phone set. This functionality requires Avaya CCMS DN licensing instead of Avaya AST licensing. See [Licensing](#).

Avaya DMS-MLS Integration Overview

The Avaya DMS-MLS integration uses an active method for acquiring audio. Uptivity relies on the Avaya DMS functionality to send it the audio to be recorded. RTP streams are forwarded directly from the phones to the Uptivity server without the need for port mirroring. Uptivity uses MLS for CTI integration which provides call control events and metadata. MLS also provides the services necessary to direct the phones to forward audio streams.



General architectural diagram of an Avaya DMS-MLS integration

Component	Function
Avaya CS 1000	PBX component that controls the audio being presented to and from digital phones, IP phones, or both.
Avaya CCMS	Supports MLS and provides CTI call events such as start/stop to the Uptivity recording server.
Uptivity Recording Server	Receives call control events, business data, and audio. Provides a CTI interface for audio recording. Creates call records and manages recording storage. May host the Web Portal for playback and system administration.

Avaya Requirements

Hardware

- Avaya Communication Server (CS) 1000
- Phase II or higher IP Phones

Software

- Succession/CS1000 Release 4.5 – 7.5
- Contact Center Manager Server (CCMS) 6.0 – 7.5

Licensing

AST or CCMS DN licensing is required for phones. With AST licensing, Uptivity can record a maximum of two (2) DNs per phone set. CCMS DN licensing allows recording of all DNs associated with a given phone set.

Uptivity Requirements

Hardware

Uptivity hardware requirements vary depending on system configurations. Appropriate hardware is identified during the system implementation process. For additional information, search online help for keyword *site requirements*.

Software

- NICE Uptivity version 5.6 or higher

Licensing

- One (1) Voice seat license per named agent
- Additional licensing may be required if the system includes optional features (for example, inContact Screen Recording)

Customer Configuration Overview

The following table provides a high-level overview of the customer configuration steps in Avaya DMS-MLS integrations. Links are provided for procedures covered in this guide.

Customer Configuration Steps for Avaya DMS-MLS Integrations	
1	Complete all necessary physical and IP connections between the recording server(s) and the LAN.
2	Obtain any necessary Avaya software and licensing.
3	Enable the IPIE Prompt on the CS1000.
4	Configure IP Call Recording CLS.
5	Configure Avaya telephony settings and Generate a DN Database List.
6	Configure the Avaya MLS server to use DMS for all phones you wish to record. Consult your Avaya vendor for more information.

Customer Integration Tasks

The information in this section is provided for your reference only. Detailed steps for the Avaya configuration can be found in Avaya's documentation, which is available on the Avaya website. You should always use the appropriate documentation from Avaya to install and configure Avaya components.

Enable the IPIE Prompt on the CS1000

The IPIE Prompt on the CS1000 enables or disables IP Call Recording on a system-wide basis, and is disabled by default. The Prompt must be **enabled** for this integration. When enabled, the PBX sends a modified Application Module Link (AML) message that identifies the IP endpoint for each call. The IPIE Prompt is in LD 17 under system parameters (PARM).

Configure IP Call Recording CLS

The CLS ICRD/ICRA responses are used to configure whether or not an IP phone allows call recording. The CLS must be set to ICRA for each IP phone to allow call recording. You can change the CLS in LD 11.

To determine whether a phone is configured with the proper CLS, you can perform an LD 20 printout. The **ICRA** flag will be listed in the CLS. To obtain a count of how many phones have the ICRA CLS enabled, view the ICRA/ICRD responses to the FEAT prompt in LD 81.



If you apply the ICRA class of service to a non-IP Phone, error SCH1599 message is generated.

If you change the class of service on an IP phone during an active call, the Call Server will disconnect the call to apply the change.

As of Avaya (Nortel) CS1000 Release 7.0, the ICRA/ICRD classes of service have been replaced with RECA/RECD, respectively. Attempting to use the older classes in newer release versions will result in error SCH2381. For details, see Avaya's *Software Input Output Reference –System Messages* guide for Avaya (Nortel) Communication Server 1000 Release 7.0.

Generate a DN Database List

In an Avaya CS1000 environment, each phone can have different DNs (extension numbers) assigned to it. To record ACD calls, the ACID of each phone is needed. The ACID roughly equates to a position ID or line appearance – when an agent signs into the phone, their agent number is attached to this ACID.

Phone have DNs of their own, which are used when an agent places a call or when a non-ACD call is received. These DNs are usually listed with a TYPE parameter of "SL1". Avaya MLS requires that these monitors be started in a different way.

ACDNs can also be monitored for additional call detail. The ACDN determines the pool of agents to which calls are distributed. This is equivalent to an ACD queue.

You will need to provide each of these values for any phone you wish to record to your Uptivity Installation team. Obtaining the DN database that contains these values requires console access to and administrative privileges for the Avaya CS1000.

i The number of DNs that can be recorded per phone may be limited by your Avaya licensing. For more information, see [Licensing](#).

inContact recommends that you use a terminal program (such as PuTTY or SecureCRT) with a buffer capture feature to capture the printout of this listing for later use. Within such a program, set up and run the following command on the Avaya console:

- **Overlay Number** — LD 20
- **REQ** — PRT
- **TYPE** — DNB

The remaining fields can be left blank.

Customer Administration Tasks

During ongoing use of the system, your Uptivity administrator may need to configure new channels or reconfigure existing channels. At those times, this integration requires changes to the **Voice Boards** page and to the CTI monitors in the **Web Portal**.

For more information on voice board and related tasks, search online help for keyword *voice boards*.

Channel Configuration Settings for Voice Boards

This section provides a reference to channel settings that must be configured for the Avaya DMS-MLS integration. You should refer to this section whenever you add new channels to your NICE Uptivity system.

Any other voice board changes should only be done under direct supervision from Uptivity WFO Support. Done incorrectly, voice board modifications can have serious negative impact to your system. In addition, altering the hardware configuration of your system may void your warranty.

The following settings apply when configuring channels for Avaya DMS-MLS integrations:

Setting	Definition	Value
Assign	Used in deployments where physical devices and channels have a one-to-one correspondence, or to allocate specific channels to specific types of recording. For details, search online help for keyword <i>channel assignment</i> .	Concurrent Licensing: <i>Anything</i> Per-Seat Licensing: <i>Dedicated Record</i>
Assign Value	If Assign is set to <i>Anything</i> , leave this field blank. If Assign is set to a <i>Dedicated Record</i> option, enter the value for the corresponding device.	
Name	Enter an optional name for the channel that can be used in channel scripting.	

i You must restart the **CTI Core** service after any changes to voice boards, channels, or both.

CTI Monitors

In this integration, Uptivity requires a list of devices to monitor (CTI monitors). Any phone or device that should be monitored must be configured in this list.

With Avaya DMS-MLS, Uptivity monitors the **ACD/DN** for login/logoff events, the **Position ID** for ACD (incoming) calls, and the **PBX Extension** for direct and outbound calls. For related information, see [Generate a DN Database List](#).

When you add or reconfigure a channel, you must configure a CTI monitor for each of these values. The Avaya system differentiates the agent logged into the phone from the phone itself.

For more information on CTI monitor tasks, search online help for keyword *cti monitor*.

Document Revision History

Revision	Change Description	Effective Date
0	Initial version for this release	2015-04-30
1	Rebranded content.	2016-02-05
2	Enhanced description of required Avaya licensing.	2016-05-18
3	Rebranded for NICE Uptivity.	2017-03-31