AVAYA

Avaya Solution and Interoperability Test Lab

Application Notes for VPI Empower R5.4 with Avaya Aura® Contact Center Release 6.3 and Avaya Communication Server 1000 Release 7.6 via Meridian Link Services – Issue 1.0

Abstract

These Application Notes describe a solution comprised of Avaya Aura® Contact Center Release 6.3 and VPI Empower R5.4. During the compliant testing, the VPI Empower R5.4 was able to connect to Contact Center Manager Server using Meridian Link Services, acquire and monitor keys of IP Phone, and record Voice over IP calls made from/to IP Phone of Avaya Communication Server 1000.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

RS; Reviewed:
SPOC 3/7/2014
Solution & Interoperability Test Lab Application Notes
©2014 Avaya Inc. All Rights Reserved.
1 of 16
Empower-AACC63

1. Introduction

The objective of this interoperability compliance testing is to verify that the VPI Empower R5.4 (hereafter referred as Empower) can successfully connect to the Avaya Aura® Contact Center Release 6.3 (hereafter referred as Contact Center) using Meridian Link Services (MLS) and record Voice over IP calls for the IP Phones of Avaya Communication Server 1000 Release 7.6 (hereafter referred as Communication Server 1000).

2. General Test Approach and Test Results

The general test approach was to verify that Empower is able to acquire and monitor keys of IP Phones of Communication Server 1000 by communicating with the MLS server of Contact Center system, duplicate the media stream of monitored IP Phone and save recorded calls.

2.1. Interoperability Compliance Testing

The focus of this compliance testing was to prove and verify that Empower was able to interoperate with Contact Center and Communication Server 1000 system. The following areas were tested:

- Empower successfully utilizes MLS to access the functionality of the Contact Center Manager Server (CCMS) and Communication Server 1000 to record all calls.
- Recording provides information of the Automated Call Distribution (ACD) Agent, Dialed Number Identification Service (DNIS), Calling Line Identification (CLID), Directory Number (DN), Day/Time, Days of week, and Call Duration.
- Agent Resiliency Information.
- Multiple DN Call Recording.

2.2. Test Results

The objectives outlined in the **Section 2.1** were verified and met. All test cases were executed and they all passed.

2.3. Support

Technical support for VPI Empower can be obtained by contacting VPI via
Web: http://www.vpi-corp.com/ or
Phone: 1-800-200-5430.

3. Reference Configuration

Figure 1 illustrates the network diagram configuration used during the compliant testing event between the Empower and Contact Center.
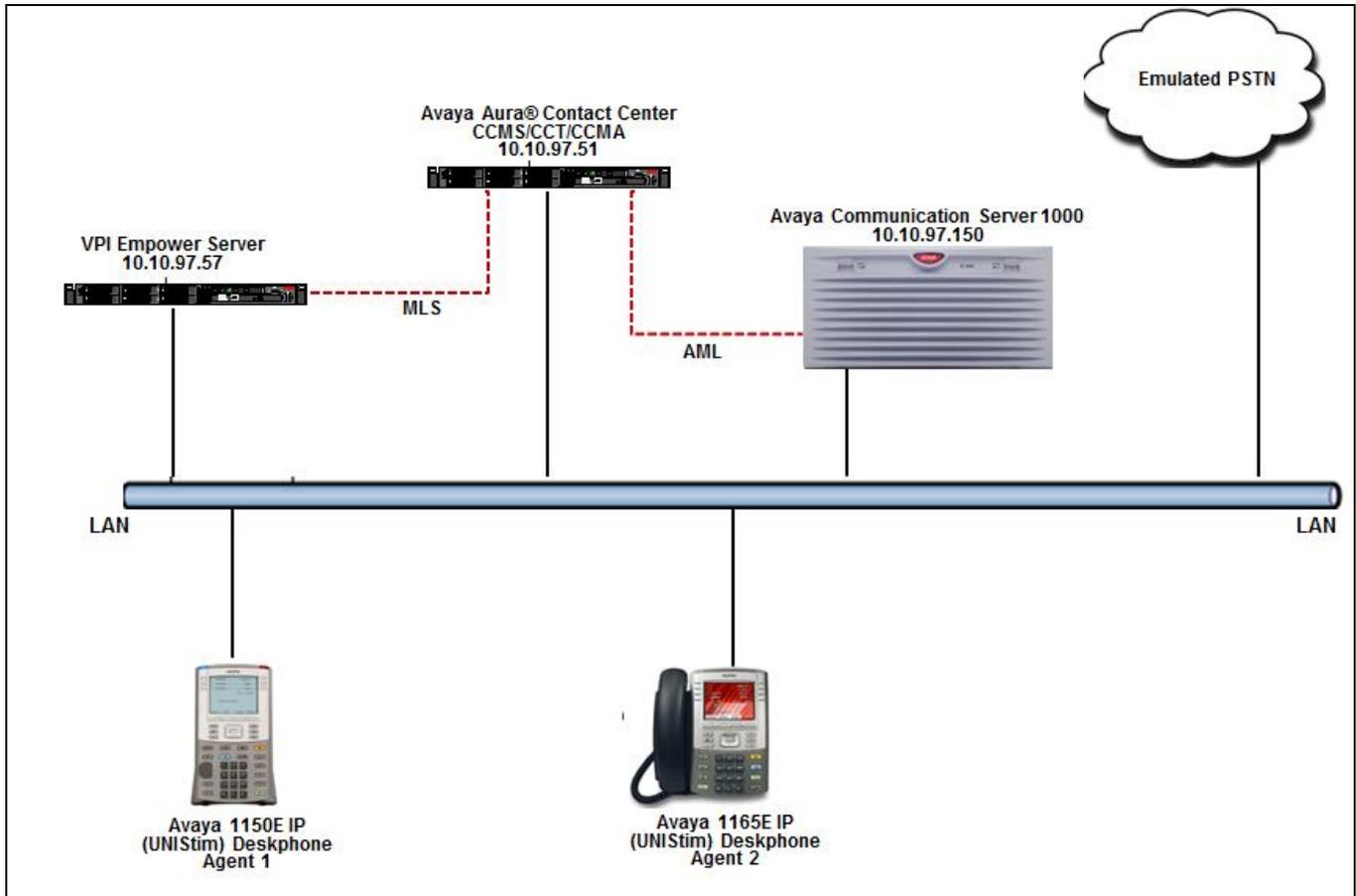

Figure 1: Network Diagram Configuration

4. Equipment and Software Validated

The following equipment and software were used during the lab testing:

Equipment	Software/Firmware
Avaya Communication Server 1000	7.65 P
Avaya Aura® Contact Center	6.3 SP10
Avaya IP (UNIStim) Deskphones: 1150E 1165E	 0x27C8Q 0x25C8Q
VPI Empower Server OS	Windows Server 2008 R2 SP1 64-bit
VPI Empower	5.4 SP3

RS; Reviewed:
SPOC 3/7/2014

Solution & Interoperability Test Lab Application Notes
©2014 Avaya Inc. All Rights Reserved.

3 of 16
Empower-AACC63

5. Configure Avaya Communication Server 1000

This document assumes that Communication Server 1000 is properly installed and configured. These Application Notes provide the necessary configuration that has to be done on Communication Server 1000 to work with Contact Center and Empower. For more information about how to install and configure Avaya Communication Server 1000, refer to **Section 10.**

5.1. Create ELAN for Contact Center application on the Call Server

Log in to the command line interface of Call Server with the appropriate credentials and issue overlay **LD 17** to access the **ADAN** gate opener to create a new ELAN for the Contact Center application. During compliance testing **ELAN 19** was created as shown below.

```
REQ   chg
TYPE  adan
ADAN  new elan 19
CTYP  elan
DES   AACC62
LCTL
```

5.2. Create VAS for the ELAN of Contact Center on the Call Server

Log in to the command line interface of Call Server with the appropriate credentials and issue overlay **LD 17** to access the **VAS** gate opener to create a value added server (VAS) for the ELAN 19 created above for the Contact Center application. During compliance testing **VSID 19** was created as shown below.

```
REQ   chg
VAS   new
VSID  19
ELAN  19
SECU
INTL
MCNT
VSID
```

5.3. Enable IPIE feature for IP call recording on the Call Server

Log in to the command line interface of Call Server with the appropriate credentials and issue overlay **LD 17** to access the **PARM** gate opener to enable the **Enhanced Unsolicited Status Message (USM) IE (IPIE)** as shown in the screen below.

```
PARM
  LPIB 3500
  HPIB 3500
  .
  .
  .
  MARP YES
  IPIE YES
  FRPT NEFR
  .
  .
```

5.4. Enable class of service RECA for IP Phone

Log in to the command line interface of Call server with the appropriate credentials and issue overlay **LD 11** to add or change the configuration of a Deskphone. Screen below shows that the **Recording Allowed (RECA)** has been added to the class of service for the deskphone.

```
DES  AGENT6
TN   096 0 02 05  VIRTUAL
TYPE 1150
.
.
.CAC_MFC 0
CLS  CTD FBA WTA LPR MTD FNA HTA TDD HFA CRPD
     MWA LMPN RMMD SMWD AAD IMD XHD IRD NID OLD VCE DRG1
     POD SLKD CCSD SWD LND CNDA
     CFTD SFD MRD DDV CNID CDCA MSID DAPA BFED RCBD
     ICDA CDMD LLCN MCTD CLBD AUTU
     GPUD DPUD DNDA CFXA ARHD CNTD CLTD ASCD
     CPFA CPTA ABDD CFHD FICD NAID BUZZ AGRD MOAD
     UDI RCC HBTD AHA IPND DDGA NAMA MIND PRSD NRWD NRCD NROD
     DRDD EXR0
     USMD USRD ULAD CCBD RTDD RBDD RBHD PGND OCBD FLXD FTTC DNDY DNO3
MCBN
     FDSD NOVD VOLA VOUD CDMR PRED RECA MCDD T87D SBMD
     KEM3 MSNV FRA  PKCH MUTA MWTD DVLD CROD ELCD VMSA
CPND_LANG ENG
.
.
```

5.5. Configure the Associated Set Assignment (AST) for IP phone

Log in to the command line interface of Call Server with the appropriate credentials and issue overlay **LD 11** to add or change the configuration of a Deskphone. To define which key/s of IP Phone needs to be recorded, assign them at the **AST** prompt. During compliance testing, calls coming to keys **00** and **03** were recorded as shown in the screen below.

```
DES  AGENT6
TN   096 0 02 05  VIRTUAL
TYPE 1150
.
.
.
SPID NONE
AST  00 03
IAPG 0
.
.
```

6. Configure Avaya Aura® Contact Center

This document assumes that the Contact Center system with all its modules including CCMS and MLS are installed and configured correctly and it communicates to the Communication Server 1000. For more information how to install and configure the Contact Center please refer to **Section 10.**

7. Configure VPI Empower Server

This section provides the detailed configuration on the Empower server for recording VoIP calls of agent's deskphones residing on Communication Server 1000.

7.1. Login to Empower CLogger Configuration

Access the Login screen for Empower CLogger configuration by navigating to **Start → All Programs → VPI → Activ! Voice → VPI Configuration**. Enter the required credentials and click on the **OK** button as shown below.
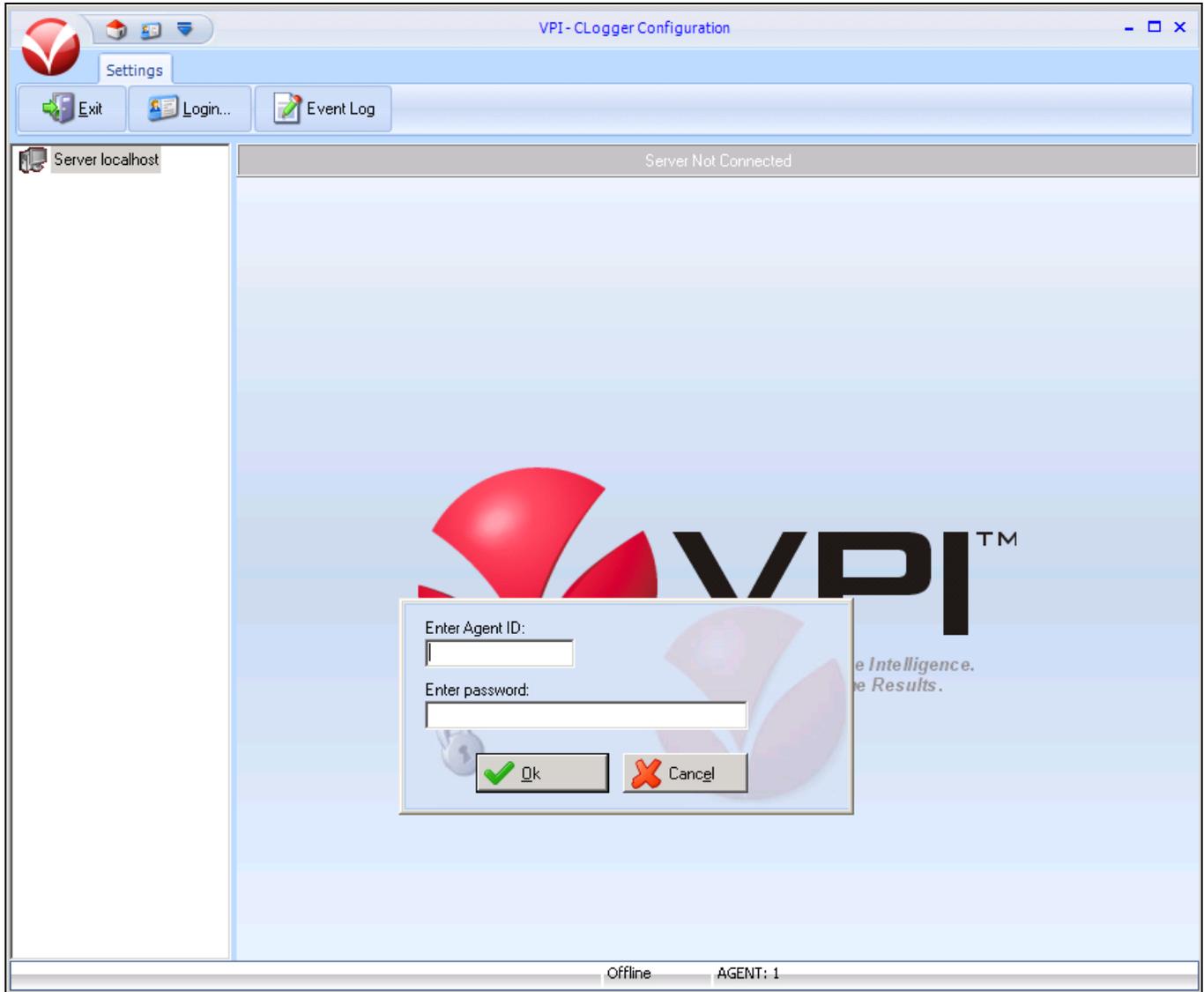
7.2. Configuring Channel Manager Properties

From the main screen of CLogger Configuration as shown below, navigate to **Channel Manager →
AvayaMLS** and enter the **Server Address** of the Contact Center. During compliance testing that value
was *10.10.97.51*. Retain default values for other fields.
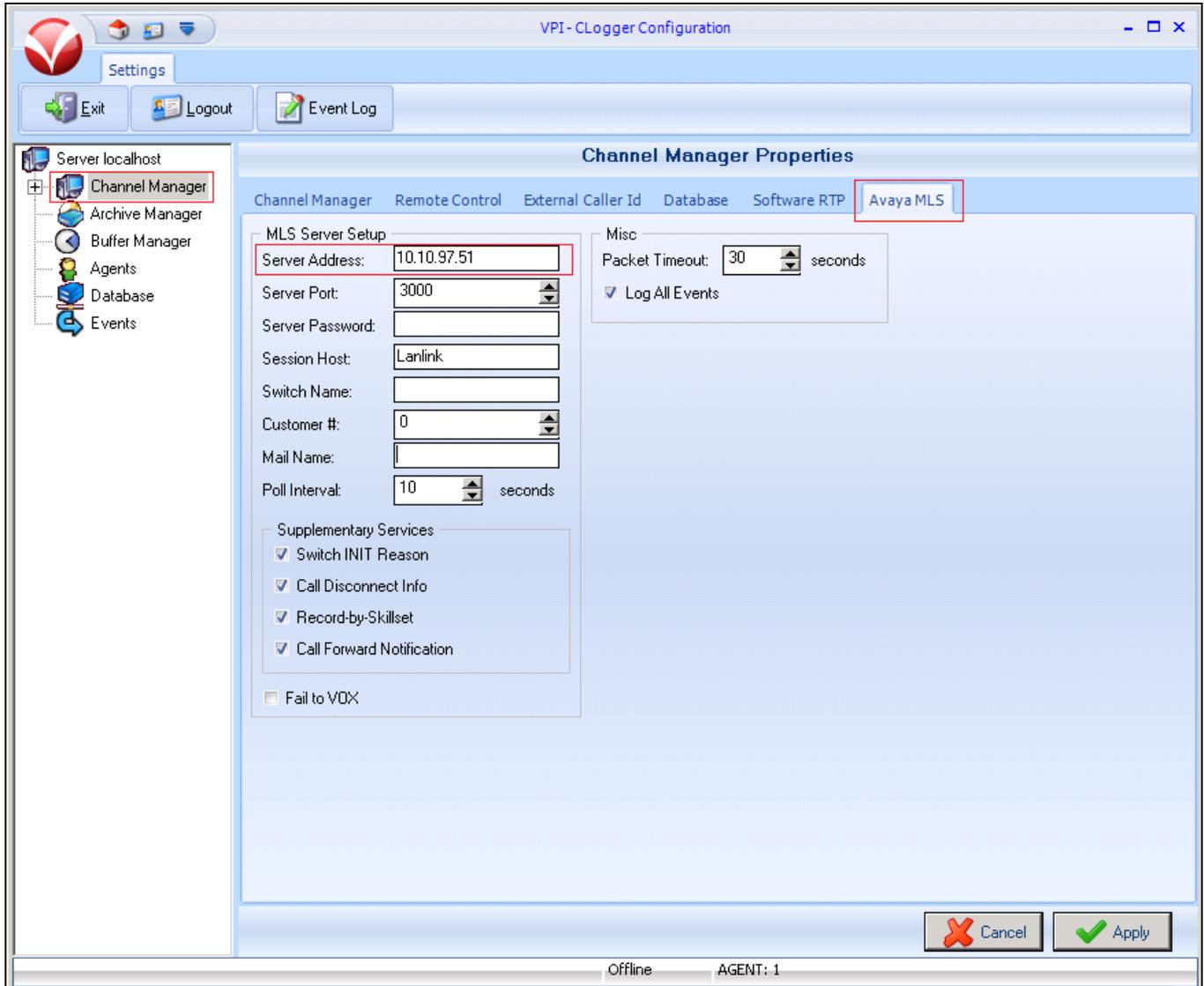
From the same CLogger Configuration page as shown below, navigate to **Channel Manager →
Software RTP** and enter the **IP Address** of the Empower server. During compliance testing that value
was *10.10.97.57*. Retain default values for other fields.

RS; Reviewed:
SPOC 3/7/2014

Solution & Interoperability Test Lab Application Notes
©2014 Avaya Inc. All Rights Reserved.

9 of 16
Empower-AACC63
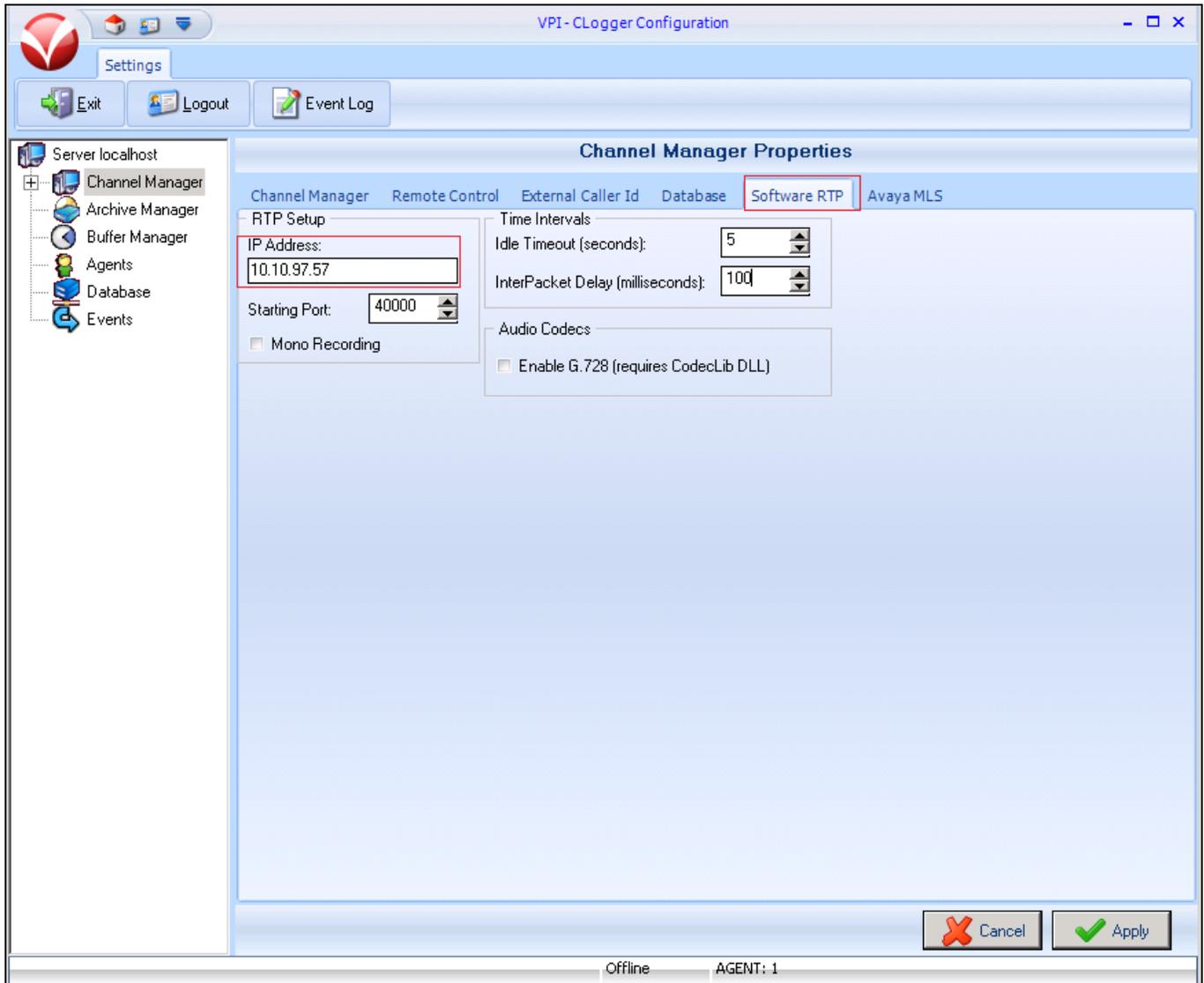
From the same CLogger Configuration page as shown below, navigate to **Channel Manager** ➔ **Database** and add the required **Database Field**. During compliance testing *MLSCALLID, MLSCONFCALLID, MLSSKILLSETID AND MLSSKILLSETNAME* were added.

7.3. Configuring Channel Properties

To configure channels used for recording, from the CLogger Configuration page shown below, navigate to **Channel Manager → Channels**. During compliance testing Channels **25** and **26** were used to record Agents **1** and **2** respectively. Example shows the **Associated ACD Position ID** and **Extension** values of *1005* and *54405* for *Agent 1* respectively. Retain default values for other fields.
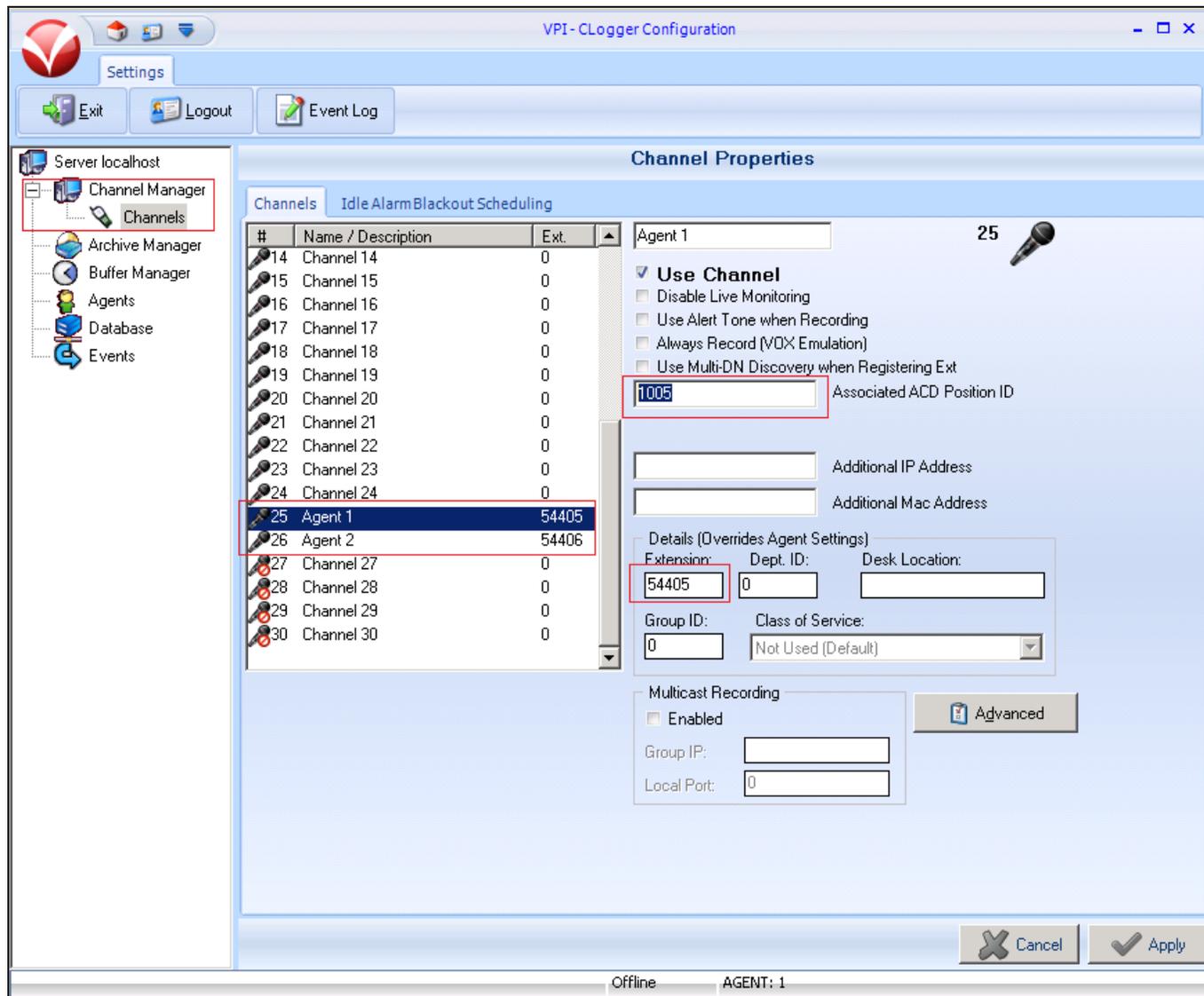
8. Verification **Steps**

The following are typical steps to verify the interoperability between the Empower and Contact Center and Avaya Communication Server 1000.

- Ensure that the Empower can connect to the Contact Center and acquire the required information from CCMS via the MLS. The first screens below shows the **Server Status** with the **Link OK** and the second screen shows the status of the channels where one is idle and waiting for a call while the other is showing recording.

- Process a call and record the same. The first screen shows the Login screen for the user to access the recordings. This can be launched by entering the IP Address of the Empower Server on a browser's URL. The second screen shows an example of a recorded call with all the required information.

RS; Reviewed:
SPOC 3/7/2014

Solution & Interoperability Test Lab Application Notes
©2014 Avaya Inc. All Rights Reserved.

14 of 16
Empower-AACC63

9. Conclusion

All of the executed test cases have passed and met the objectives outlined in **Section 2** with any observations or exceptions noted in **Section 2.2**. The VPI Empower R5.4 is considered compliant with Avaya Aura® Contact Center Release 6.3 and Avaya Communication Server 1000 Release 7.6.

10. Additional References

Product documentation for Avaya Communication Server 1000 products may be found at:
https://support.avaya.com/css/Products/

Product documentation for VPI Empower may be found at:
http://www.uptivity.com/support

[1] Avaya Communication Server 1000 Documents:
Avaya Communication Server 1000E Installation and Commissioning, March 2013, Release 7.6, NN46041- 310
Co-resident Call Server and Signaling Server Fundamentals - Avaya Communication Server 1000, March 2013, Release 7.6, NN43001-509
Software Input Output Reference —Administration Avaya Communication Server 1000*,* NN43001-611
Element Manager System Reference – Administration - Avaya Communication Server 1000, March 2013, Release 7.6, NN43001-632

[2] Avaya Aura® Contact Center R6.3 Documents:
Avaya Aura® Contact Center Planning and Engineering (NN44400-210) May 2013
Avaya Aura® Contact Center Installation (NN44400-311) May 2013
Avaya Aura® Contact Center Server Administration (NN44400-610) May 2013
Avaya Aura® Contact Center Overview (NN44400-111) May 2013
Avaya Aura® Contact Center Fundamentals (NN44400-110) May 2013
Avaya Aura® Contact Center Manager Administration – Client Administration (NN44400-611) May 2013.

©2014 Avaya Inc. All Rights Reserved.
Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at devconnect@avaya.com.