



Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Telcomp Dialer and Avaya IP Office using TAPI - Issue 1.0

Abstract

These Application Notes describe the procedure for configuring Telcomp Dialer to interoperate with Avaya IP Office using a first party TAPI interface.

Telcomp Dialer provides a capability to use an application on a Windows PC to initiate calls using the TAPILink interface to IP Office. Dialer as described in these Application Notes is often installed concurrently with Telcomp Pickup which handles inbound calls. The Pickup solution is described separately in *Application Notes for Configuring Telcomp Dialer and Avaya IP Office using TAPI*.

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 procedure for configuring Telcomp Dialer to interoperate with Avaya IP Office using a first party TAPI interface.

Telcomp Dialer provides a capability to use an application on a Windows PC to initiate calls using the TAPILink interface to IP Office. Dialer as described in these Application Notes is often installed concurrently with Telcomp Pickup which handles inbound calls. The Pickup solution is described separately in *Application Notes for Configuring Telcomp Dialer and Avaya IP Office using TAPI*.

The Dialer solution described in these Application Notes uses the Avaya TAPI Service Provider for IP Office to provide a link for integrating control of an IP Office phone with applications running on a PC. With this information, a variety of tasks can be automated by inserting the information into application APIs. For example, a phone number on a web page can be highlighted using a hot-key and can be used to launch a call from the associated IP Office station and also launch a script to open a web browser to a specific URL with the phone number being the key to a database lookup for a browser based CRM application.

2. General Test Approach and Test Results

This interoperability compliance test included feature and functionality testing. Testing examined the ability of Telcomp Dialer to initiate outbound calls through Avaya IP Office from pre-programmed speed dials defined at the workstation, as well as from phone numbers contained in applications such as a web browser using a hot-key sequence.

2.1. Interoperability Compliance Testing

The testing included a mix of endpoints supported in IP Office, including Digital, H.323 and SIP deskphones. Testing was performed manually on an Avaya IP Office configured with two-way trunks connecting to the PSTN. SIP trunks from a PSTN Gateway were connected to the Avaya IP Office. The Dialer application was configured to establish a TAPI connection to the Avaya IP Office. The Dialer application was set up to control an extension and initiate a call when a pre-programmed speed dial button was pressed, or when a phone number was found in any application running on the PC using a hot-key sequence to initiate the call.

2.2. Test Results

The Telcomp Dialers functionality was successfully verified through the course of the compliance test.

2.3. Support

For technical support, contact Telcomp, Inc. at <http://telcomp.com> or (407) 889-7377.

3. Reference Configuration

The test environment used for the solution testing is shown in **Figure 1**.

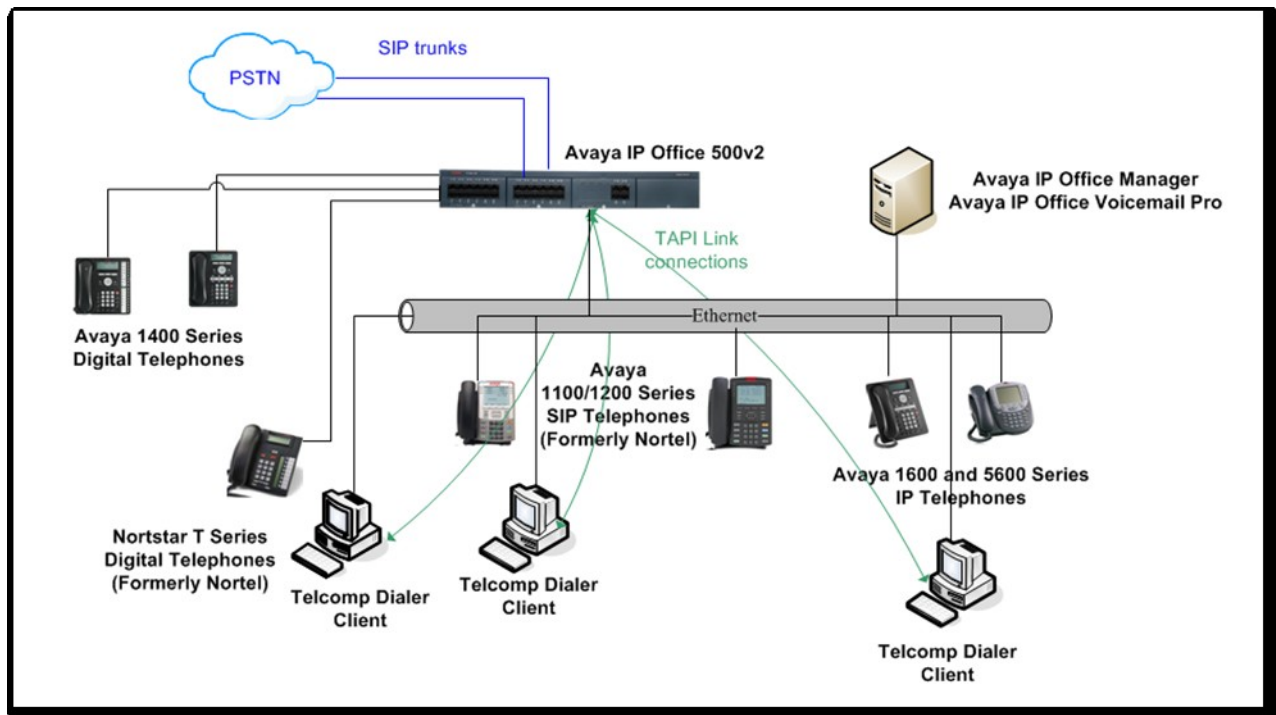


Figure 1: Telcomp TAPI Dialer Test Configuration

4. Equipment and Software Validated

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

Equipment	Software/Firmware
IP Office 500 V2 Control Unit	7.0 (12)
IP Office Manager on Windows XP PC	9.0 (12)
Avaya 1408/1416 Digital Phones	-
Avaya 1616 IP Phone	ha1616ua1_300B.bin
Avaya 5610 IP Phone	x10d01a2_9_1.bin
Avaya T7208 Norstar Digital Phone	-
Avaya 1140E IP Phone	4.01.13 SIP
Avaya 1230 IP Phone	4.01.13 SIP
Windows XP PC with : Telcomp Dialer Avaya IP Office TAPI 3 Service Provider	9.12y Q1 Maintenance 2011 Release
Windows 7 PC with : Telcomp Dialer Avaya IP Office TAPI 3 Service Provider	9.12y Q1 Maintenance 2011 Release

5. Configure Avaya IP Office


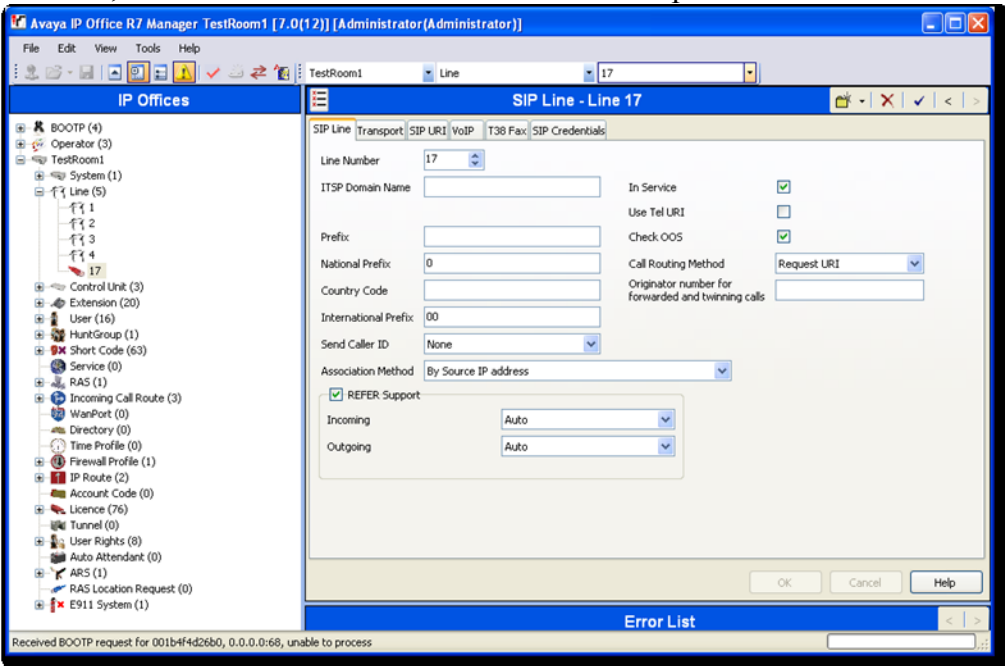
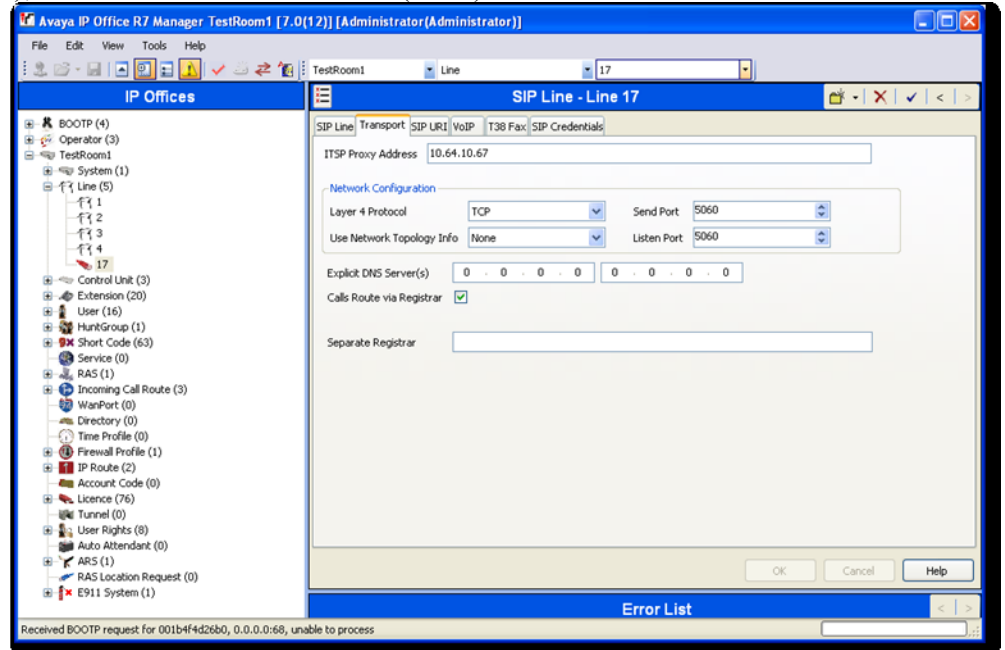
The configuration of Avaya IP Office involved establishing Trunks (Lines) and routing to connect to the external PSTN, and to confirm proper CTI licenses were in place on the IP Office system.

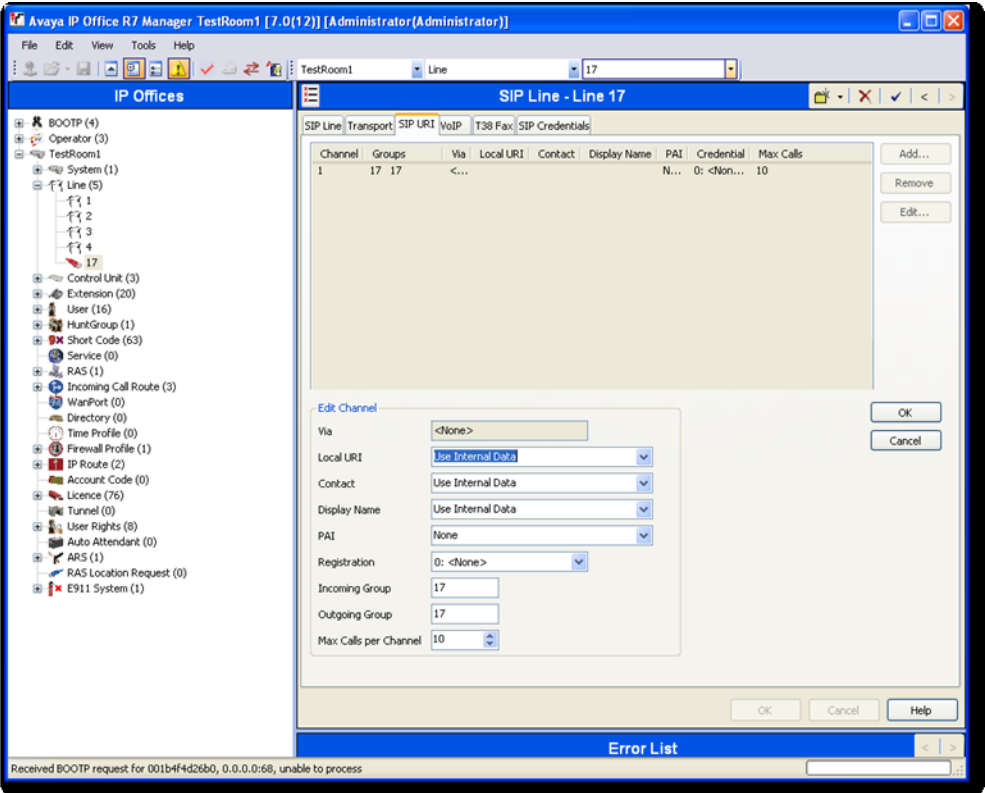
5.1. Configuration Details for IP Office

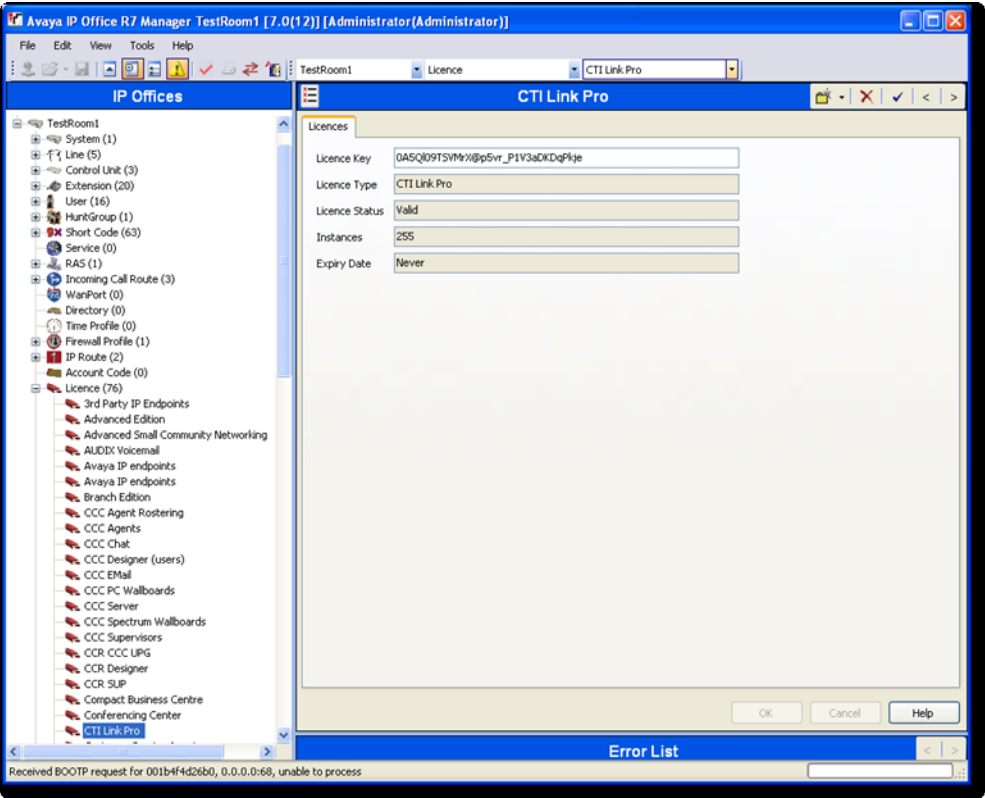
The following configuration of IP Office was performed using the IP Office Manager application.


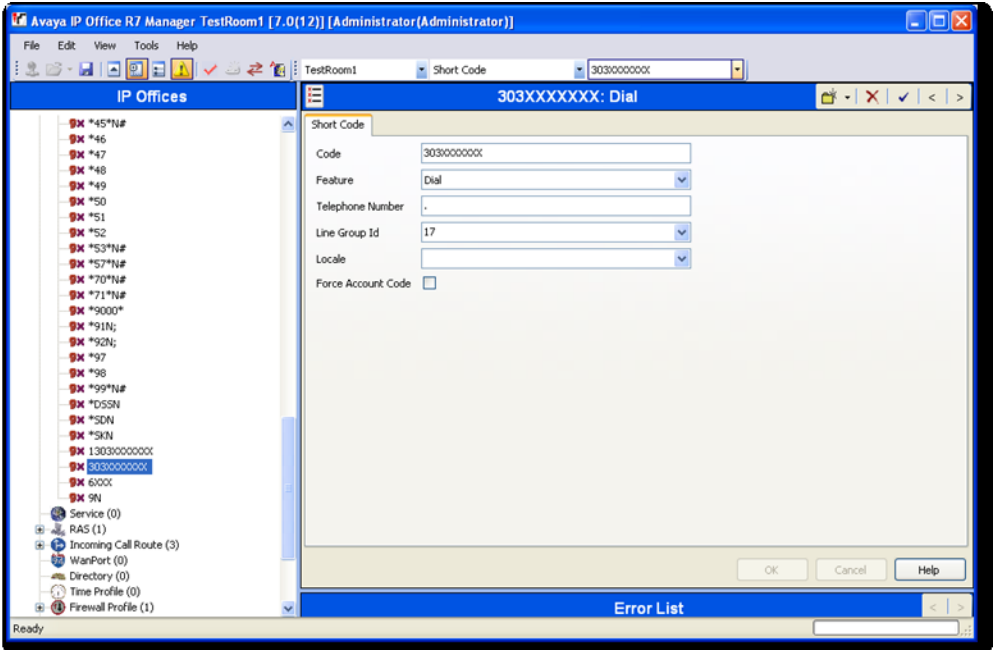

The changes made were:

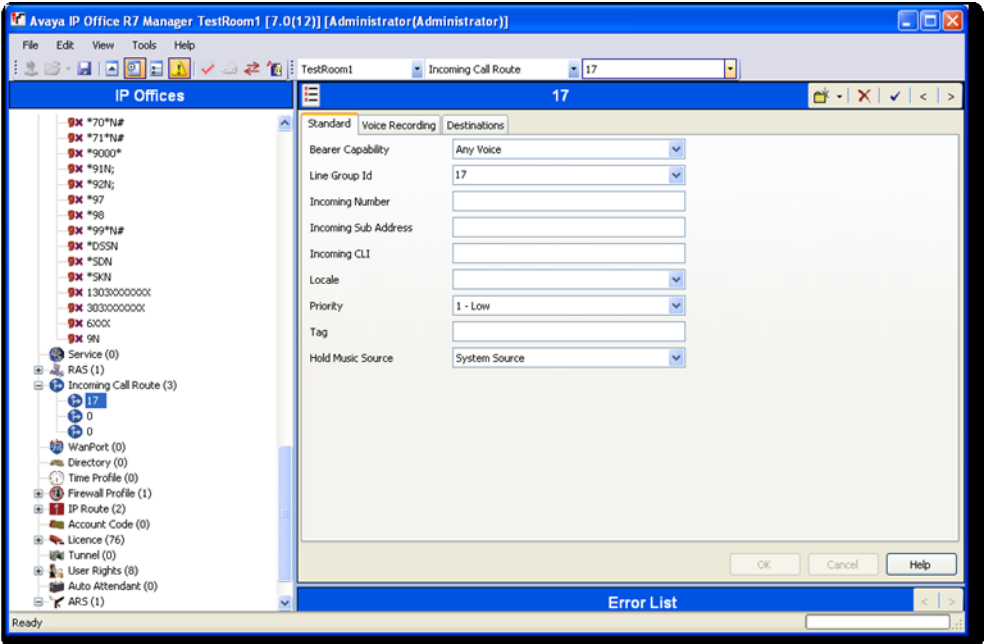
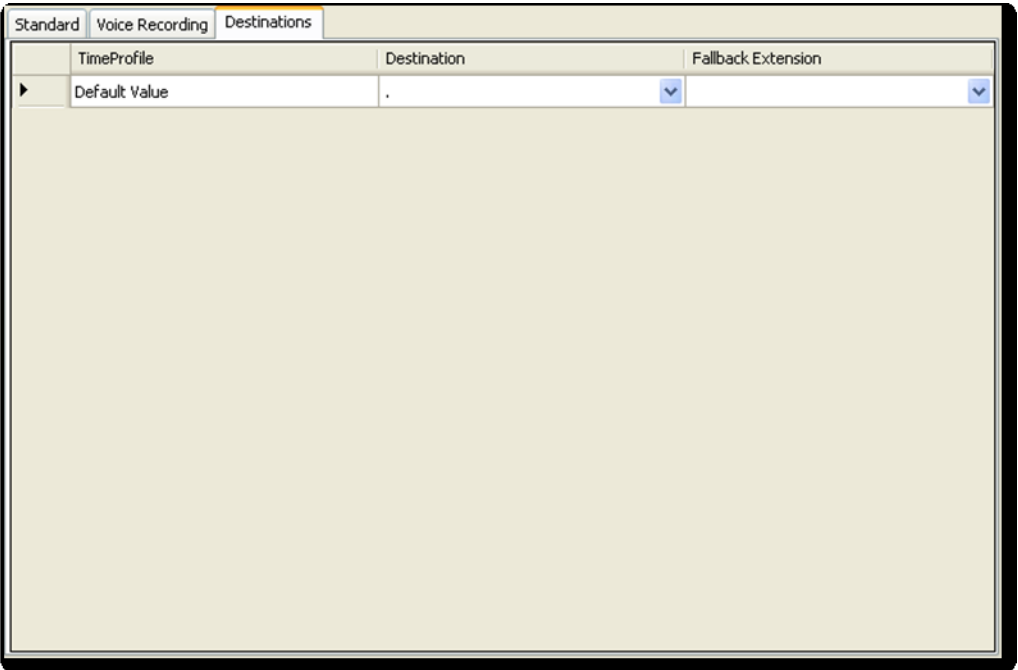
- Configure SIP Trunks (Lines) to the PSTN
- Confirm Licenses
- Configure Short Codes for Routing
- Configure Inbound Routing

Step	Description
1.	<p>Configure SIP Trunks (Lines) to the PSTN</p> <p>In the tested configuration, a SIP Trunk was used for routing PSTN traffic to and from the IP Office system. In order to create a SIP Line, select the Line object in the IP Office Manager and click the New icon  and select SIP Line (not shown). On the SIP Line tab, select an available Line Number and accept all other defaults.</p> 
	<p>On the Transport tab, enter the ITSP Proxy Address of the other end of the SIP Line, in this case an Avaya Aura® Communication Manager, enter the Layer 4 Protocol (TCP), and Send and Listen Ports (5060).</p> 

Step	Description
	<p>Configure SIP Trunks (Lines) to the PSTN (Continued)</p> <p>On the SIP URI tab, Click Add to create a new record containing the URI specifications, accept all defaults and enter the Incoming and Outgoing Group (Line 17 configured above), and the Max Calls per Channel which relates to the number of trunk group members in Communication Manager in this test, or number of concurrent sessions from a SIP Service Provider. Click OK to save the entries in the Edit Channel section, then click OK at the bottom of the screen to save all changes to the Line configuration.</p> 

Step	Description
2.	<p>Confirm Licenses</p> <p>Navigate to License>CTI Link Pro to confirm that an adequate quantity of Instances are enabled for each endpoint that will use Dialers to be able to connect.</p> 

Step	Description
3.	<p>Configure Short Codes for Routing</p> <p>Select the Short Code object in the IP Office Manager, and click the New icon  to create routing instructions for calls to the PSTN via Line 17. In the example below, calls to the 303 area code with 10 digits used the Dial feature and Line Group Id 17 to reach the PSTN. The Telephone Number ‘.’ was used to instruct IP Office to send the dialed digits from the phone without modification. Repeat this for all permitted dial patterns, or use a broader pattern to encompass all area codes as required. In this system, the 9N pattern (not shown) which is a default pattern was also configured to use Line Group Id 17 enabling calling to 11 digit numbers starting with 9. Click OK to save any changes.</p>  <p>At this point, click the System Save icon  in the toolbar and save all of the changes and allow the system to reboot to read and apply the new settings (not shown).</p>

Step	Description
4.	<p>Configure Inbound Routing Create a new Incoming Call Route by clicking the New icon when the Incoming Call Route object is selected in IP Office Manager. Set the Line Group ID to 17 for this routing rule on the Standard tab.</p>  <p>On the Destinations tab, enter ‘.’ in the Destination field to route calls to the dialed number. If a specific destination is required such as an auto attendant number, enter that here instead.</p> 

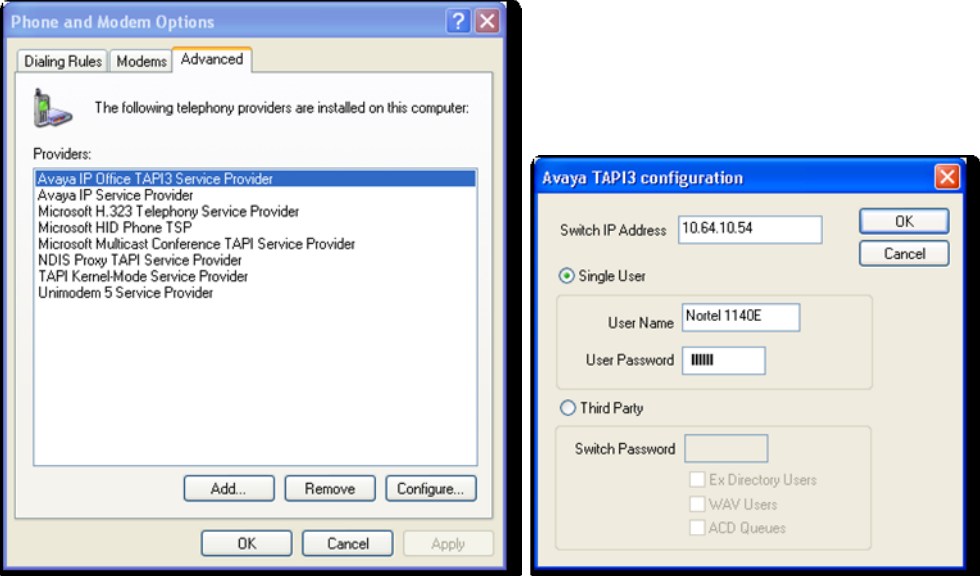
6. Configure Telcomp Dialer on PCs

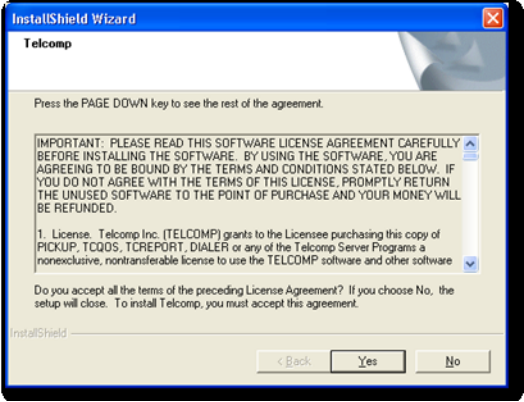
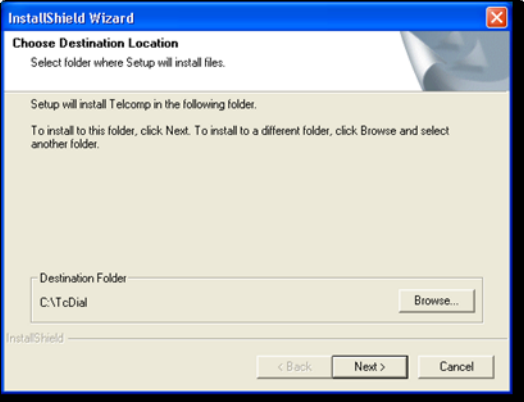
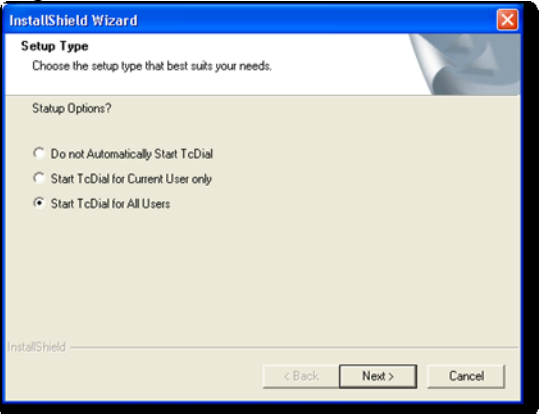
This section covers the configuration of Telcomp Dialer on PCs and is illustrated on a Windows XP machine. The steps are similar on Windows 7 or any other supported Windows OS, though the screens might look a bit different.

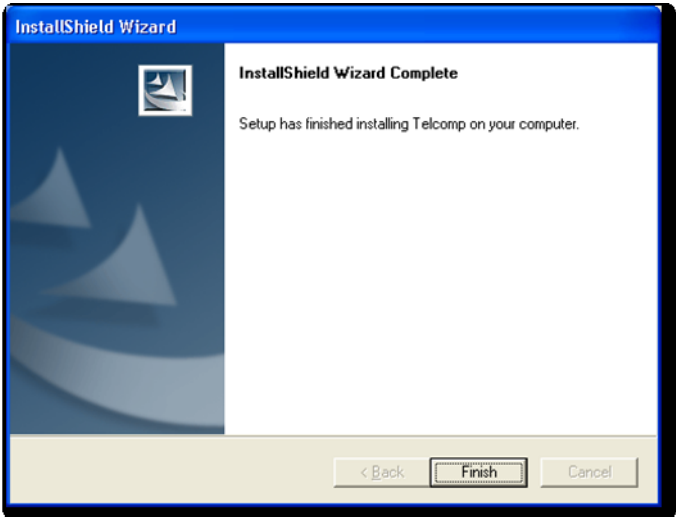
6.1. Configuration Details for Telcomp Dialer


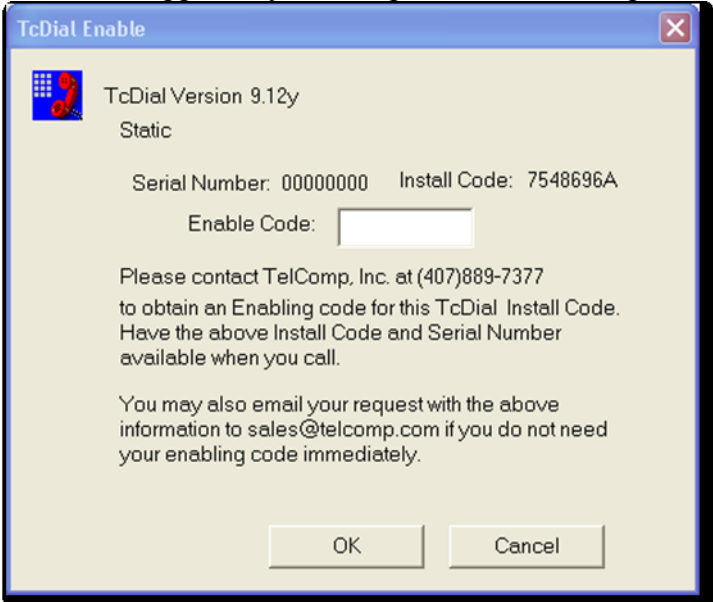
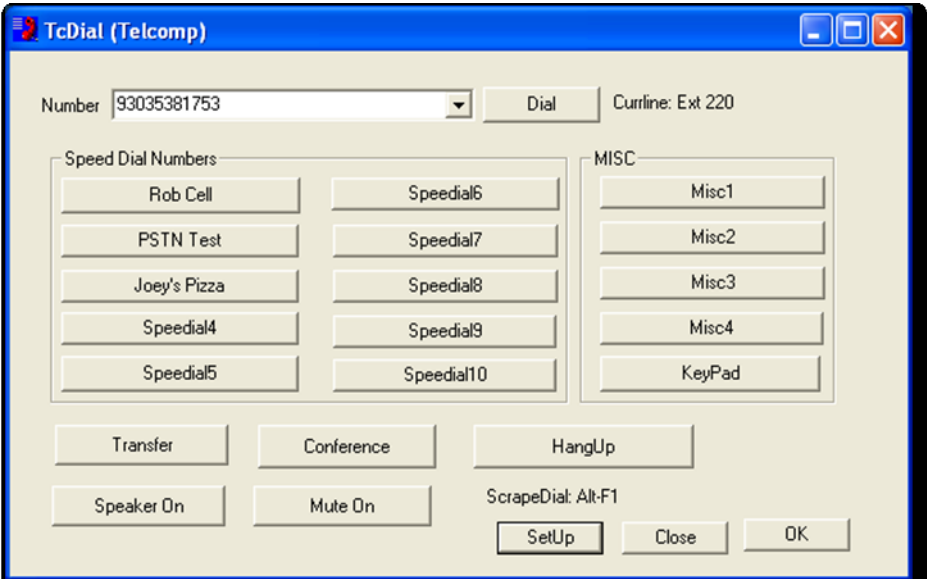
The Avaya IP Office TAPI3 Service Provider must be installed and configured on each PC that will have the Dialer application installed on. Installation of the TAPI Service Provider follows standard software installation process and is not covered in these Application Notes. The steps at each PC are as follows:

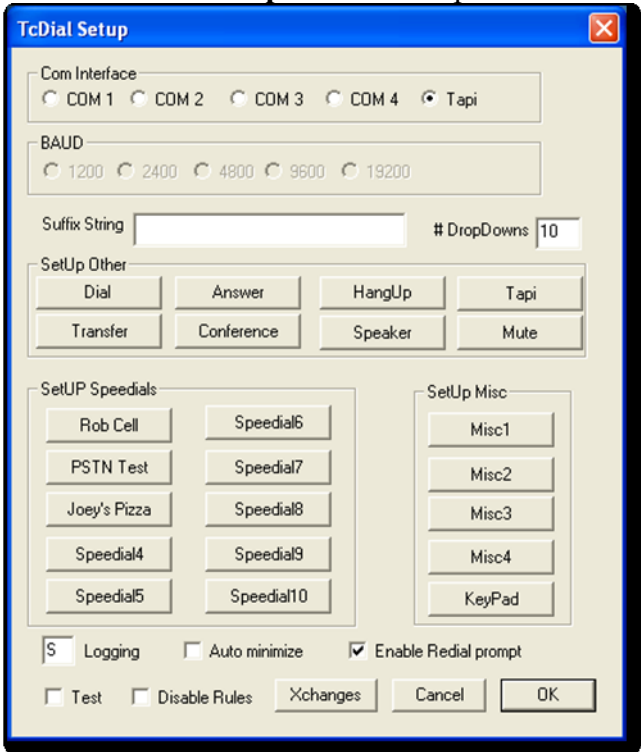
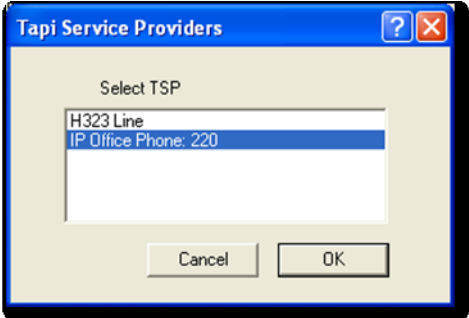
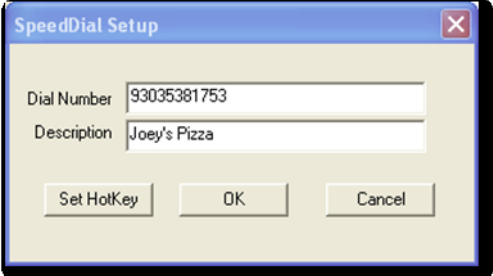
- Configure the Avaya IP Office TAPI Service Provider
- Install the Telcomp Dialer Client
- Configure the Telcomp Dialer Client

Step	Description
1.	<p>Configure the Avaya IP Office TAPI Service Provider</p> <p>The latest TSP can be found on the support.avaya.com downloads page for IP Office and follows a standard Windows installation method (not shown). To configure, select Phone and Modem Options from the Windows Control Panel and navigate to the Advanced tab. Highlight the Avaya IP Office TAPI3 Service Provider and click Configure. On the Avaya TAPI3 configuration dialog, enter the IP Office Control Unit IP Address in the Switch IP Address field, select Single User, enter the User Name and User Password assigned to the phone at the workstation being configured. Click OK on both dialog boxes to save the changes. Repeat this at each workstation that will use the Dialer application.</p> 

Step	Description
2.	<p>Install Dialer Client</p> <p>Use an account with administrative privileges to install the software. Run the SETUP program from the Tinstall file location (if installed online), CD or USB Stick (if purchased with media). Please read and agree to the software license. Click YES to continue.</p>  <p>The install will then display the Drive and Folder Installation Destination. The default installation folder for the Dialer program is C:\TcDial. If this is not the intended installation directory, click on the Browse button and select an alternate installation location (not shown). Click NEXT to proceed.</p>  <p>Choose the startup option for the computer. Generally Start TcDial for All Users is selected. Click NEXT to proceed.</p> 

Step	Description
	<p>Install Dialer Client (Continued)</p> <p>The Installer will eventually confirm that installation is complete. Click Finish to close the installer.</p> 

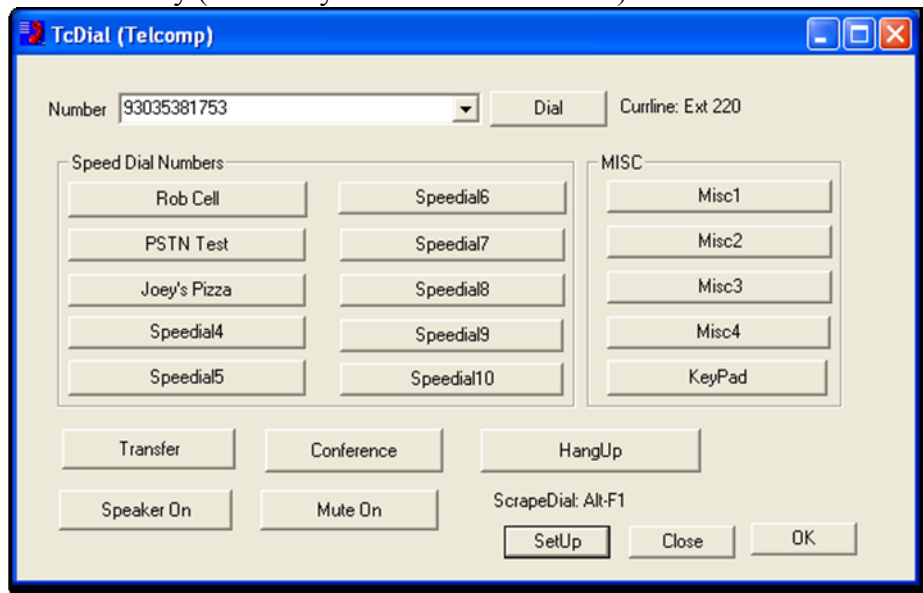
Step	Description
3.	<p>Configure the Dialer Client Start the Dialer program by clicking on the desktop Icon as shown below.</p>  <p>The following screen will appear the first time the Dialer application is launched. Provide the Enable Code supplied by Telcomp and click OK to proceed.</p>  <p>Click on the SetUp button. Note: The first time the application is launched, the Currline: field will be blank. This indicates the need to setup a TAPI Service Provider.</p> 

Step	Description
	<p>Configure the Dialer Client (Continued) On the TcDial Setup screen, click on Tapi to select the TAPI Service Provider. This screen will also be used to launch the Speed Dial setup below as well.</p>  <p>Select the IP Office Phone TSP from the list and click OK.</p>  <p>With a Speeddial button selected from the TcDial Setup screen, enter the Dial Number and Description and then click OK to save the speed dial settings.</p> 

7. Verification Steps

The following steps may be used to verify the configuration:

- From a PC configured with the Telcomp Dialer application, launch the Dialer client and place a call using the blank **Number** field, and click the **Dial** button.
- From a PC configured with the Telcomp Dialer application, launch the Dialer client and place a call using the **Speed Dial** buttons.
- From a PC configured with the Telcomp Dialer application, launch the Dialer client and place a call from a phone number highlighted in a browser window or other application using the **ScrapeDial Hot-Key (Alt-F1)** by default as seen below).



8. Conclusion

These Application Notes describe the procedure for configuring Telcomp Dialer to interoperate with Avaya IP Office using a TAPI interface.

9. Additional References

Avaya

- [1] *Avaya IP Office Release 7.0 Manager 9.0*, Doc # 15-601011, Issue 26h, May 2011
- [2] *Avaya IP Office DevLink Guide*, Doc # 15-601034, Issue 12d, December, 2009
- [3] *Avaya IP Office TAPILink*, Doc # 15-6010354, Issue 11f, December, 2009

Product documentation for Avaya products may be found at <http://support.avaya.com>.

Product documentation for Telcomp products may be found at <http://telcomp.com/>

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