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Customer Guide to Avaya DP-MLS Integrations

Version: This guide should be used with NICE Uptivity (formerly Uptivity WFO

Premise) v5.6 and higher.

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Introduction

Audience

This document is written for customers and prospective customers interested in using Uptivity Call Recording in an Avaya DP-MLS telephony environment. Readers who will perform procedures in this guide should have a basic level of familiarity with traditional wired telephony, general networking, the Windows operating system, Avaya MLS, and NICE Uptivity.

Goals

The goal of this document is to provide knowledge, reference, and procedural information necessary to understand a proposed Avaya/Uptivity integration using digital trunks and Avaya MLS, 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 an Uptivity Sales Engineer, Project Manager, or other resource to assist in applying this information to the reader's environment. It also assumes that the telephony trunks have been added to your Avaya PBX and are working correctly.

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.
- **CS1000** This is the legacy Nortel contact center PBX. It has been rebranded as Avaya and is still in use.
- **MLS** Meridian Link Services. MLS is a legacy Nortel product that has been rebranded as Avaya and is still widely used.
- **TDM** Time Division Multiplexing. Commonly-used as an acronym for traditional wired telephony, as opposed to VoIP.

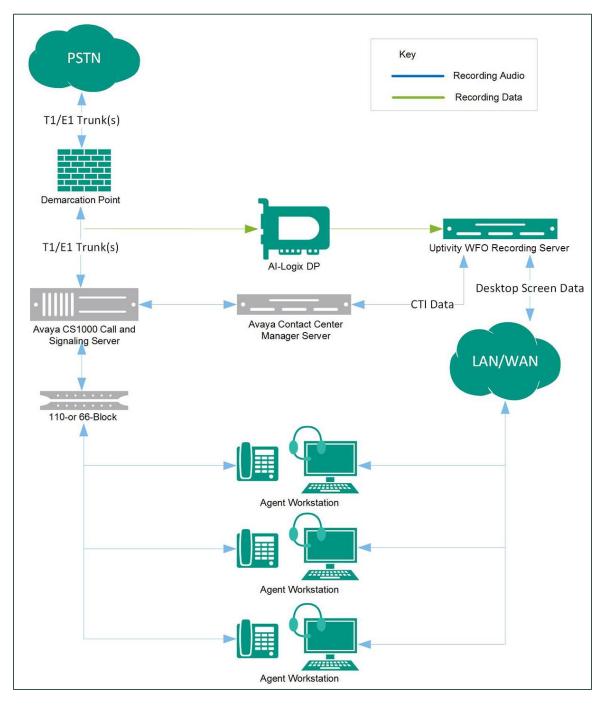
Customer Responsibilities

You are responsible for supplying the physical connection(s), 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 <u>Customer Integration Tasks</u> section for additional information.

If you supply the server hardware for the installation, then you are also responsible for installing the physical Ai-Logix cards in the server.

Avaya DP-MLS Integration Overview

The Avaya DP-MLS integration uses Ai-Logix passive tap (DP) cards to connect to a T1/E1 trunk as an audio source. Call control events and metadata are received from the MLS server.

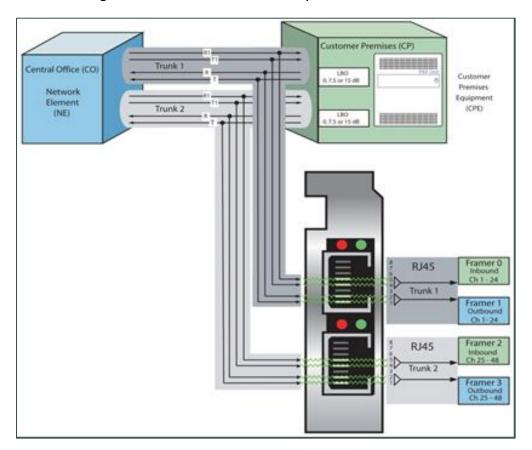


General architectural example of the Avaya DP-MLS integration with optional screen recording

Component	Function
Avaya Communication Server (CS) 1000	PBX component that controls the audio being presented to and from digital phones, IP phones, or both.
Avaya Contact Center Manager Server (CCMS)	Supports MLS and provides CTI call events such as start/stop to the Uptivity recording server.
AI-Logix DP Voice Board	Audio capture card(s) installed in 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 also host the Web Portal for playback and system administration.

Wiring Example

inContact recommends that the wiring tap be accomplished through use of a patch panel that will split one input connection into two output connections: one to the PBX and one to the Uptivity recording server. For more information, refer to AudioCodes documentation supplied with the Ai-Logix board or available from your installation team.



Wiring diagram for passive trunk tapping

Known Limitations

 The Avaya DP-MLS integration does not support the real-time blackout functionality in Uptivity.

Avaya Requirements

Hardware

• Avaya Communication Server (CS) 1000

Software

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

Licensing

 Contact your Avaya representative concerning licensing requirements for your specific installation.

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*.

Along with standard hardware, one or more of the following is specifically required for this integration based on the number of trunks to be recorded:

AudioCodes DP 6409 T1/E1 Passive Tap Call Recording Blade

This card is dual-port and can connect to up to two (2) T1/E1 trunks. The number of channels that can be recorded per trunk varies depending on the configuration of the trunk itself:

- **Single T1** − 24 channels (23 channels for ISDN-signaled T1)
- **Dual T1** 48 channels (46 channels for ISDN-signaled T1)
- Single E1 30 channels
- **Dual E1** 60 channels

Software

NICE Uptivity, version 5.6 or higher

Additional third-party software is required for the Ai-Logix digital trunk integration:

- AudioCodes SmartWORKS v3.11 5.4
- AudioCodes SmartWORKS v5.9 in MS 2012 environments

Licensing

- One (1) Voice seat license per named agent or
- One (1) Voice concurrent session license for each simultaneous call that will be recorded
- Additional licensing may be required if the system includes optional features (for example, Uptivity Screen Recording)

Customer Configuration Overview

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

	Customer Configuration Steps for Avaya DP-MLS Integrations		
1	Install the Ai-Logix card(s) in customer-supplied server(s).		
2	Complete all necessary physical connections between the recording server(s) and the telephony system.		
3	Complete all necessary physical and IP connections between the recording server(s) and the LAN.		
4	Obtain any necessary Avaya software and licensing.		
5	Generate a TN Database List and provide the information to the Uptivity installation team.		
6	Generate a DN Database List and provide the information to the Uptivity installation team.		

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.

Generate a TN Database List

You will need trunk number information to configure the trunk channels in the Avaya MLS CTI module on the Uptivity recording server.

To generate the database TN list, set up and run the following command on the Avaya console:

- Overlay Number LD 20
- REQ PRT
- TYPE TNB
- TN _tn of trunk_ (You can leave the TN value empty to get the full tn database.)

The remaining fields can be left blank.

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.

☑ Sometimes the member numbers do not go in proper order or what is provided by MLS does not match the trunk numbers. In these situations, you must dial through all channels of the trunk to match the TN sent by MLS with the channel on which the audio is heard.

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 must provide each of these values for any phone you want 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.

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**.

The number of voice board channels corresponds to the number of trunks configured on the physical Ai-Logix card. Adding channels may require purchase and installation of server hardware and Uptivity licensing. Contact Support for additional information.

For more information on voice board 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 DP-MLS integration. You should refer to this section whenever you add new channels to your Uptivity system.

Any other voice board changes should only be done under direct supervision from Uptivity 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 DP-MLS integrations:

Setting	Definition	Value
	This will already be configured unless you are adding a new Ai-Logix card. In that scenario, select the value from the drop-down list based on the trunk configuration:	
Number of	 23 – T1 ISDN for ISDN-signaled T1 trunks 	
Channels	 24 – T1 RBS for T1 trunks with Robbed-bit 	
	• 30 – E1 ISDN for ISDN-signaled E1 trunks	
	■ 30 - E1 RBS for E1 trunks with Robbed-bit	
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> .	Dedicated Record (Device)
Assign Value	Enter one PBX Trunk Member/Port ID per channel. This value is case sensitive.	
Desc	Enter an optional description for the channel.	

Selected
S

② 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.

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 monitors and related 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.	2016-03-07
3	Rebranded for NICE Uptivity.	2017-03-31