Avaya Solution & Interoperability Test Lab

Application Notes for OAISYS Recording Server with Avaya IP Office – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for OAISYS Recording Server to interoperate with Avaya IP Office. OAISYS Recording Server is a call recording solution.

In the compliance testing, OAISYS Recording Server used the DevLink interface from Avaya IP Office to monitor contact center agents on Avaya IP Office, and used the trunk tap method to capture the media associated with the monitored calls for recording.

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.

1. Introduction

These Application Notes describe the configuration steps required for OAISYS Recording Server to interoperate with Avaya IP Office using trunk tap. OAISYS Recording Server is a call recording solution.

In the compliance testing, OAISYS Recording Server used the DevLink interface from Avaya IP Office to monitor agent stations on Avaya IP Office, and used the trunk tap method to capture the media associated with the monitored calls for recording.

2. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. Upon start of the Recording Server application, the application established DevLink connectivity to IP Office for monitoring of agent stations.

For the manual part of the testing, each call was handled manually on the agent station with generation of unique audio content for the recordings. Necessary user actions such as hold and reconnect were performed from the agent telephones to test the different call scenarios.

The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet cable to Recording Server.

The verification of tests included using the Recording Server logs for proper message exchanges, and using the OAISYS Management Studio application for proper logging and playback of calls.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the following on Recording Server:

- Handling of DevLink real-time events.
- Proper recording, logging, and playback of calls for scenarios involving inbound, outbound, internal, external, ACD, hot desking, non-ACD, hold, reconnect, simultaneous, conference, and transfer.

The serviceability testing focused on verifying the ability of Recording Server to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet cable to Recording Server

2.2. Test Results

All test cases were executed and verified. The following were observations on Recording Server from the compliance testing.

- Held periods were included in the call recordings, and contained the audio from the PSTN.
- Conversations between internal parties were not captured as expected.
- All transfer and conference recording entries used the transfer-from and conference-from for Extension, without any transfer-to and conference-to information in the Detailed View.
- For a call that stayed up during a link disruption, one call recording was generated for the call and captured the conversation up to a few seconds after link restoration.

2.3. Support

Technical support on Recording Server can be obtained through the following:

- **Phone:** (888) 496-9040
- **Web:** http://www.oaisys.com/technical_support.aspx
- **Email:** support@oaisys.com

3. Reference Configuration

As shown in the test configuration below, the Management Studio application was running on the supervisor PC, used for configuration of Recording Server and for verification of proper logging and playback of calls. In the compliance testing, the RTP streams for contact center devices were captured using a PRI splitter that replicated all conversations with the PSTN to Recording Server.

The contact center devices used in the compliance testing are shown in the table below.

Device Type	Extension
Hunt Group	29000
Agent Stations	20031, 20032
Supervisor Station	20035

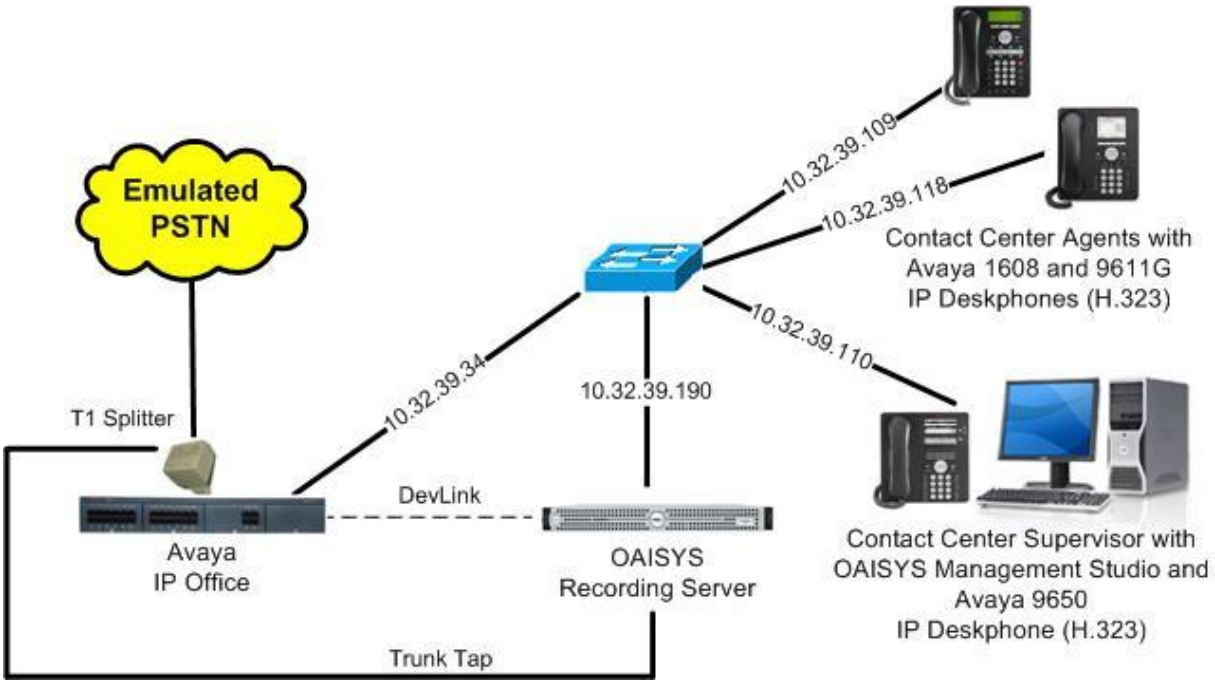


Figure 1: Compliance Testing Configuration

4. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Equipment/Software	Release/Version
Avaya IP Office on IP500 V2	8.1 (52)
Avaya 1616 IP Deskphone (H.323)	1.302S
Avaya 9611G IP Deskphone (H.323)	6.2209
Avaya 9650 IP Deskphone (H.323)	3.105S
OAISYS Recording Server on Windows 7 Professional • Avaya DevLink (devlink.dll)	7.2.1348 2009 SP1 1.0.0.5

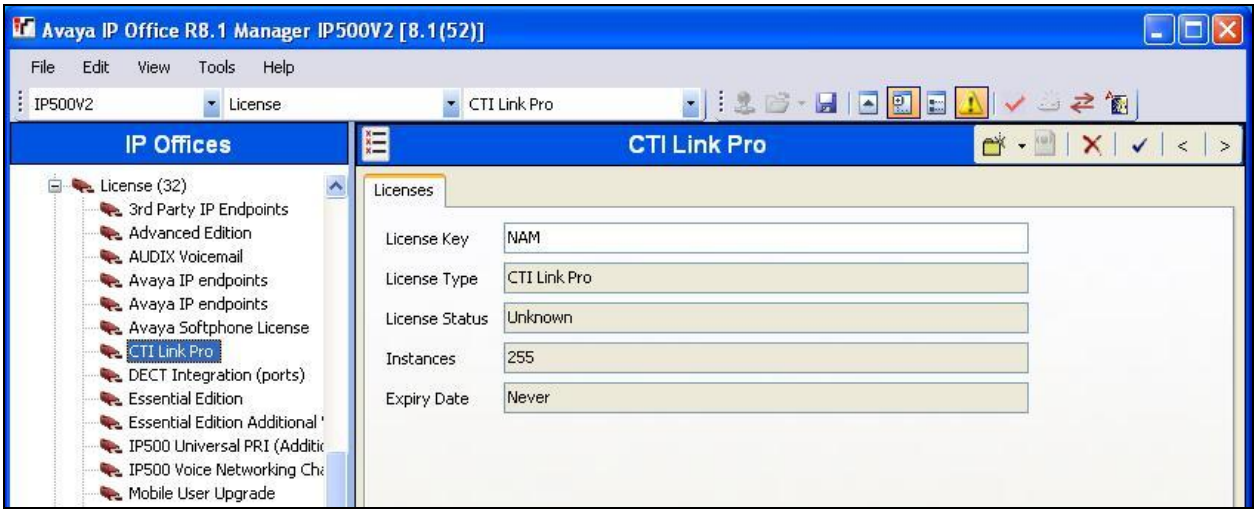
Testing was performed with IP Office 500 V2 R8.1, but also applies to IP Office Server Edition R8.1 (single site configuration only).

5. Configure Avaya IP Office

This section provides the procedures for verifying the license on IP Office.

From a PC running the IP Office Manager application, select **Start → Programs → IP Office → Manager** to launch the application. Select the proper IP Office system, and log in using the appropriate credentials.

The **Avaya IP Office R8.1 Manager** screen is displayed. From the configuration tree in the left pane, select **License → CTI Link Pro**, to display the **CTI Link Pro** screen in the right pane. Verify that the **License Status** is "Valid".



6. Configure OAISYS Recording Server

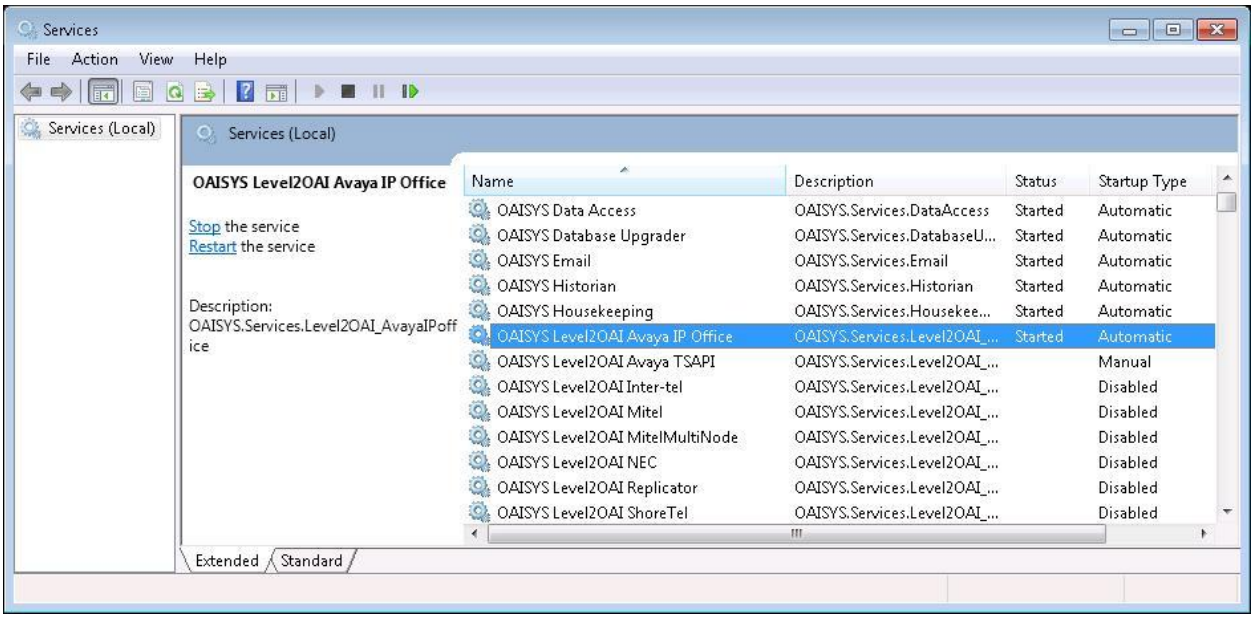
This section provides the procedures for configuring Recording Server. The procedures include the following areas:

- Administer TAPI service
- Launch Management Studio
- Administer CTI port settings
- Administer recording spans
- Administer recording ports

The configuration of Recording Server is performed by authorized third party integrators. The procedural steps are presented in these Application Notes for informational purposes.

6.1. Administer TAPI Service

From the Recording Server, select **Start → Control Panel → Administrative Tools > Services** to display the **Services** screen. Configure the **OAISYS Level2OAI Avaya IP Office** service to be "Automatic", and start the service as shown below.



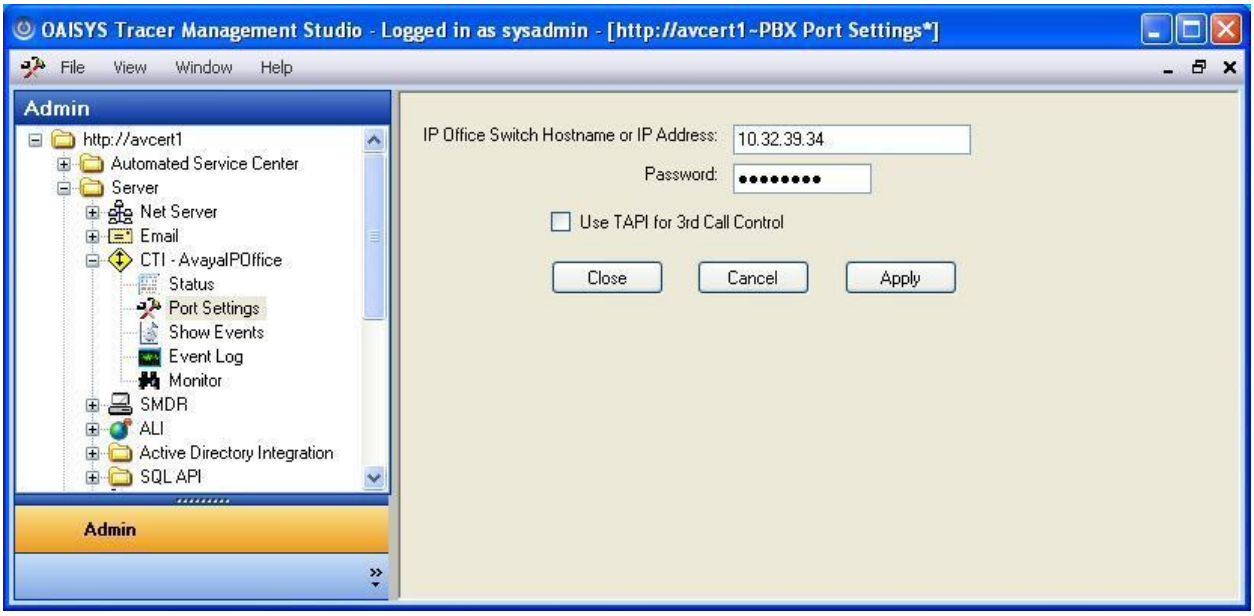
6.2. Launch Management Studio

From a PC running the Management Studio application, select **Start → All Programs → OAISYS → OAISYS Management Studio** to launch the application, and log in using administrative credentials.

6.3. Administer CTI Port Settings

The **OAISYS Tracer Management Studio** screen is displayed. Select **Server → CTI – AvayaIPOffice→ Port Settings** in the left pane, to display the screen shown below.

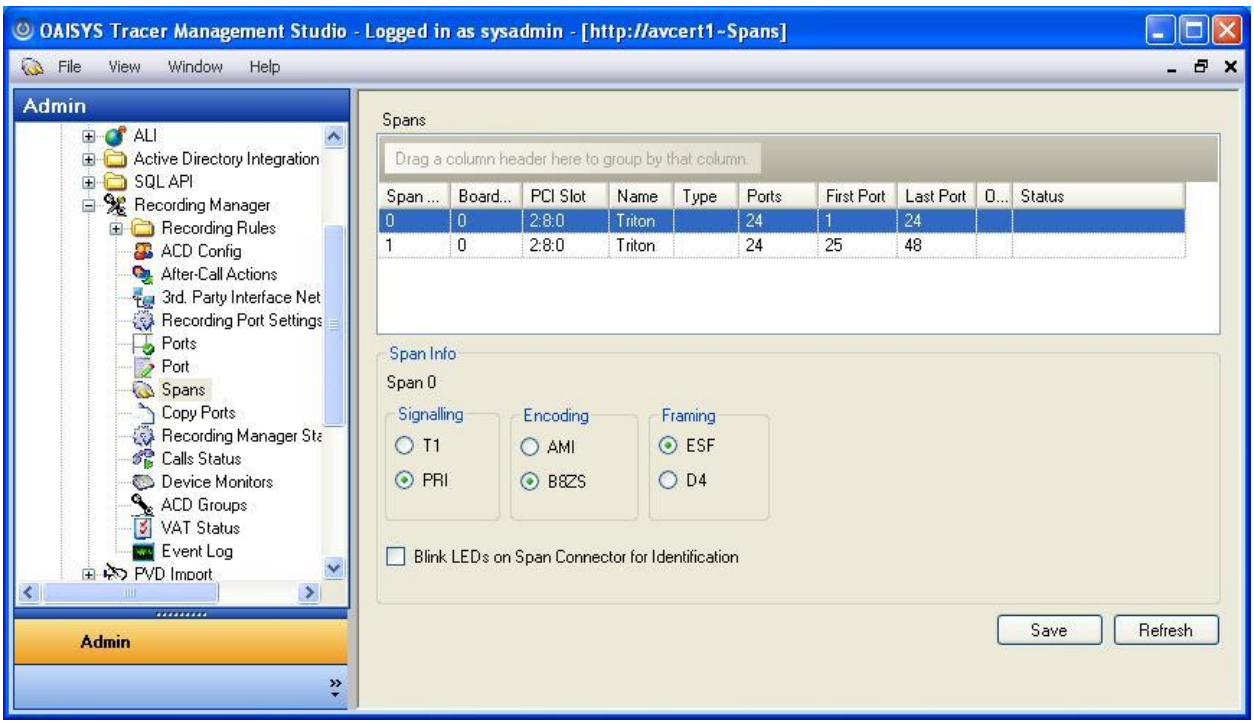
For **IP Office Swtich Hostname or IP Address**, enter the IP address of IP Office. For **Password**, enter the password for the IP Office Monitor and Call Status application.



6.4. Administer Recording Spans

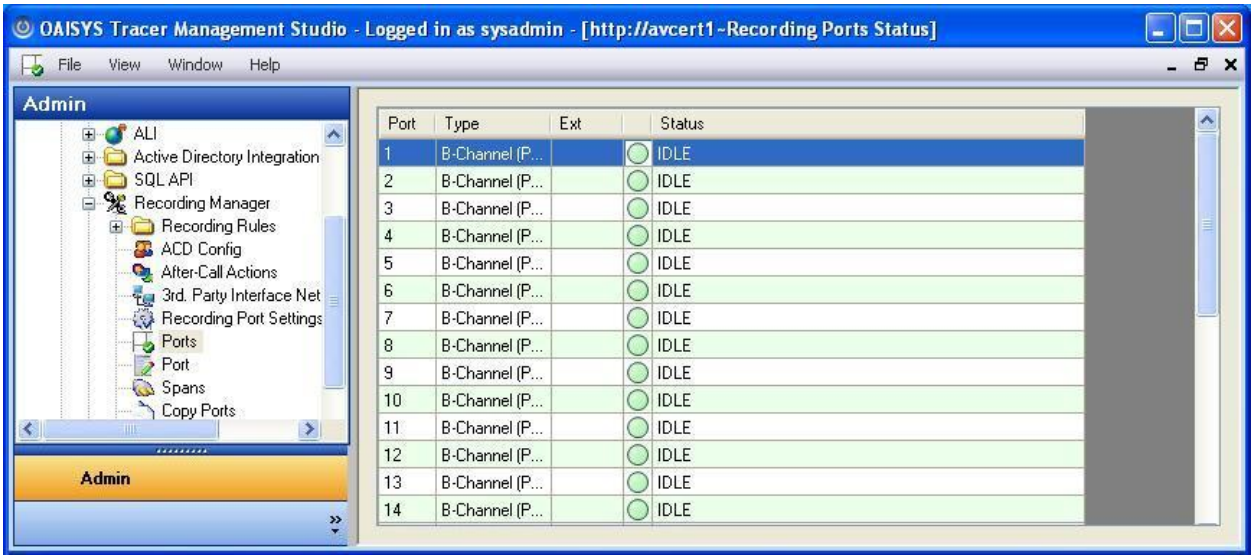
Select **Server → Recording Manager → Spans** in the left pane, to display the **Spans** screen. Select the entry corresponding to the actual physical span used for trunk tap, in this case span "0".

In the **Span Info** sub-section, select the proper values to match the network configuration.



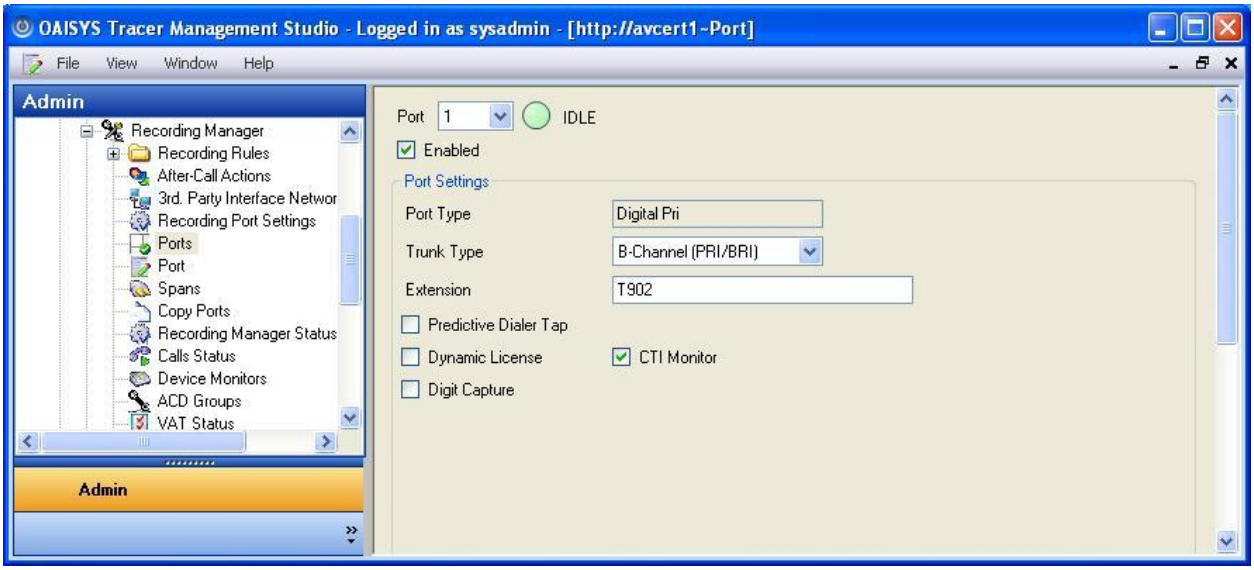
6.5. Administer Recording Ports

Select **Server → Recording Manager → Ports** in the left pane, to display a list of ports. Double click on the entry corresponding to the first port for the span from **Section 6.4**, in this case port "1".



In the updated screen shown below, check **Enabled**. For **Extension**, enter "Txy" where "x" is the relevant line number from IP Office, and "y" is the two-digit line channel number starting with "02". Retain the default values in the remaining fields.

Repeat this section to configure all ports for the relevant span. In the compliance testing, 23 ports were configured, and the corresponding line number from IP Office was 9.



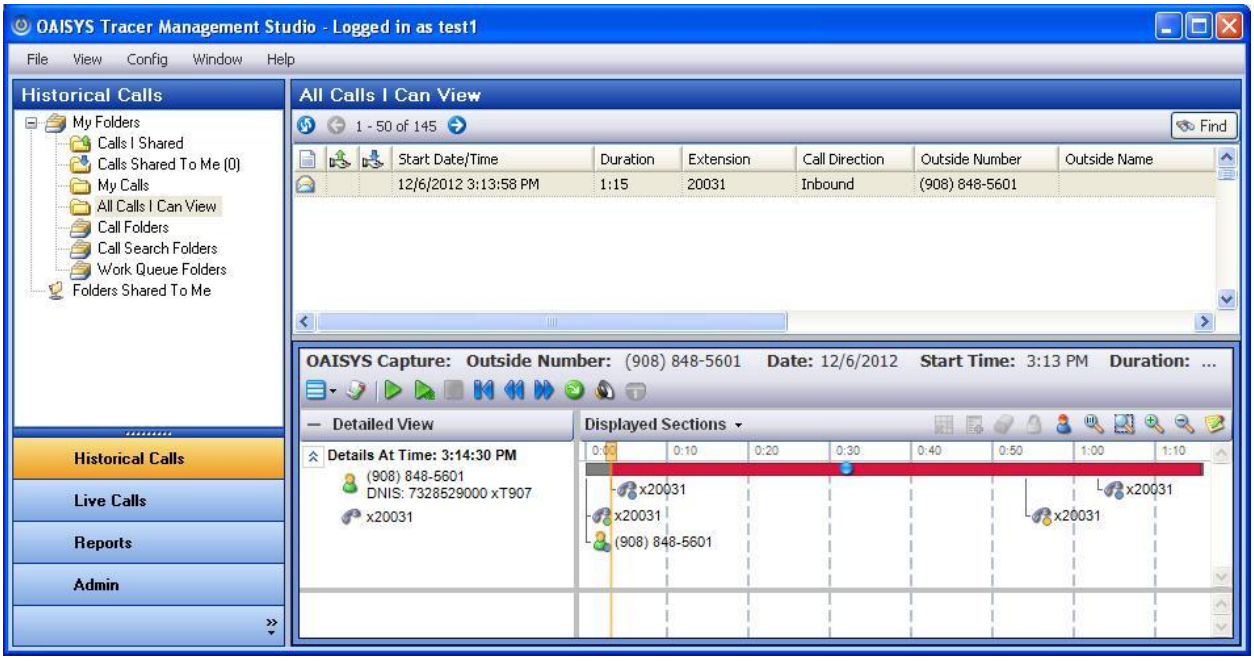
7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of IP Office and Recording Server.

Log an agent in to the hunt group to handle and complete an ACD call. Follow the procedural steps in **Section 6.2** to launch the Management Studio application, and log in using the appropriate user credentials.

Select **Historical Calls** in the lower left pane, followed by **My Folder → All Calls I Can View** in the upper left pane. Verify that there is an entry reflecting the last call, with proper values in the relevant fields.

Double click on the entry to listen to the playback. Verify that the call recording can be played back.



8. Conclusion

These Application Notes describe the configuration steps required for OAISYS Recording Server to successfully interoperate with Avaya IP Office using trunk tap. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

9. Additional References

This section references the product documentation relevant to these Application Notes.

1. *IP Office Manager 8.1*, Document 15-601011, Issue 25o, April 2012, available at http://support.avaya.com.

2. *OAISYS Administration Guide*, Version 7.2, May 29, 2012, available at http://www.oaisys.com/downloads/OAISYS_Version_7.2_Administration_Guide.pdf.

3. *OAISYS Management Studio User Guide*, Version 7.2, May 23, 2012, available at http://www.oaisys.com/downloads/OAISYS_Version_7.2_Management_Studio_User_guide.pdf.

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.