Technical Configuration Guide for TelStrat Engage with Avaya IP Office Contact Center – Issue 1.2

Abstract

This Technical Configuration Guide describes the configuration steps required for TelStrat Engage to interoperate with Avaya IP Office Contact Center (IPOCC) using VoIP recording. TelStrat Engage is a call recording solution.

In the testing, TelStrat Engage used the WSC interface from Avaya IP Office Contact Center to monitor contact center agents on Avaya IP Office, and the port mirroring method to capture the media associated with the monitored agents for recording.

Information in this guide has been obtained through Avaya R&D testing and additional technical discussions. Testing was conducted via the Avaya IPOCC R&D team.

1. Introduction

This Technical Configuration Guide describes the configuration steps required for TelStrat Engage to interoperate with Avaya IP Office using VoIP recording and the Avaya IPOCC Contact Center using the WSC service. The TelStrat Engage application is a call recording solution.

In the testing, TelStrat Engage uses TAPI 2 in third party mode from Avaya IP Office to monitor contact center agents on Avaya IP Office, and the port mirroring method to capture the media associated with the monitored agents for recording. The TelStrat Engage also uses Web Services Collection (WSC) to interface with the Avaya IP Office Contact Center.

2. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. Upon start of the Engage application, the application established TAPI connectivity to IP Office for monitoring of agent stations and established WSC connection to the IP Office Contact Center.

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 Engage.

The verification of tests included using the Engage logs for proper message exchanges, and using the Engage Client application for proper logging and playback of calls.

2.1. Interoperability Testing

The interoperability test included feature and serviceability testing.

The feature testing focused on verifying the following on Engage:

- Handling of TAPI 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 Engage to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet cable to Engage.

2.2. Test Results

All test cases were executed and verified. The following were observations on Engage from the testing.

- For the attended conference scenario, two recordings are made. The first recording contains the start of the call between the agent and the customer, a silence period for when the customer was put on hold, and then the remaining call between the conferenced parties. The second recording contains the audio for when the agent is in conversation with the conferenced party.

- For an unattended conference scenario, the first recording contains the complete conversation. A second call recording is also present; this recording is zero-length as expected since there was no consult between the agent and the conferenced party (i.e. unattended conference).

2.3. Support

Technical support on Engage can be obtained through the following:

- **Phone:** (972) 633-4548
- **Email:** support@telstrat.com

3. Reference Configuration

As shown in the test configuration below, the Engage Client application was running on the supervisor PC, and used for verification of proper logging and playback of calls.

In the testing, the RTP stream for contact center agents with Avaya IP Deskphones were mirrored from the layer 2 switch, and replicated over to the Engage server.

The detailed administration of contact center devices is not the focus of this Guide and will not be described. In addition, the port mirroring of the layer 2 switch is also outside the scope of this Guide and will not be described.
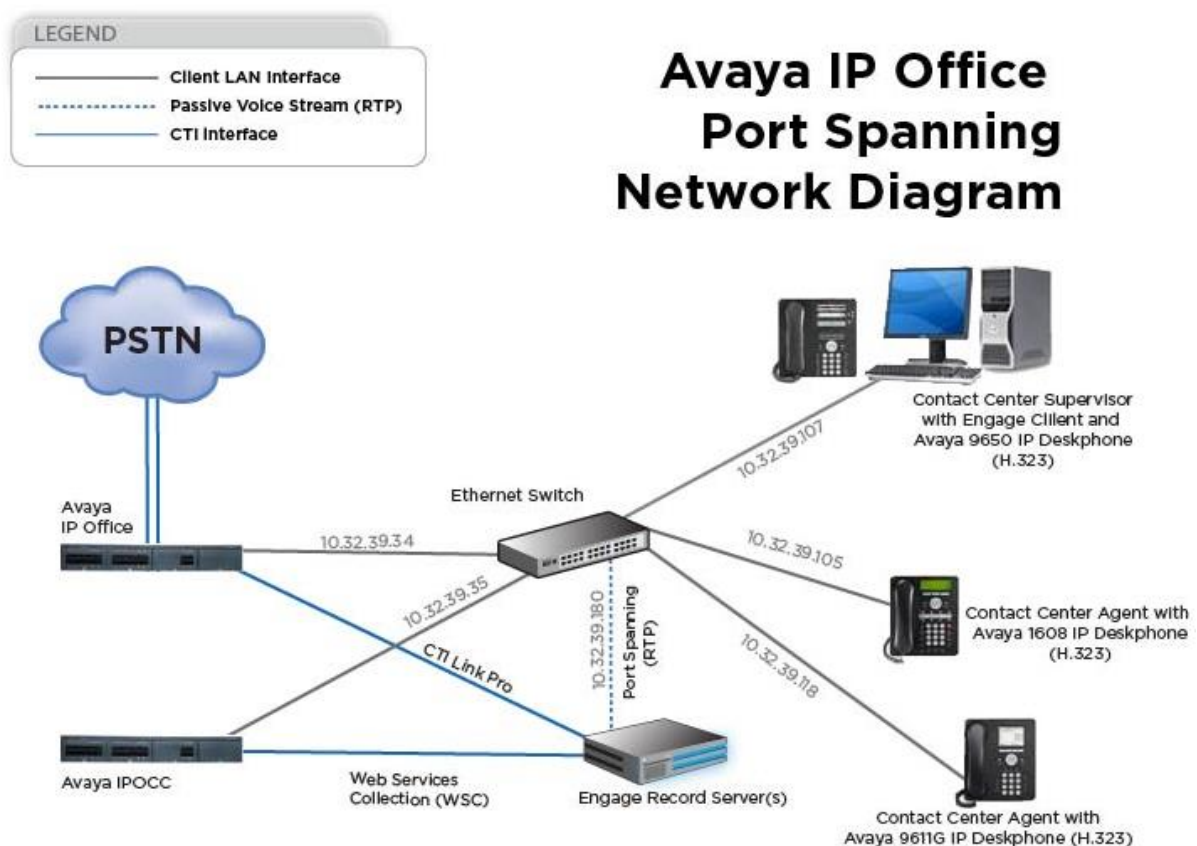
Figure 1: Testing Configuration

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	9.0.3.0 (941)
Avaya IP Office Contact Center	9.0.3
Avaya 9621 IP Deskphone (H.323)	6.000
Avaya 4621 IP Deskphone (H.323)	2.200
Avaya 4610 IP Deskphone (H.323)	2.9

TelStrat Engage on
Windows 2008 Server Standard
    • Database Server
    • VOIPEngine
    • Avaya TAPI (tspi2w.tsp)
	3.7.1.18
	SP2
	Microsoft SQL Server 2008 R2
	3.7.1.18
	1.0.0.37

TelStrat Engage Web2.0 Client on Windows 7 Professional	4.1.18

5. Configure Avaya IP Office

This section provides the procedures for configuring IP Office. The procedures include the following areas:

- Verify license
- Obtain phone IP addresses

5.1. Verify License

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 R9.0.3 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".

5.2. Obtain Phone IP Address

From a PC running the IP Office Monitor application, select **Start → Programs → IP Office → Monitor** to launch the application. The **Avaya IP Office R9.0.3 SysMonitor** screen is displayed, as shown below. Select **Status → H323 Phone Status** from the top menu.
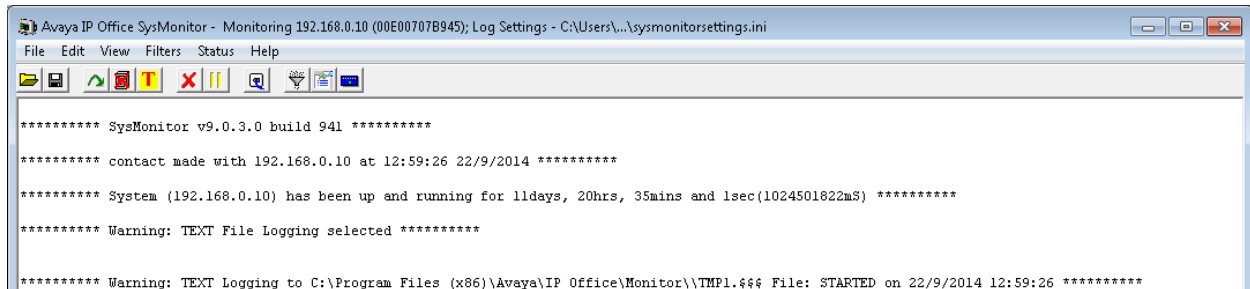
The **IPPhoneStatus** screen is displayed. Make a note of the MAC or IP address associated with each extension number the agents may be using.
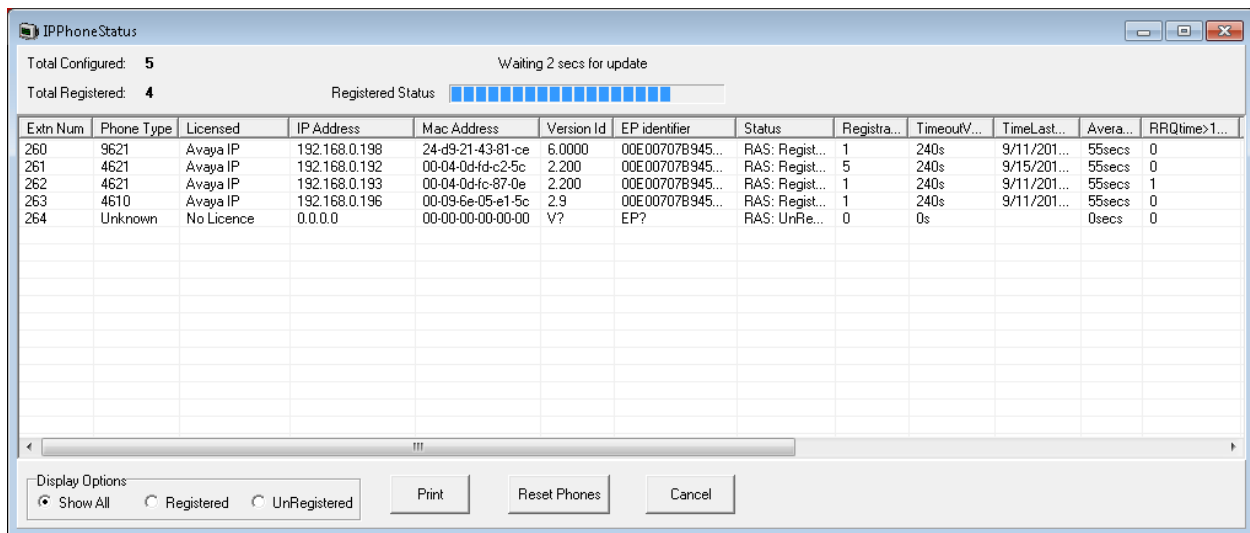
6. Configure Avaya IP Office Contact Center (IPOCC)

This section provides the procedures for configuring the Avaya IP Office Contact Center (IPOCC). Note that the Web Service Collection (WSC) service must be installed/enabled on the Avaya IP Office Contact Center.

6.1. Required Licenses

The Engage VOIP Engine service acts as a web service client to the WSC service. The following licenses are required for the VOIP Engine to access the WSC service.

- Agent License – for accessing the Agent Task Control
- TeamLeader License – for monitoring privileges

6.2. Create Agent account

On the IPOCC server, log in as an administrator to the IPOCC User Interface. Select the **Administration** taskbar and select **Configuration,** and then select the **Agent** tab.
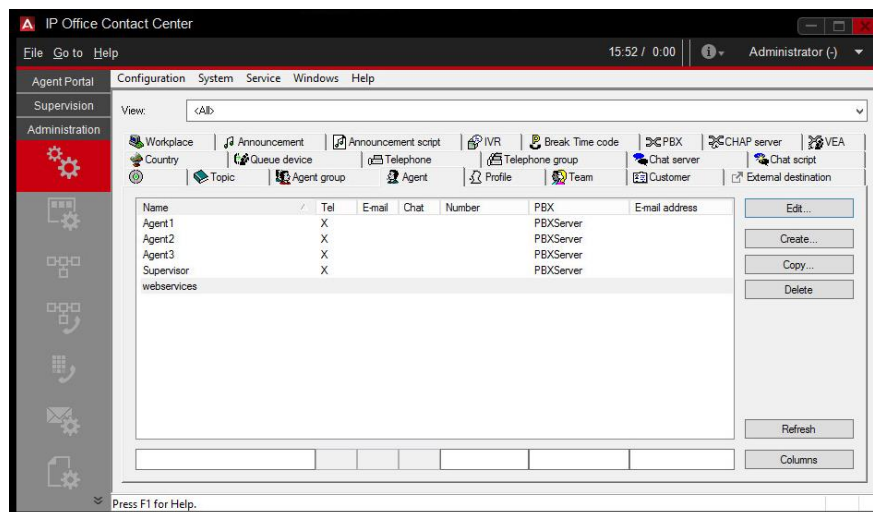
Create an Agent account and note the username and password. These credentials will be used in the Engage application.

Assign the TeamLeader license to the Agent by enabling the Realtime information privileges for the Agent. Select the **Privileges** button and **Realtime Information** tab. Select all of the checkboxes in the **Team** section.

Configure the Agent with authorization to view all object types. Select the **Authorization** tab and for each tab (Topic, Agent group, Agent, Team, etc..) select and double-click **<All>** for each type.
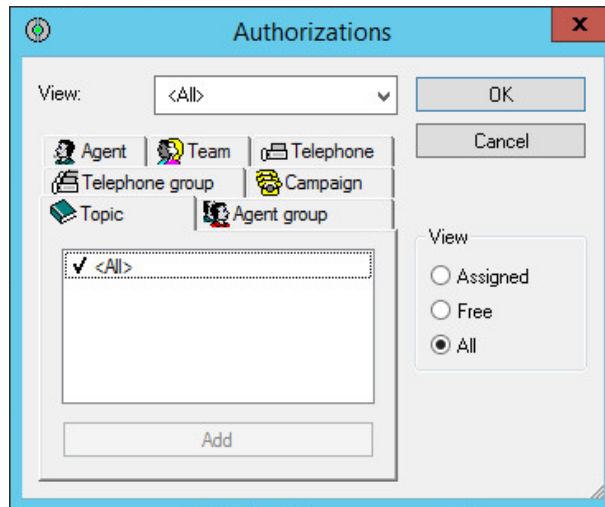
7. Configure TelStrat Engage

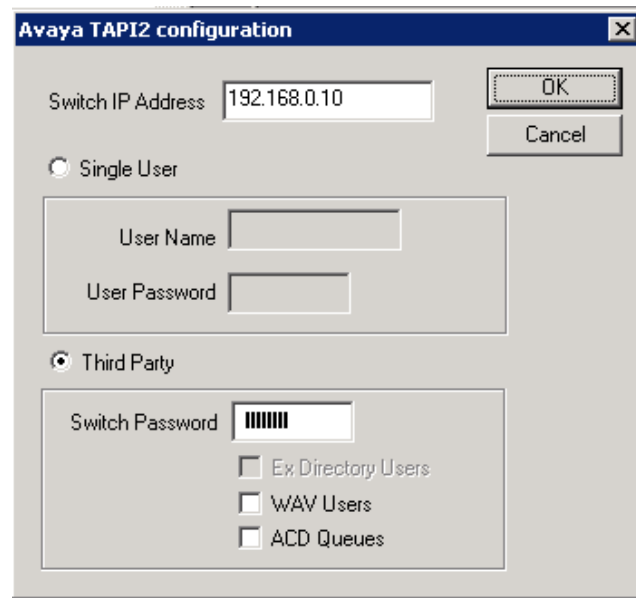This section provides the procedures for configuring Engage. The procedures include the following areas:

- Administer TAPI driver
- Launch VoIP Engine Configuration
- Configure IPOCC parameters
- Configure SPAN for mirroring by IP (optional)
- Administer port mapping

7.1. Administer TAPI Driver

From the Engage server, select **Start → Control Panel**, and click on the **Phone and Modem** icon (not shown below). In the displayed **Phone and Modem Options** screen, select the **Advanced** tab. Select the **Avaya IP Office TAPI2 Service Provider** entry, and click **Configure**.
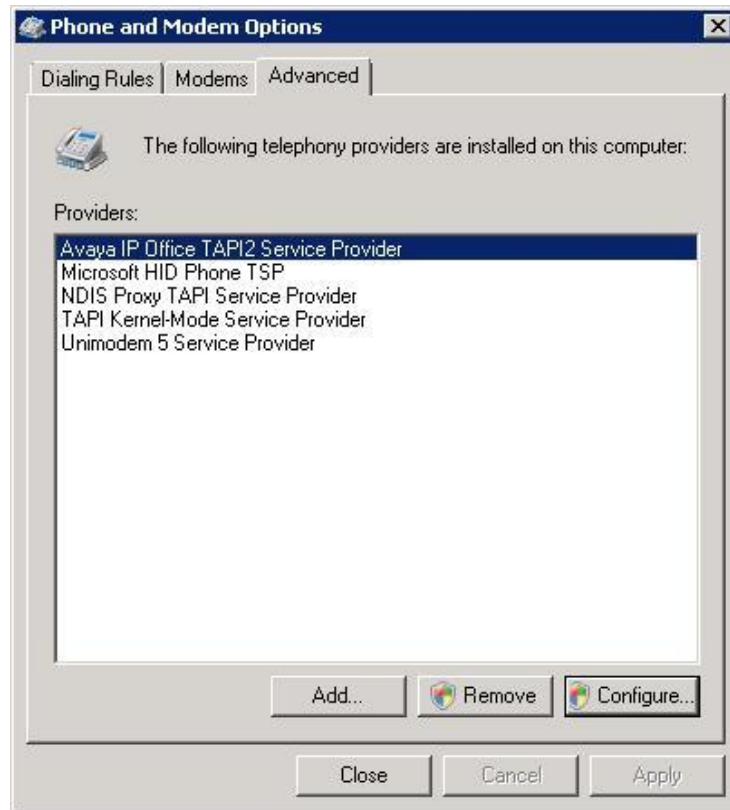
The **Avaya TAPI2 configuration** screen is displayed. For **Switch IP Address**, enter the IP address of IP Office. Select the radio button for **Third Party**, and enter the IP Office password into the **Switch Password** field. Reboot the Engage server.

7.2. Launch VoIP Engine Configuration

From the Engage server, select **Start → All Programs → TelStrat Engage → VOIP Engine Configuration** to display the **Engage VoIPEngine Config Console** screen shown below. Click **Config**.

7.3. Configure IPOCC parameters

The **VoIP Configuration** screen is displayed. In the upper right corner, populate the IPOCC parameters –

- IPO CC Address – enter the IP address of the IPOCC server
- IPO CC Port – enter the port number of the IPOCC server
- Observer Server – enter the IP address of the VOIP Engine server where the notifications from the WSC service should be sent to
- Observe Port – enter the port number of the VOIP Engine server where the notifications from the WSC service should be sent to
- User ID – enter the Agent username that the VOIP Engine will use to connect to the WSC service
- Password – enter the Agent password that the VOIP Engine will use to connect to the WSC service

If it is desired to display the Topic in the DNIS field of the call record in the Engage application, select the **More** button. Select the checkbox **Fill DNIS with Topic**, then select **OK**.

7.4. Configure SPAN for mirroring by IP (optional)

By default, the Engage VOIP Engine will monitor the spanning traffic by MAC address. If the network is routed, the spanning traffic must be monitored by IP address.

From the VOIP Engine Configuration screen, select the **More** button. Select the checkbox **Mirroring By IP**, then select **OK.**

7.5. Administer Port Mapping

The **VoIP Configuration** screen is displayed again. Right click in the empty screen and select **ADD**.

The **Device And CommSrv Port Mapping** screen is displayed. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Device ID:**   Physical station extension of the phoneset from **Section 5.2**
- **MAC/IP:**   The corresponding station MAC or IP address from **Section 5.2**
- **DN:**   Enter a (*) in this field, as the DN is dependent on which agent logs into the phone
- **Recording Channel:** An available port

Repeat this section to create port mappings for all stations in **Section 5**.

8. Verification Steps

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

Log in an agent to the hunt group to handle and complete an ACD call. From a PC that has access to the Engage web client application, browse to and login onto the webclient and select the **Recordings→Playback** tab.

The **Engage** screen below is displayed. Select **Recent Calls** to refresh/update the Playback Log. Verify that there is an entry reflecting the last call, with proper values in the relevant fields. Double click on the entry and verify that the call recording can be played back.

9. Conclusion

This Guide describes the configuration steps required for TelStrat Engage to successfully interoperate with Avaya IP Office and the Avaya IP Office Contact Center.   All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

10.   Additional References

This section references the product documentation relevant to this Guide.

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

2. *Engage Server Installation and Administration Guide*, Product Release 3.7, Standard 1.0, available from TelStrat support.

3. *Engage Contact Center Suite System Administration Guide*, Product Release 3.7, Standard 1.0, available from TelStrat support.