



## **Avaya Solution & Interoperability Test Lab**

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# **Application Notes for Resource Software International Visual Rapport with Avaya IP Office – Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps required for Resource Software International Visual Rapport to interoperate with Avaya IP Office. Resource Software International Visual Rapport is a visual communication console that provides desktop dialing, telephone status / presence, instant messaging, email, screen pop, call logging, and file transfer. The compliance testing focused on the telephony features.

In the compliance testing, Resource Software International Visual Rapport used the TAPI interface from Avaya IP Office to provide screen pop and basic call control telephony features.

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) Visual Rapport to interoperate with Avaya IP Office. RSI Visual Rapport is a visual communication console that provides desktop dialing, telephone status / presence, instant messaging, email, screen pop, call logging, and file transfer. The compliance testing focused on the telephony features.

In the compliance testing, RSI Visual Rapport used the TAPI interface from Avaya IP Office to provide screen pop and basic call control telephony features.

RSI Visual Rapport used a server and client architecture. Each RSI Visual Rapport client used TAPI 2 in single user mode with Avaya IP Office to obtain call events and perform call controls such as hold and reconnect.

## 2. General Test Approach and Test Results

### 2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing. The feature test cases were performed manually. The feature testing focused on verifying the following on RSI Visual Rapport:

- Handling of TAPI call events from Avaya IP Office.
- Proper handling of call control scenarios including answer, disconnect, hold, reconnect, blind/attended transfer, park, unpark, incoming trunk call, internal call, outgoing call, voicemail call, multiple calls, and outpulse of DTMF digits.

The verification of tests also included checking of proper states at the user telephones and desktop screens, and of reviewing the TAPI log file from the RSI Visual Rapport Client.

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

### 2.2. Test Results

All test cases were executed and passed.

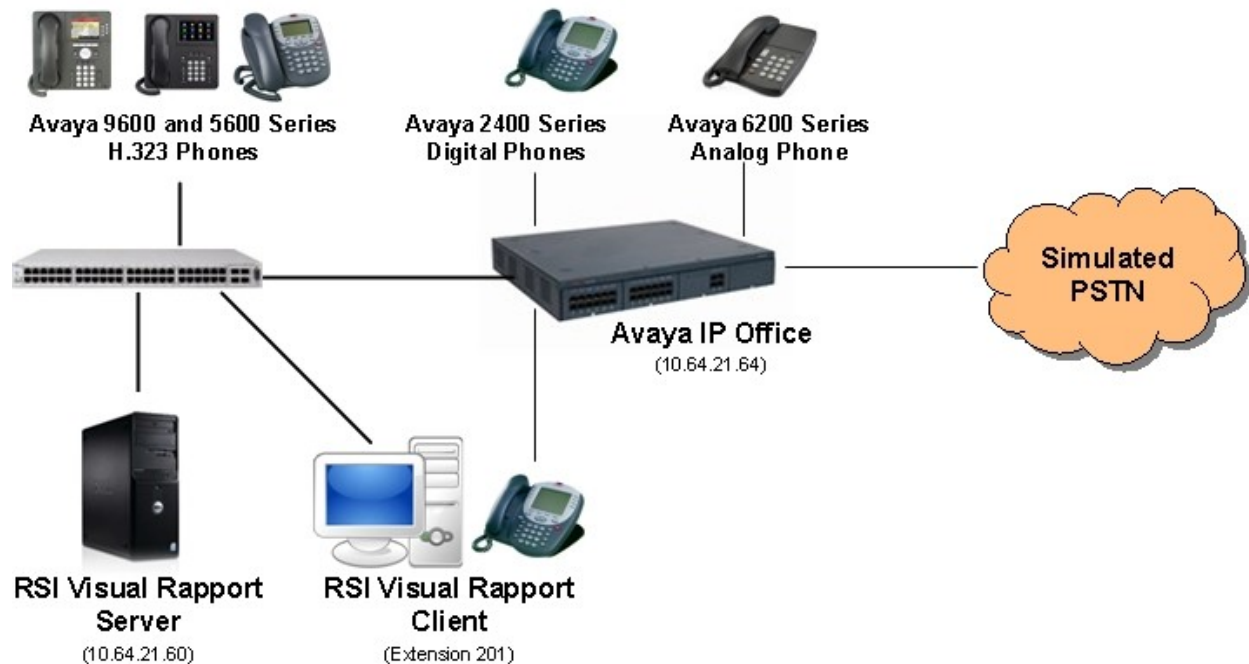
### 2.3. Support

Technical support on the RSI Visual Rapport can be obtained through the following:

- **Phone:** (905) 576-4575
- **Email:** [support@telecost.com](mailto:support@telecost.com)
- **Web:** [www.telecost.com](http://www.telecost.com)

### 3. Reference Configuration

The RSI Visual Rapport solution consists of the RSI Visual Rapport Server, and RSI Visual Rapport Clients. Each RSI Visual Rapport Client has a TAPI connection to Avaya IP Office. The example reference configuration below shows only one RSI Visual Rapport Client associated with the User of digital phone extension 201. However, during compliance testing, the RSI Visual Rapport Server and Client were reconfigured and retested with other phone types (i.e. H.323, digital, and analog).



## 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"><li>DIGSTA8/PRIS U</li><li>VCM32</li><li>ANALOG POTS30V2</li></ul>	8.0 (13) <ul style="list-style-type: none"><li>8.0 (13)</li><li>8.0 (13)</li><li>10.0 (13)</li></ul>
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"><li>96x0</li><li>96x1</li></ul>	3.1 SP2 6.0 SP5
RSI Visual Rapport Server on Windows XP Professional Service Pack 3 PC	2.17
RSI Visual Rapport Client <ul style="list-style-type: none"><li>Avaya IP Office TAPI Driver</li></ul>	2.17 tapiQ3Maint2011.exe

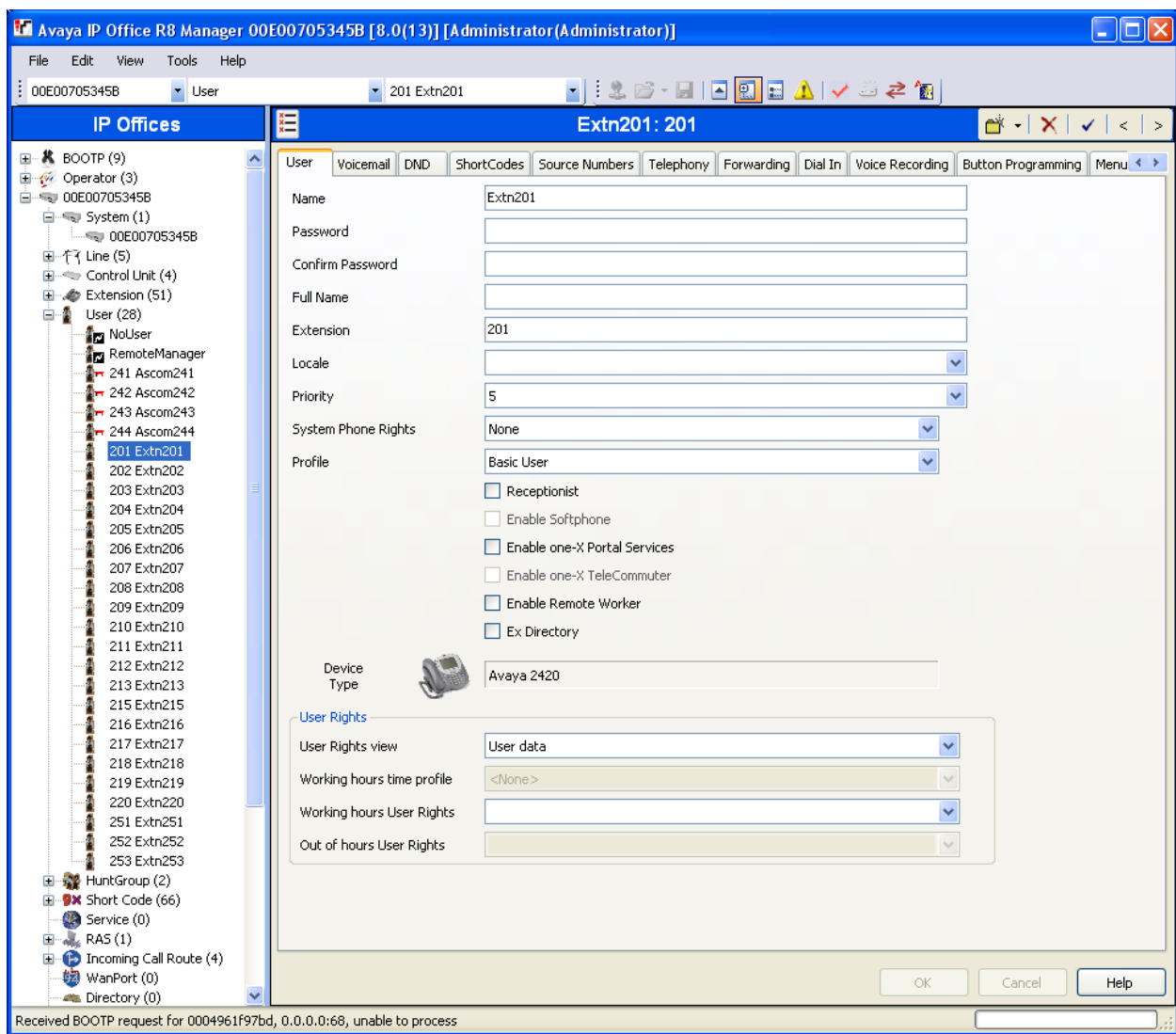
## 5. Configure Avaya IP Office

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 (not shown).

The **Avaya IP Office R8 Manager** screen is displayed. From the configuration tree in the left pane, select a user (e.g. “Extn201”).

Enter a desired value (or blank) for **Password** and **Confirm Password**. Make a note of the values for **Name**, **Password**, and **Extension**, which will be used later to configure RSI Visual Rapport. Repeat this section for all RSI Visual Rapport users



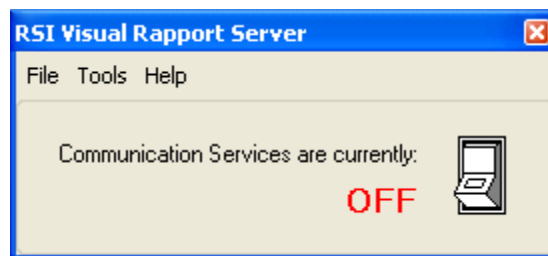
## 6. Configure RSI Visual Rapport Server

This section provides the procedures for configuring the RSI Visual Rapport Server. The procedures include the following areas:

- Launch Visual Rapport Server
- Administer group
- Administer users
- Administer communication

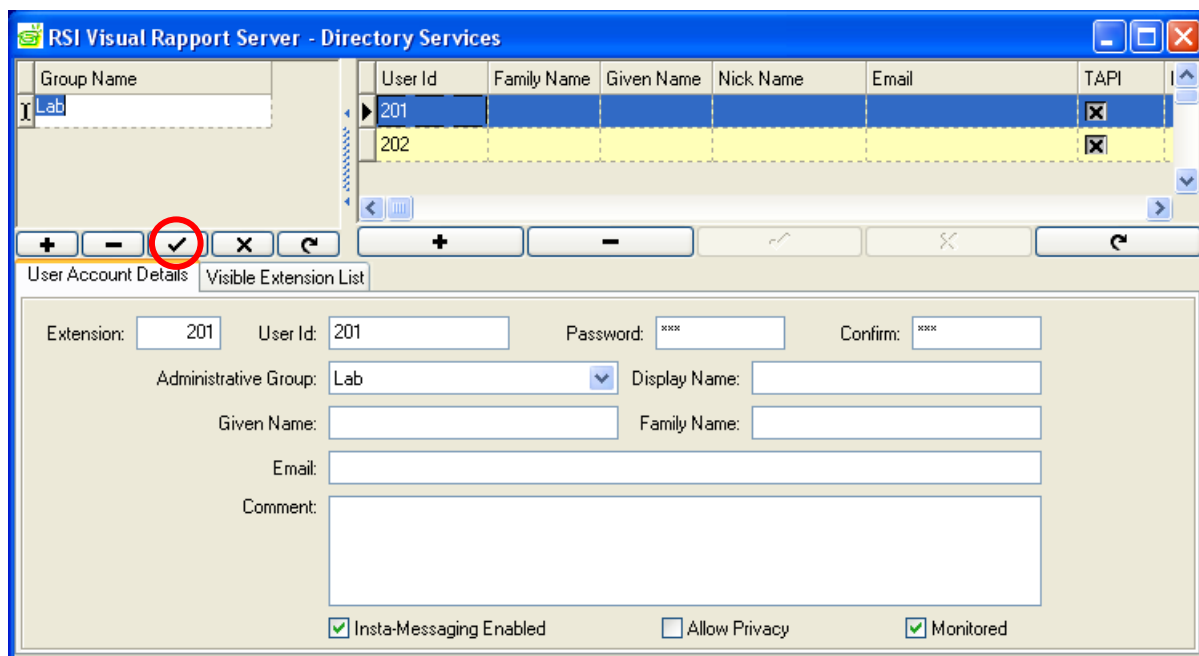
### 6.1. Launch Visual Rapport Server

From the Visual Rapport server, select **Start > All Programs > RSI > Visual Rapport for TAPI > Server** to display the **RSI Visual Rapport Server** screen. Select **Tools > Directory Services** from the top menu.



### 6.2. Administer Group

The **RSI Visual Rapport Server – Directory Services** screen is displayed next. In the upper left pane, enter a desired **Group Name** (e.g. “Lab”), and click the **Post edit** button circled below.



### 6.3. Administer Users

In the bottom pane, select the **User Account Details** tab.

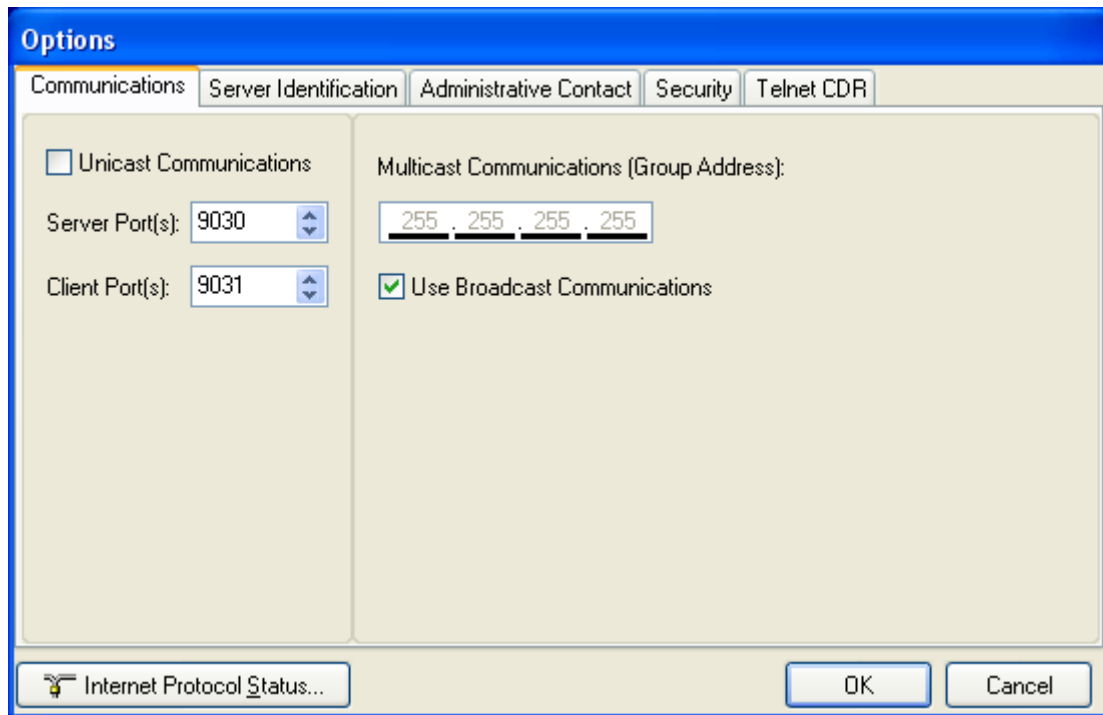
For **Extension**, enter the first user extension from **Section 5**. Enter desired values for **User Id**, **Password**, **Confirm**, and **Display Name**. Retain the default value in the remaining fields, and click the **Post edit** button circled below.

The screenshot shows the 'RSI Visual Rapport Server - Directory Services' window. At the top, there's a table with columns: Group Name, User Id, Family Name, Given Name, Nick Name, Email, and TAPI. The 'Group Name' is 'Lab'. The 'User Id' column has values 201, 203, and 204. The 'TAPI' column has checkboxes, with the one for 201 checked. Below the table is a row of buttons: +, -, ✓ (circled in red), X, and a refresh icon. Below this is the 'User Account Details' tab. It contains fields for: Extension (201), User Id (201), Password (XXXX), Confirm (XXXX), Administrative Group (Lab), Display Name, Given Name, Family Name, Email, and Comment. At the bottom are three checkboxes: 'Insta-Messaging Enabled' (checked), 'Allow Privacy' (unchecked), and 'Monitored' (checked).

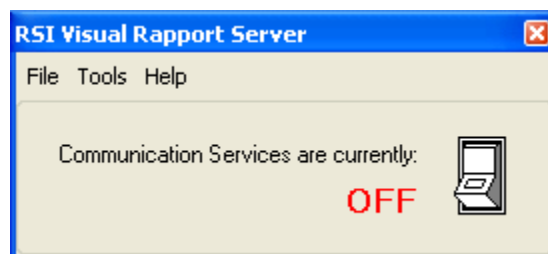
Repeat this section to add all users.

## 6.4. Administer Communication

From the **RSI Visual Rapport Server** screen shown in **Section 6.1**, select **Tools > Options** from the top menu to display the **Options** screen. Check **Use Broadcast Communications**. Note that the method of communication between the server and client can be either unicast or multicast. During compliance testing, the multicast method was used.

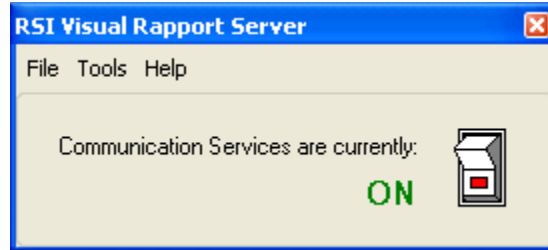


The **RSI Visual Rapport Server** screen is displayed again. Click on the flip switch.





The **Communication Services** are activated as shown below.



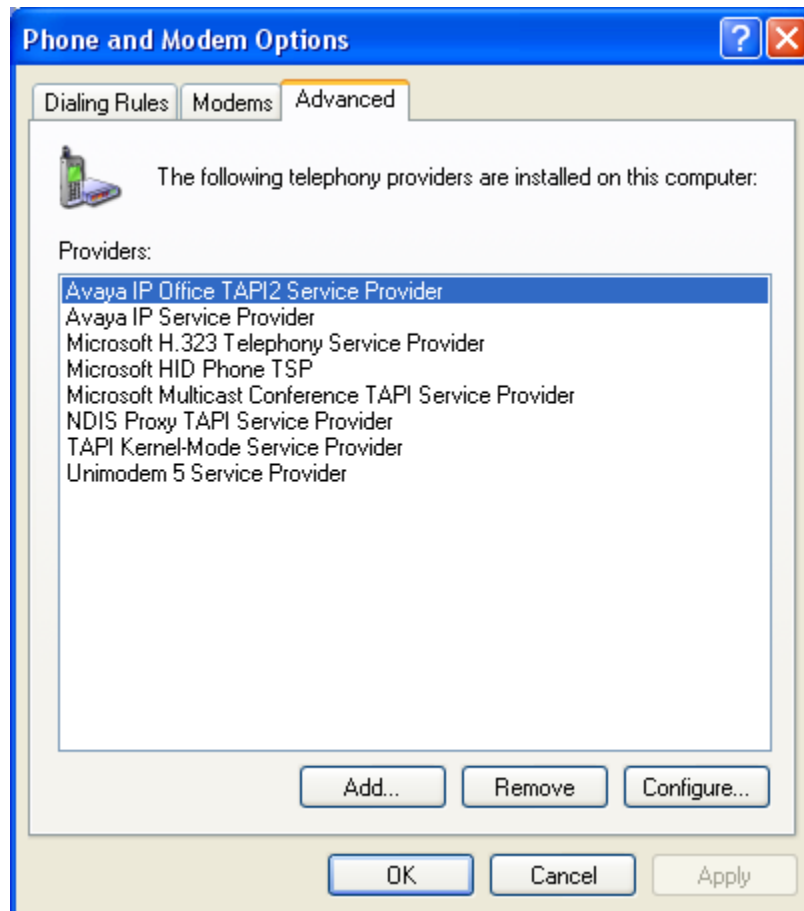
## 7. Configure RSI Visual Rapport Client

This section provides the procedures for configuring the RSI Visual Rapport Client. The procedures include the following areas:

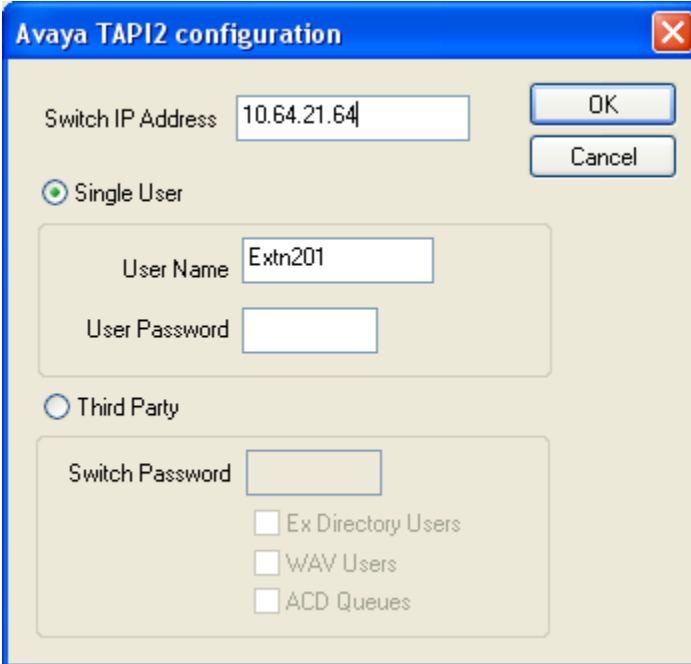
- Administer TAPI driver
- Launch Visual Rapport Client
- Administer messaging configuration
- Administer TAPI configuration

## 7.1. Administer TAPI Driver

From the Visual Rapport Client 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 **Single User**. For **User Name** and **User Password**, enter the corresponding IP Office user name and password from **Section 5**. Reboot the Visual Rapport Client PC.

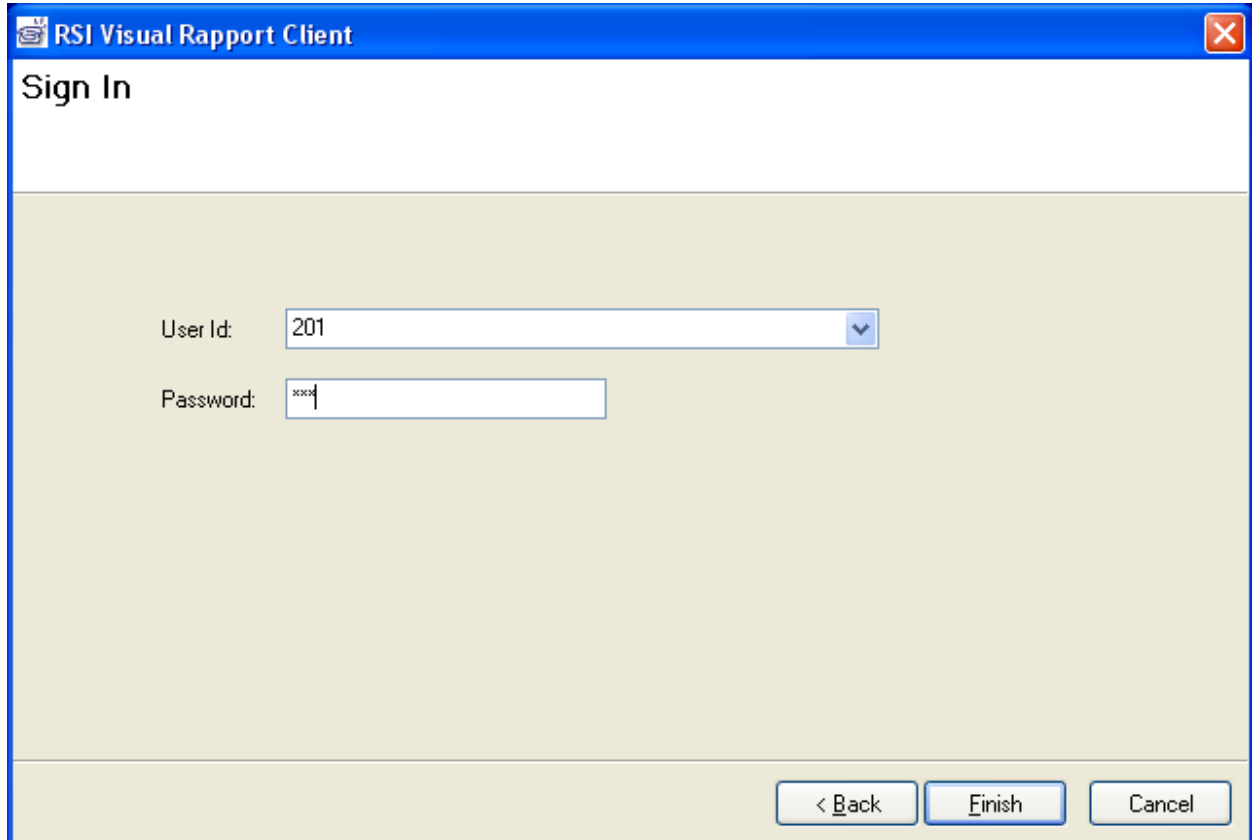


The image shows a Windows-style dialog box titled "Avaya TAPI2 configuration". It has a blue title bar with a red close button. The dialog is divided into two main sections by radio buttons. The first section, "Single User", is selected. It contains a text box for "Switch IP Address" with the value "10.64.21.64", and a group box containing "User Name" (value "Extn201") and "User Password" (empty). The second section, "Third Party", is unselected and contains a "Switch Password" text box and three unchecked checkboxes: "Ex Directory Users", "WAV Users", and "ACD Queues". "OK" and "Cancel" buttons are in the top right.

Field	Value
Switch IP Address	10.64.21.64
Single User	<input checked="" type="radio"/>
User Name	Extn201
User Password	
Third Party	<input type="radio"/>
Switch Password	
Ex Directory Users	<input type="checkbox"/>
WAV Users	<input type="checkbox"/>
ACD Queues	<input type="checkbox"/>

## 7.2. Launch Visual Rapport Client

From the Visual Rapport Client, select **Start > Programs > RSI > Visual Rapport for TAPI > Client** to display the **RSI Visual Rapport Client** screen.



The screenshot shows a window titled "RSI Visual Rapport Client" with a standard Windows-style title bar (blue with a close button). The main area is titled "Sign In" and has a light beige background. It contains two input fields: "User Id:" with a dropdown menu showing "201" and a small downward arrow, and "Password:" with a text box containing "xxxx". At the bottom right, there are three buttons: "< Back", "Finish", and "Cancel".

### 7.3. Administer Messaging Configuration

Click the **Back** button until the **Messaging Configuration** screen is displayed. For **Visual Rapport Server Address**, enter the IP address of Visual Rapport server (or “LOCALHOST” if the server is local). Retain the default values in all remaining fields. Click the **Next** button.

The screenshot shows the 'RSI Visual Rapport Client' window with the 'Messaging Configuration' tab selected. The 'Visual Rapport Server Address' field contains '10.64.21.60'. Under 'Unicast Communications', 'Server Port(s)' is '9030' and 'Client Port(s)' is '9031'. The 'Multicast Group Address' is '224.0.0.255'. The 'Use Broadcast Communications' checkbox is unchecked. At the bottom, there are three buttons: 'Test Insta-Message Configuration...', 'View Server Properties...', and 'Internet Protocol Status...'. The bottom right corner has '< Back', 'Next >', and 'Cancel' buttons.

Field	Value
Visual Rapport Server Address	10.64.21.60
Unicast Communications	<input checked="" type="checkbox"/>
Server Port(s)	9030
Client Port(s)	9031
Multicast Group Address	224.0.0.255
Use Broadcast Communications	<input type="checkbox"/>

## 7.4. Administer TAPI Configuration

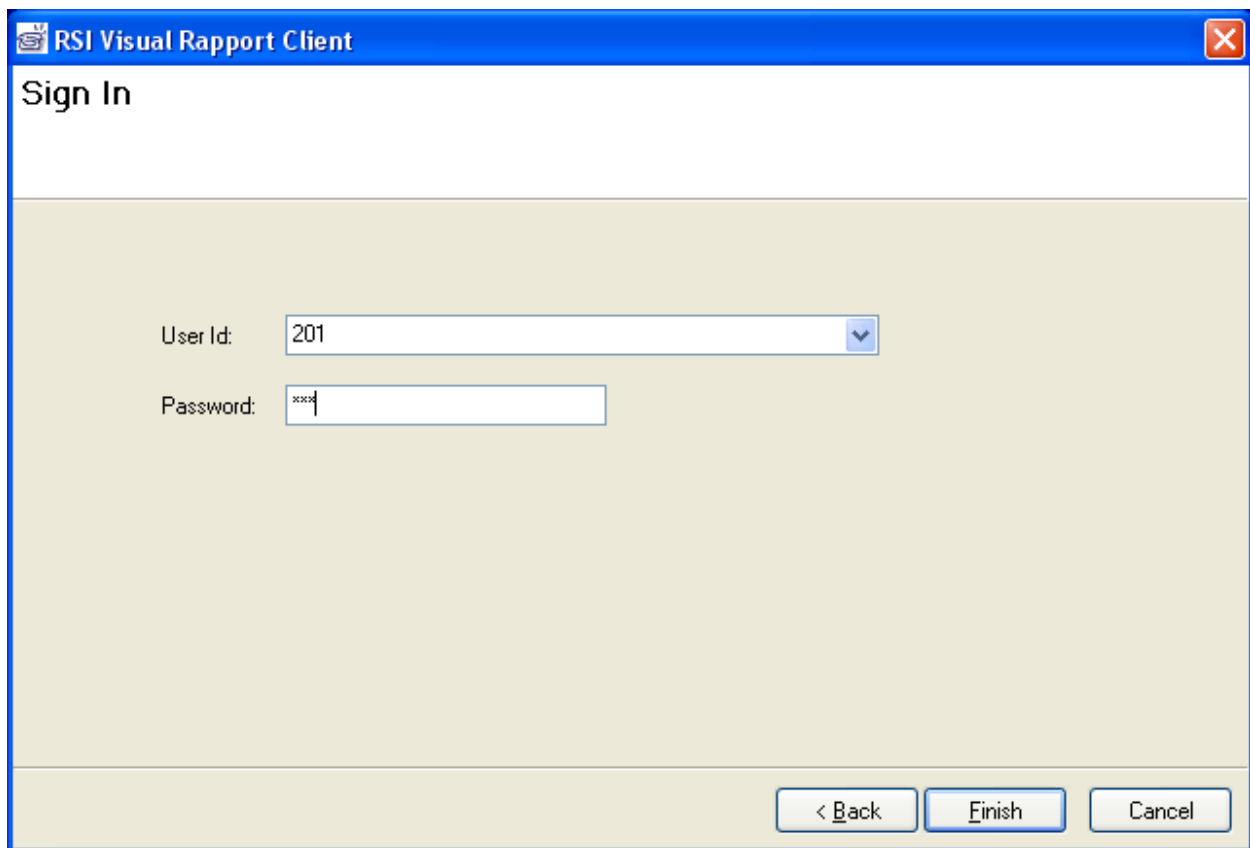
The **TAPI Configuration** screen is displayed next. Select “Avaya IP Office TAPI2 Service Provider” from the drop-down list. Select **Callable**, **Internal**, and **Owner** as shown below. Retain the default values in the subsequent screens to complete the configuration. Click the Next button to get back to the **Sign In** screen shown in **Section 7.2**, and then click the **Finish** button to sign in.

Hide	Callable	Internal	Owner	Appearance Name
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	IP Office Phone: 201 - 201

## 8. Verification Steps

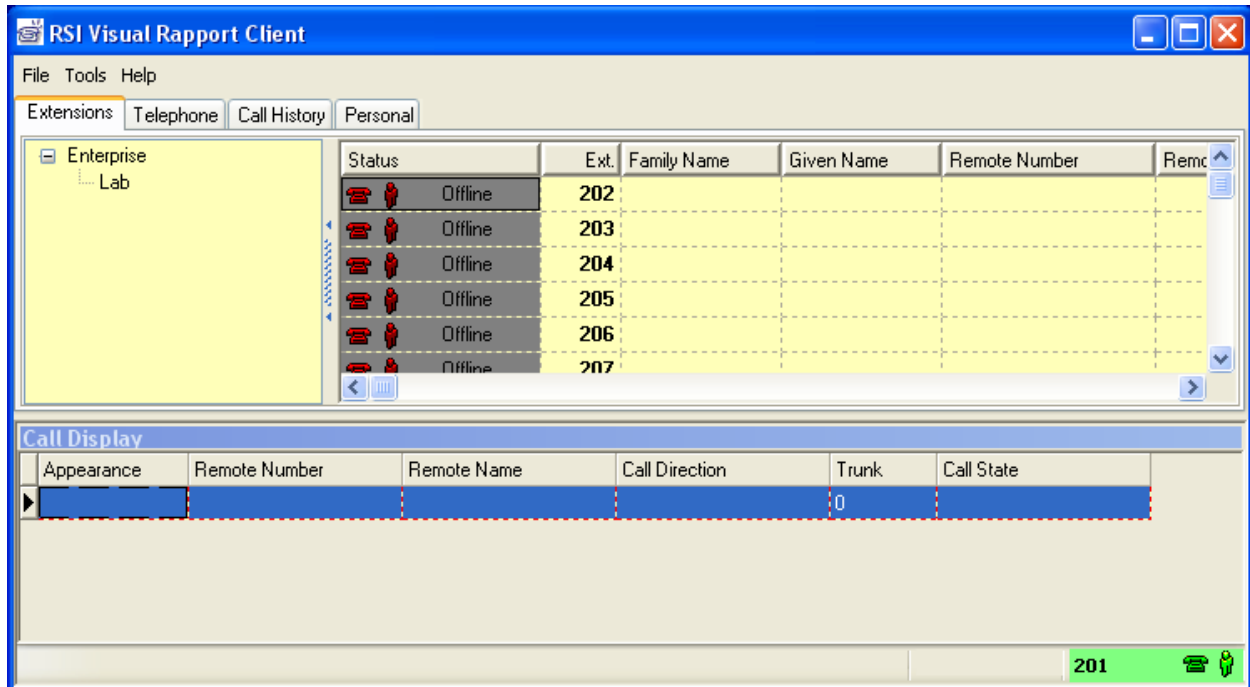
This section provides the tests that can be performed to verify proper configuration of Avaya IP Office and RSI Visual Rapport.

From the Visual Rapport Client, select **Start > Programs > RSI > Visual Rapport for TAPI > Client** to display the **RSI Visual Rapport Client** screen. Enter the appropriate user ID and password, and click the **Finish** button.

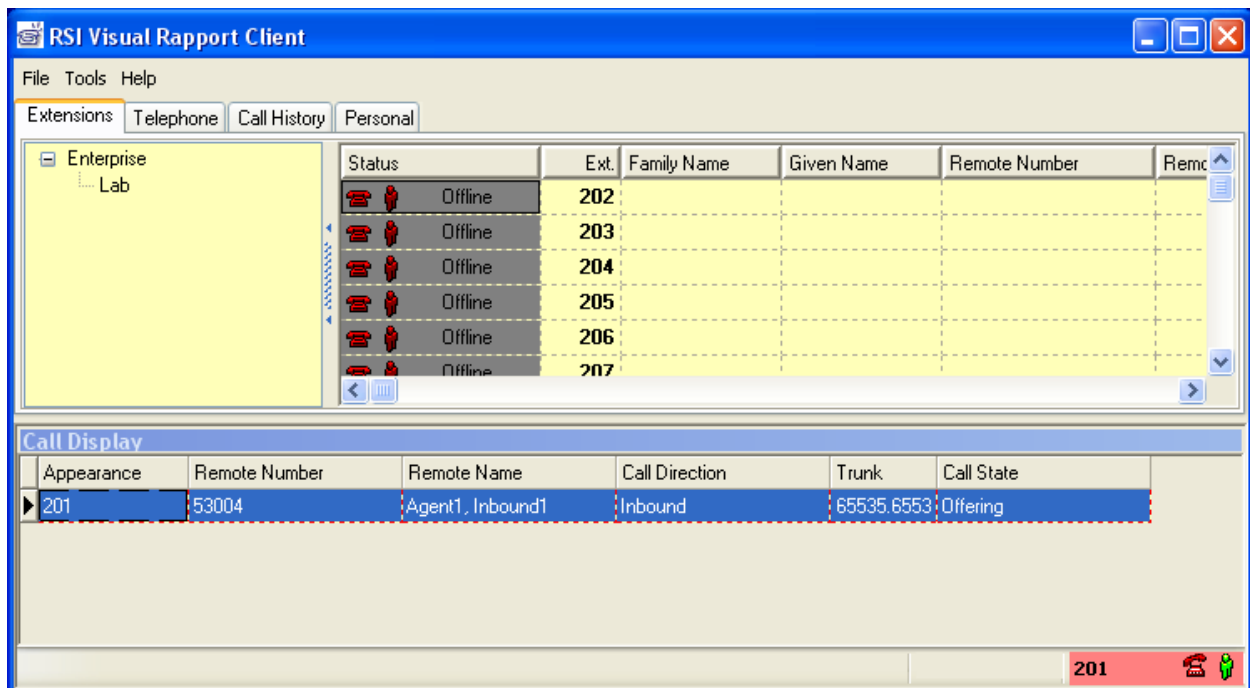


The screenshot shows a window titled "RSI Visual Rapport Client" with a standard Windows-style title bar (blue with a close button). The main area is titled "Sign In" and has a light beige background. It contains two input fields: "User Id:" with a text box containing "201" and a dropdown arrow, and "Password:" with a text box containing "XXXX". At the bottom right, there are three buttons: "< Back", "Finish", and "Cancel".

The screen below is displayed next. Verify that the user ID is displayed in the lower right corner of the screen.



Make an incoming trunk call to the user. Verify that an entry is displayed in the **Call Display** section with relevant information. Right click on the entry and select “Answer” (not shown).





Verify that the user telephone is connected to the caller, and that the **Call State** is updated to “Connected”, as shown below.

The screenshot shows the RSI Visual Rapport Client window. The 'Extensions' tab is selected, displaying a list of extensions. The 'Call Display' section at the bottom shows a table with call details.

Status	Ext.	Family Name	Given Name	Remote Number	Remc
Offline	202				
Offline	203				
Offline	204				
Offline	205				
Offline	206				
Offline	207				

Appearance	Remote Number	Remote Name	Call Direction	Trunk	Call State
201	53004	Agent1, Inbound1	Inbound	65535.6553	Connected

At the bottom right, there is a status bar showing '201' and a small icon.

## 9. Conclusion

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

## 10. 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] *Visual Rapport Client*, available on the RSI Visual Rapport Client as part of installation.

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