



Avaya Solution & Interoperability Test Lab

Application Notes for Resource Software International Tools OSN with Avaya IP Office – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Resource Software International (RSI) tools OSN to interoperate with Avaya IP Office. Resource Software International tools OSN application offers immediate, E911 on-site notification for emergency calls. RSI tools OSN is a computer telephony solution that uses the CTI Link Pro (DevLink and 3rd Party TAPI) interface to an Avaya IP Office to provide real-time monitoring and notification of emergency events (i.e. 911 calling). RSI tools OSN can deliver emergency notification messages to a digital/IP telephone set, via email, or to a network computer utilizing Windows WinPopup messages.

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 Resource Software International (RSI) tools OSN to interoperate with Avaya IP Office. RSI tools OSN is a computer telephony solution that uses the CTI Link Pro (DevLink and 3rd Party TAPI) interface to an Avaya IP Office to provide real-time monitoring and notification of emergency events (e.g. 911 calling).

The software can be configured to deliver notification messages to a telephone set, via email, or to a desktop computer using Windows WinPopup messages. A record of each emergency notification event is stored in the emergency notification event log (notify.log). The onsite notification feature provides businesses with immediate real-time notification of emergency events. This solution provides increased security, elimination of inappropriate/invalid emergency calls, and faster response times to actual emergency events. The software will operate on any Pentium based computer operating a Microsoft Windows operating system (Windows XP or greater).

2. General Test Approach and Test

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing. The feature testing focused on verifying the following on RSI tools OSN:

- Handling of real-time data from Avaya IP Office, and the use of that data to provide real-time notification of an emergency.

The serviceability testing focused on verifying the ability of RSI tools OSN to recover from adverse conditions, such as disabling/re-enabling the network connection to the RSI tools OSN PC.

2.2. Test Results

All test cases were executed and passed.

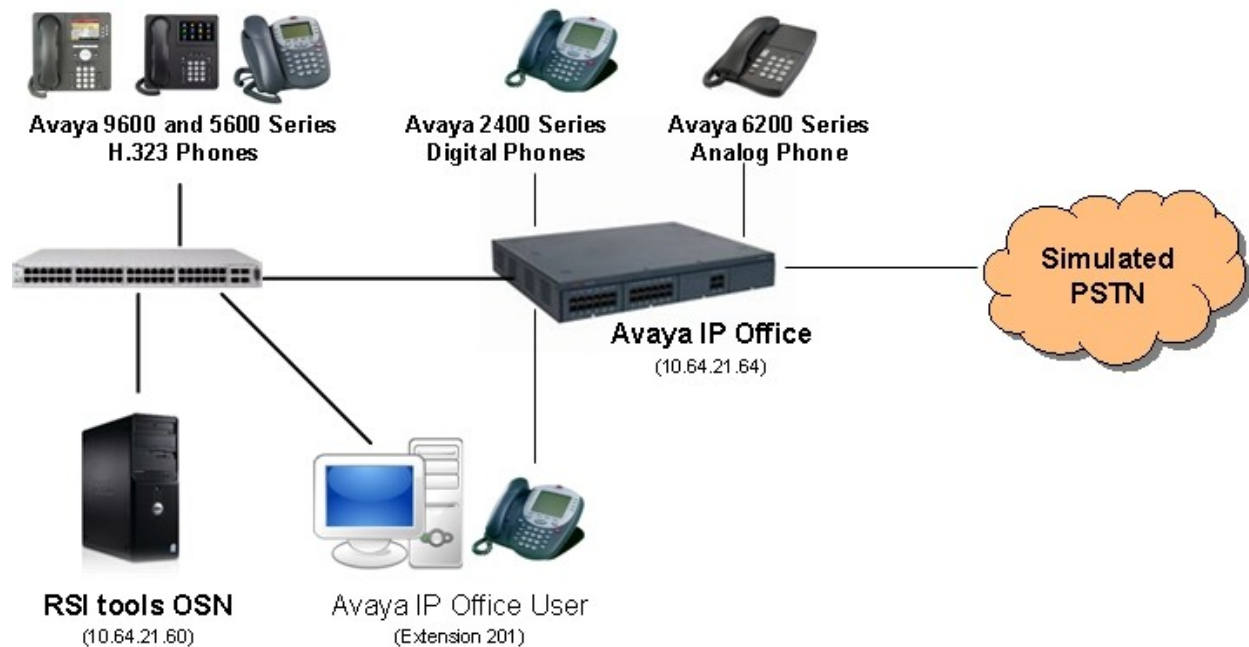
2.3. Support

Technical support on the RSI tools OSN can be obtained through the following:

- **Phone:** (905) 576-4575
- **Email:** support@telecost.com
- **Web:** www.telecost.com

3. Reference Configuration

The RSI tools OSN solution consists of the RSI tools OSN application running on a Windows PC / Server. The RSI tools OSN application utilizes the CTI Link Pro (DevLink and 3rd Party TAPI) interface to Avaya IP Office to provide real-time monitoring and notification of emergency events (i.e. 911 calling).



4. Equipment and Software Validated

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

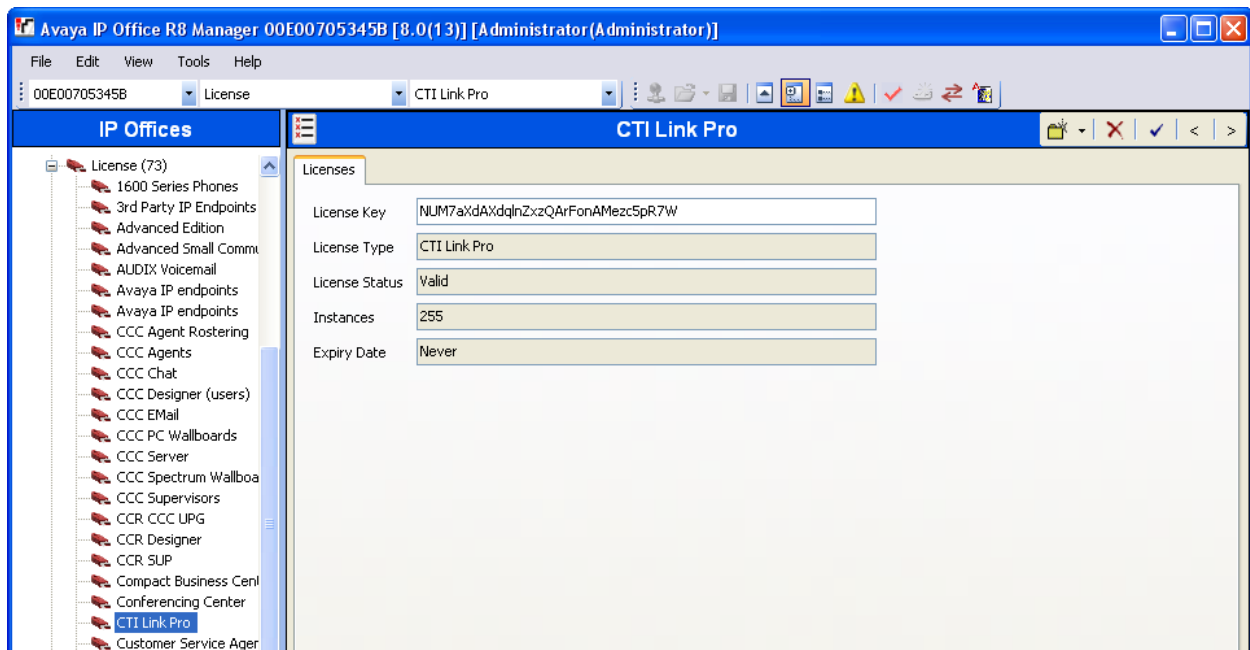
Equipment	Software
Avaya IP Office 500 <ul style="list-style-type: none">DIGSTA8/PRIS UVCM32ANALOG POTS30V2	8.0 (13) <ul style="list-style-type: none">8.0 (13)8.0 (13)10.0 (13)
Avaya 6200 Series Analog Telephone	—
Avaya 2400 Series Digital Telephones	Release 6
Avaya 5600 Series IP Telephones (H.323)	2.9.1
Avaya 9600 Series IP Telephones (H.323) <ul style="list-style-type: none">96x096x1	3.1 SP2 6.0 SP5
Avaya IP Office TAPI Driver	tapiQ3Maint2011.exe
RSI tools OSN application on a Windows XP Professional Service Pack 3 PC	Version 2011 Build 2.0.0.2

5. Configure Avaya IP Office

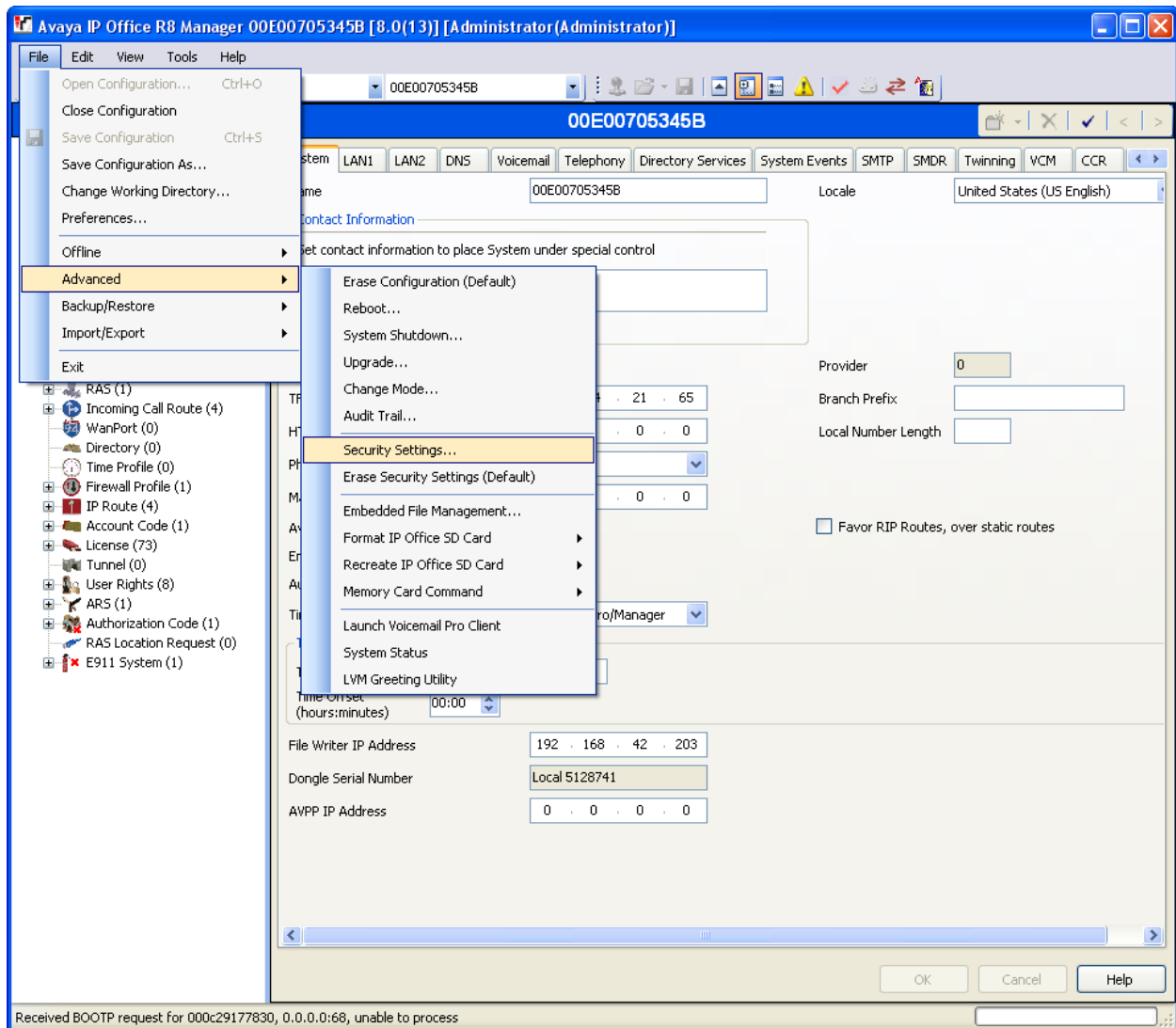
This section provides the procedures for configuring Avaya IP Office.

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

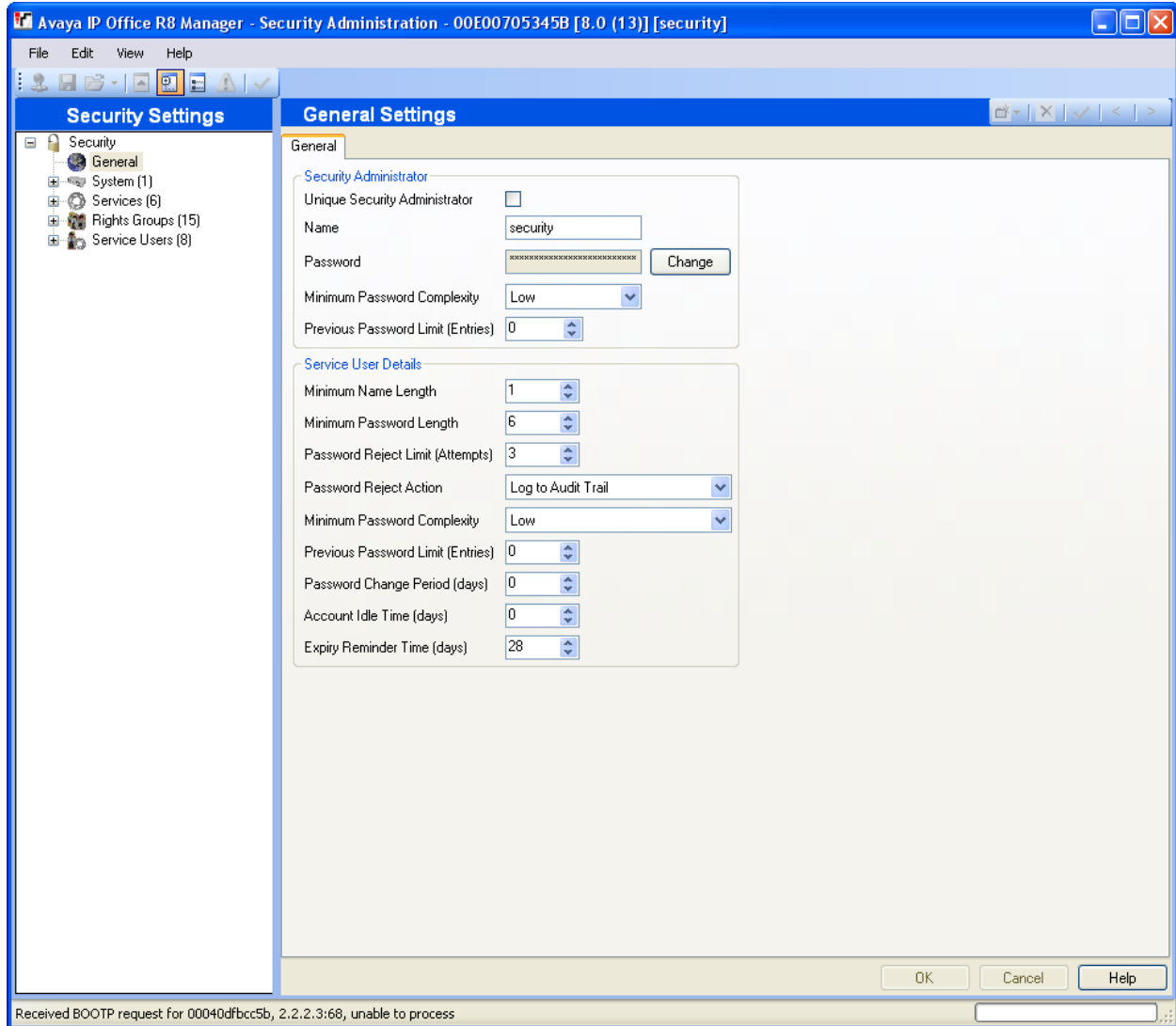
The **Avaya IP Office R8 Manager** screen is displayed. From the configuration tree in the left pane, select **License > CTI Link Pro** to display the **CTI Link Pro** screen in the right pane. Verify that the **License Status** is “Valid”.



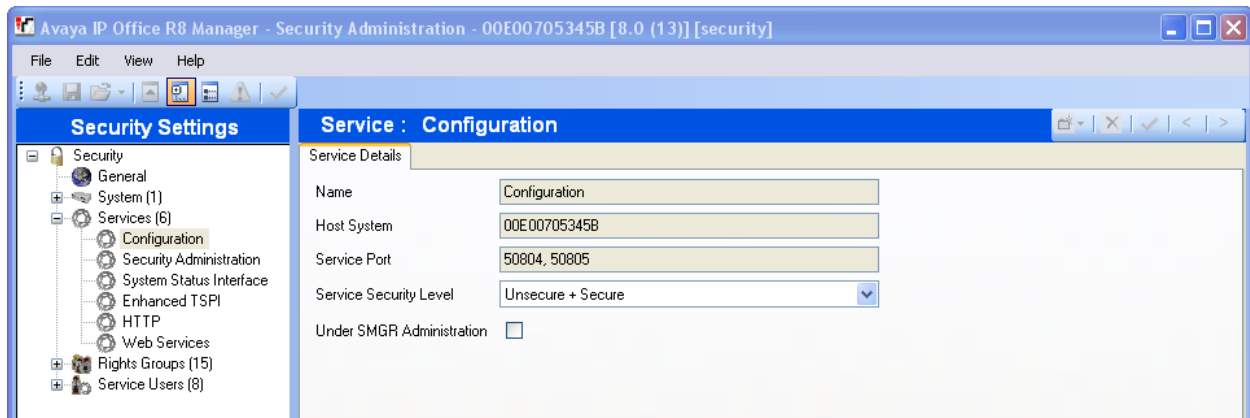
From the top menu select **File > Advanced > Security Settings...**



The following screen is displayed.



From the **Security Settings** tree in the left pane, navigate to **Services > Configuration**. Select “Unsecure + Secure” from the **Service Security Level** drop-down menu. Note the secure **Service Port** value (i.e. “50805”) which will be used later to configure RSI tools OSN.



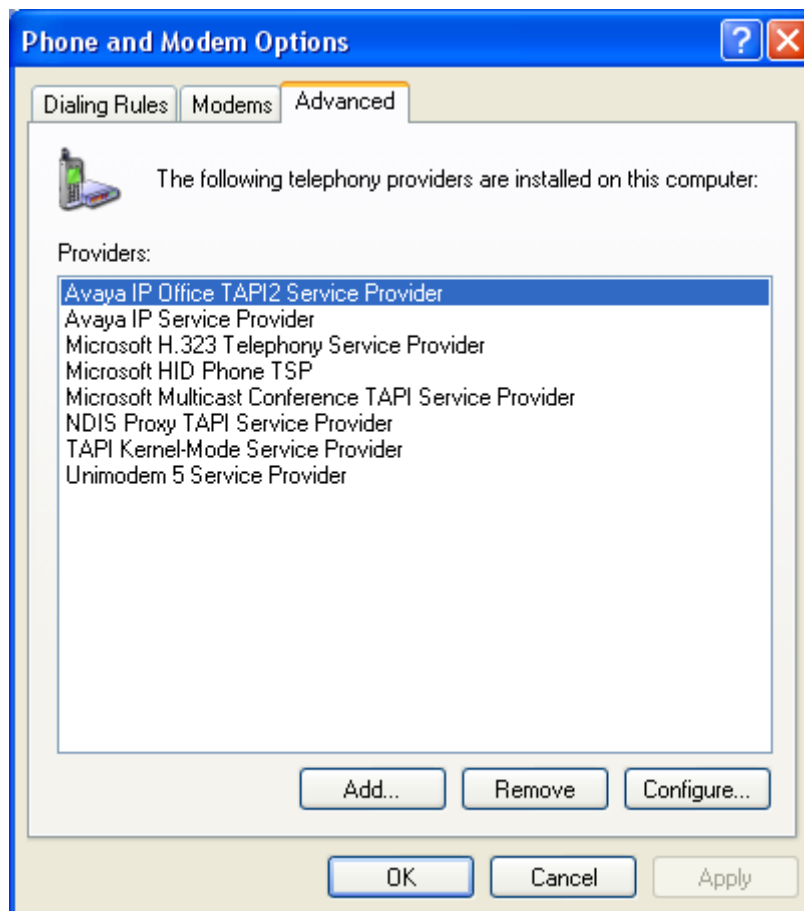
6. Configure RSI tools OSN

This section provides the procedures for configuring the RSI tools OSN Server. The procedures include the following areas:

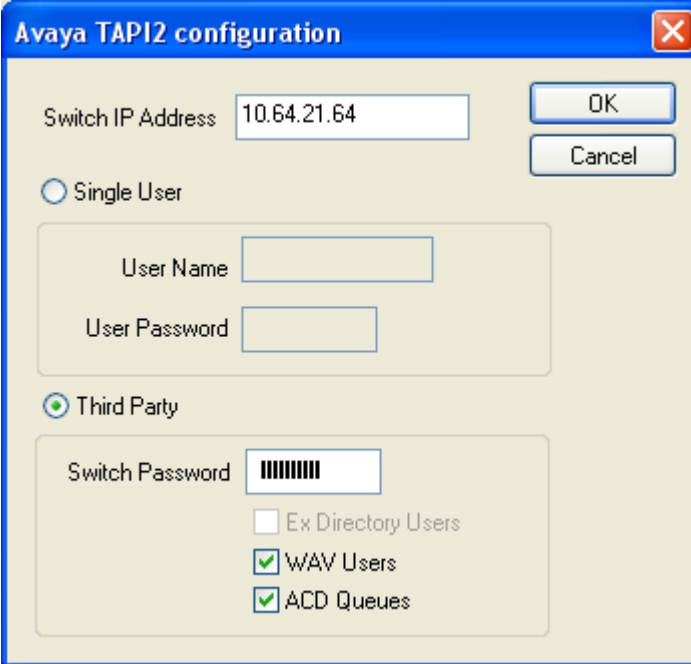
- Administer TAPI Driver
- Launch tools OSN Configuration Wizard
- Administer Connection Information
- Administer System Defaults
- Administer Public Safety Answering Point (PSAP)
- Administer Emergency List
- Administer Extension List
- Administer Notify List
- Administer IP Office Configuration Account

6.1. Administer TAPI Driver

From the RSI tools OSN PC, select **Start > Control Panel > Phone and Modem Options**, to display the **Phone and Modem Options** screen. Select the **Avaya IP Office TAPI2 Service Provider** entry under the **Advanced** tab, and click **Configure**.



The **Avaya TAPI2 configuration** screen is displayed. For **Switch IP Address**, enter the IP address of Avaya IP Office. Select the radio button for **Third Party**. Enter the appropriate credentials for the **Switch Password**. Reboot the RSI tools OSN PC.



The image shows a Windows-style dialog box titled "Avaya TAPI2 configuration". It has a blue title bar with a red close button. The main area is light beige. At the top, there is a text field labeled "Switch IP Address" containing the value "10.64.21.64". To the right of this field are two buttons: "OK" and "Cancel". Below the IP address field, there are two radio buttons. The first is labeled "Single User" and is unselected. The second is labeled "Third Party" and is selected. Below the "Single User" radio button is a group box containing two text fields: "User Name" and "User Password". Below the "Third Party" radio button is a group box containing a text field labeled "Switch Password" with masked characters (asterisks), and three checkboxes: "Ex Directory Users" (unchecked), "WAV Users" (checked), and "ACD Queues" (checked).

Avaya TAPI2 configuration

Switch IP Address: 10.64.21.64

OK Cancel

☐ Single User

User Name

User Password

☒ Third Party

Switch Password

☐ Ex Directory Users

☒ WAV Users

☒ ACD Queues

6.2. Launch RSI tools OSN Configuration Wizard


From the PC where the RSI tools OSN application is installed, select **Start > All Programs > RSI > tools OSN > Avaya > Configuration Wizard** to launch the configuration wizard. In the following sections, after entering the appropriate values on each screen, click the **Next** button to move forward through the wizard. At the end of the wizard, click the **Finish** button to complete the configuration.



6.3. Administer Connection Information

On the **Connection Information** screen, enter the IP Office IP address (or name) in the **IP Address or Name** field. Enter the password used to access IP Office in the **Password** field.

tools OSN Configuration Wizard - Connection Information



The RSI tools OSN software connects to your Avaya IP Office telephone system via your network. Once the connection is established the software monitors telephone activity from all extensions connected to the system. The following IP Office connection information is required by the tools OSN software.

IP Address or Name

Password

Monitoring of emergency events will stop when the connection between the tools OSN software and the IP Office system fails. Use the following option to instruct tools OSN to automatically reset the connection with the IP Office system if no telephone activity has occurred during the last X minutes.

Inactivity Reset Interval **Minutes**

< Back Next > Cancel

6.4. Administer System Defaults

On the **Setup System Defaults** screen, enter the desired system defaults. The screen below shows the values used during compliance testing.

tools OSN Configuration Wizard - Setup System Defaults

The RSI tools OSN Configuration Wizard program requires several system defaults to be specified by the user. These defaults will determine how your tools OSN system initializes.

☐ **Install tools OSN in Windows Startup Group**

☐ **Install tools OSN as a Service**

The RSI tools OSN system will track and record call activity on your Telephone System. Check the following options to create and log SMDR (Station Message Detail Records).

☒ **Log File**

Generate SMDR Records for the following types of calls

☒ **Outgoing** ☒ **Incoming** ☒ **Internal**

< **Back** **Next** >

6.5. Administer Public Safety Answering Point

On the **Public Safety Answering Point** screen, add/edit the PSAP Information fields as desired for each of the IP Office extensions.

tools OSN Configuration Wizard - Public Safety Answering Point (PSAP)

RSI tools OSN can send Public Safety Answering Point (PSAP) information with emergency notification messages delivered via email. Use the Extension information boxes provided below to define your PSAP information. If PSAP information is not required press the Next button.

Extensions

- 201
- 202
- 203
- 204
- 205
- 206
- 207
- 208
- 209
- 251

Extension 201 PSAP Information

Site: Avaya

Building: Building A

Floor: 3rd Room: Rm212A

Cubicle: n/a

Description: description

< Back Next > Cancel

6.6. Administer Emergency List

On the top half of the **Security Features** Screen, enter a value in the **Digits Dialed** field and click the **Add** button to add the value to the **Emergency List**. The screen below shows that “53002” has already been added as an emergency number. Repeat this procedure to add all the desired emergency numbers.

tools OSN Configuration Wizard - Security Features

Emergency Notification

Emergency Options
When an extension dials the Emergency Digits (all access codes must be included) or an Emergency Short Code a notification message will be delivered to the specified devices (i.e extensions, workstations, etc).

Digits Dialed (i.e. 911)
911

Emergency List
53002

53002 Emergencies/Errors Notifications

Extensions | Email | Computers

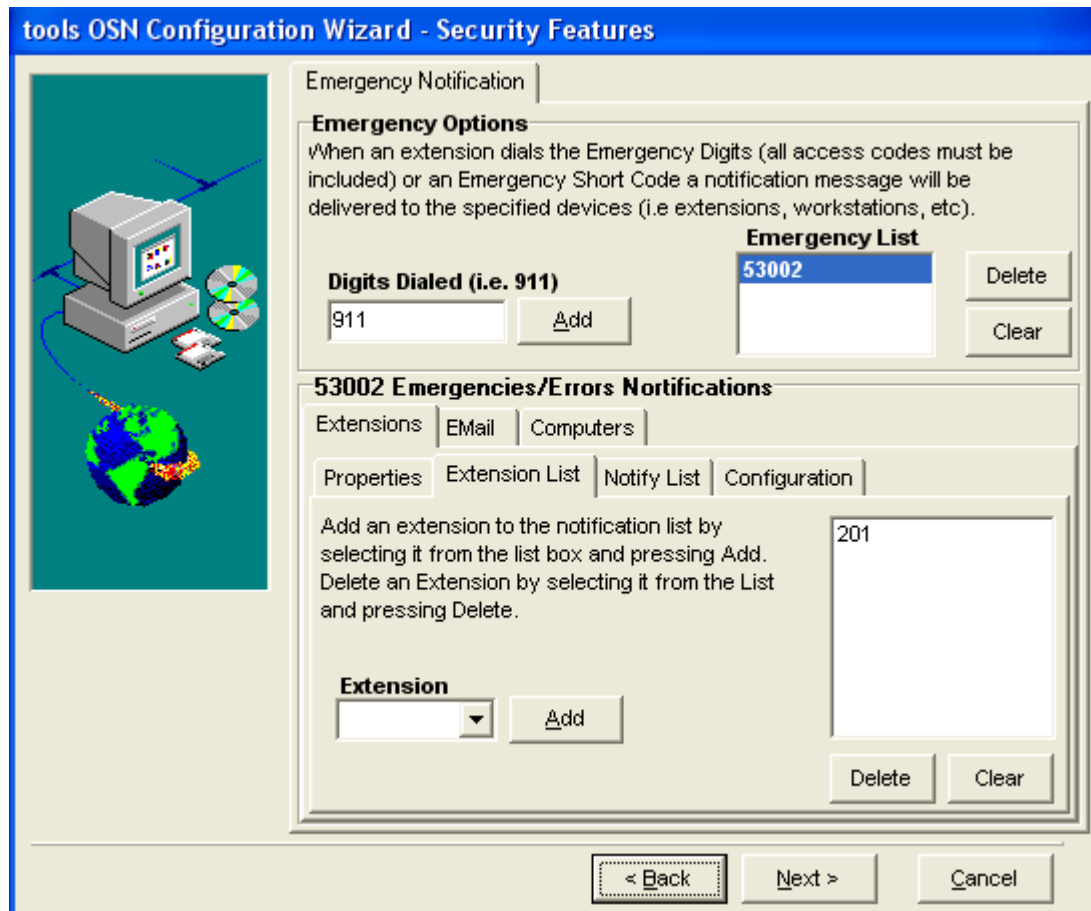
Properties | Extension List | Notify List | Configuration

Notification Message: EMERGENCY

Description:

6.7. Administer Extension List

On the bottom half of the **Security Features** Screen, click the **Extension List** tab. Use the **Extension** drop-down menu to select an extension to be added to the notification list. Click the **Add** button. Repeat this procedure to add all the desired numbers to the notification list. The screen below shows that extension “201” has already been added to the notification list.



The screenshot displays the 'tools OSN Configuration Wizard - Security Features' window. The 'Emergency Notification' tab is active. Under 'Emergency Options', a text box shows '911' with an 'Add' button next to it. To the right, the 'Emergency List' contains '53002' with 'Delete' and 'Clear' buttons. Below this, the '53002 Emergencies/Errors Notifications' section has tabs for 'Extensions', 'EMail', and 'Computers'. The 'Extensions' tab is selected, showing sub-tabs for 'Properties', 'Extension List', 'Notify List', and 'Configuration'. The 'Extension List' sub-tab is active, displaying a list box with '201'. Below the list box is an 'Extension' dropdown menu and an 'Add' button. 'Delete' and 'Clear' buttons are at the bottom right of the list. Navigation buttons '< Back', 'Next >', and 'Cancel' are at the bottom of the window.

tools OSN Configuration Wizard - Security Features

Emergency Notification

Emergency Options
When an extension dials the Emergency Digits (all access codes must be included) or an Emergency Short Code a notification message will be delivered to the specified devices (i.e extensions, workstations, etc).

Digits Dialed (i.e. 911)
911 Add

Emergency List
53002 Delete Clear

53002 Emergencies/Errors Notifications
Extensions EMail Computers

Properties Extension List Notify List Configuration

Add an extension to the notification list by selecting it from the list box and pressing Add.
Delete an Extension by selecting it from the List and pressing Delete.

Extension Add

201

Delete Clear

< Back Next > Cancel

6.8. Administer Notify List

On the bottom half of the **Security Features** Screen, click the **Notify List** tab. Select the extension(s) to be utilized to send the notification message.

tools OSN Configuration Wizard - Security Features

Emergency Notification

Emergency Options
When an extension dials the Emergency Digits (all access codes must be included) or an Emergency Short Code a notification message will be delivered to the specified devices (i.e extensions, workstations, etc).

Digits Dialed (i.e. 911)
911 Add

Emergency List
53002 Delete Clear

53002 Emergencies/Errors Notifications
Extensions Email Computers

Properties Extension List **Notify List** Configuration

Alert notifications to IP Office phones requires the use of an IP Office telephone extension. Select the extension(s) to be utilized to send the notification message.

Phone/Appearences


- ☐ IP Office Phone: 243
- ☐ IP Office Phone: 244
- ☐ IP Office Phone: 251
- ☒ IP Office Phone: 252
- ☐ IP Office Phone: 253

< Back Next > Cancel

6.9. Administer IP Office Configuration Account

On the bottom half of the **Security Features** Screen, click the **Configuration** tab. Enter the appropriate IP Office credentials for the **Account Name** and **Password** fields. In the **Port** field, enter the secure **Service Port** value shown at the end of **Section 5**.

tools OSN Configuration Wizard - Security Features



Emergency Notification

Emergency Options
When an extension dials the Emergency Digits (all access codes must be included) or an Emergency Short Code a notification message will be delivered to the specified devices (i.e extensions, workstations, etc).

Digits Dialed (i.e. 911)
911

Emergency List
53002

53002 Emergencies/Errors Nortifications

Extensions | EMail | Computers

Properties | Extension List | Notify List | **Configuration**

IP Office Configuration Account

Account Name

Password Port

Notification Options

Call Timeout (seconds) Retries

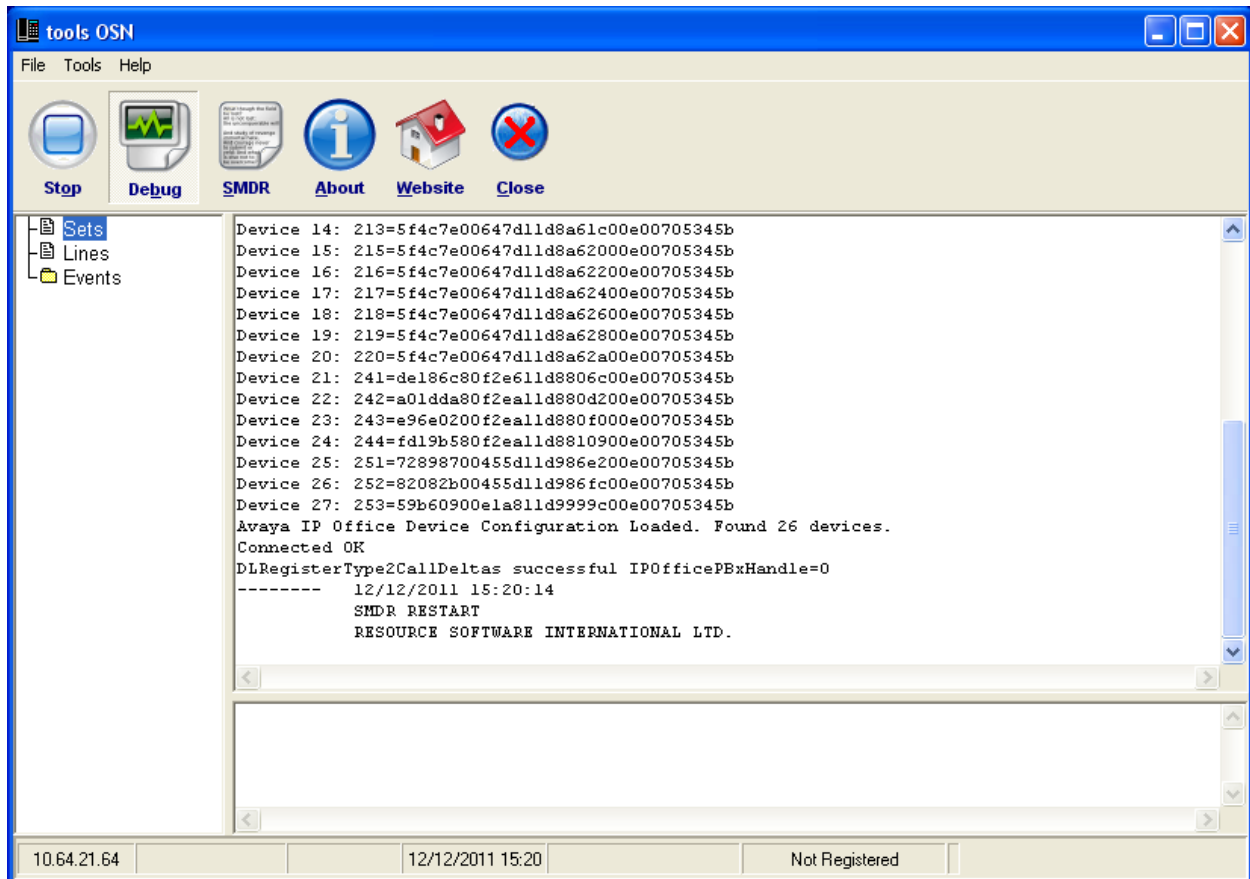
☒ Send Email to Error Email List if notification call not answered.

< Back Next > Cancel

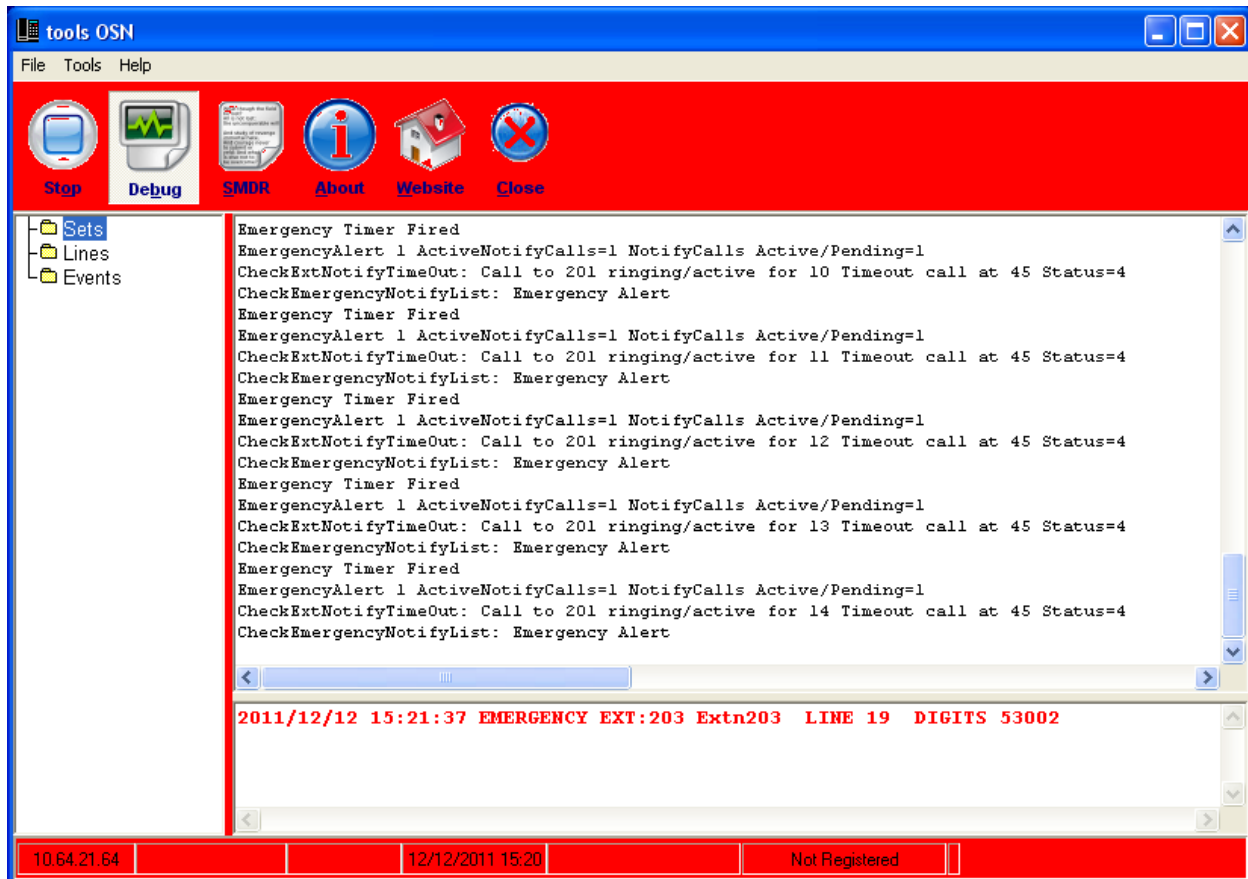
7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya IP Office and RSI tools OSN.

Launch the RSI tools OSN application by selecting **Start > All Programs > RSI > tools OSN > Onsite Notification**. Click the **Debug** icon followed by the **Start** Icon (note the **Start** icon will change to a **Stop** icon as shown below).



Place a call to an emergency number (in this case, “53002”). Verify the tools OSN application begins flashing and displays an event on the bottom portion of the screen indicating which extension dialed the emergency number (e.g. “203”) and the emergency number dialed (e.g. “53002”). Verify a call is placed from an extension selected in the **Notify List** in **Section 6.8** (e.g. “252”) to the extension in the **Extension List**, configured in **Section. 6.7** (e.g “201”). Verify the display on extension 201 shows extension 203 made an emergency call.



8. Conclusion

These Application Notes describe the configuration steps required for RSI tools OSN to successfully interoperate with Avaya IP Office. All feature and serviceability test cases were completed.

9. Additional References

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

1. *IP Office 8.0, IP Office Installation*, November 2011, available at <http://support.avaya.com>.
2. *IP Office Manager 10.0*, November 2011, available at <http://support.avaya.com>.
3. *Resource Software International Ltd. tools OSN (IP Office) User Guide*, available as part of RSI tools OSN installation.

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