



## Avaya Solution & Interoperability Test Lab

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# Application Notes for Braxtel Fluency Communicator Interactive Voice Response with Avaya IP Office - Issue 1.0

### Abstract

These Application Notes describe the configuration steps required for the Braxtel Fluency Communicator Interactive Voice Response (IVR) to successfully interoperate with the Avaya IP Office. Braxtel Fluency Communicator IVR provides a wide range of customer interaction capabilities for the creation of dynamic, flexible IVR applications with an easy to use graphical call flow designer. Features and functionality were validated and performance testing was conducted in order to verify operation under load. Information in these Application Notes has been obtained through interoperability compliance testing and additional technical discussions. Testing was conducted via the *DeveloperConnection* Program at the Avaya Solution and Interoperability Test Lab.

# 1. Introduction

These Application Notes describe the compliance-tested configuration utilizing Avaya IP Office 2.1 and Braxtel Fluency Communicator IVR 3.8.

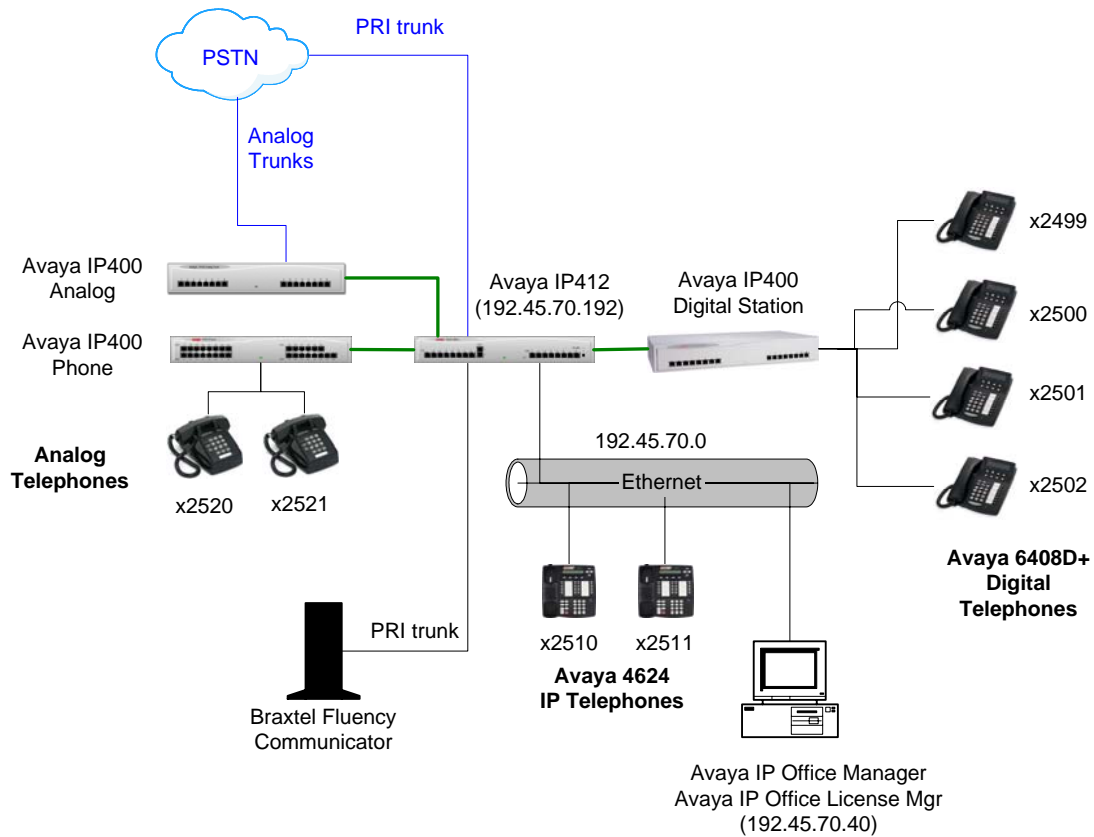
The Braxtel Fluency Communicator IVR (Fluency IVR) is a Windows 2000 Server based system that provides a wide range of customer interaction capabilities for the creation of dynamic, flexible interactive voice response applications. It supports a configurable automated attendant, a call flow designer to set up business rules for the interactive voice response and pager and cell phone notification. Call Flows are created and modified using a graphical drag and drop tool, the Call Flow Designer.

The Fluency IVR interoperates with the IP Office via T1/PRI. Incoming calls routed to the Fluency IVR are serviced according to business rules defined in the call flow. That is, the call might be processed either internally or transferred to the defined endpoint (IP Office extension, hunt group, and/or outside line). It can also send a notification of a particular event within a call or type of call (as per the call flow rules) via phone, cell, pager or email (or combination thereof).

The Fluency Communicator IVR is fully customizable. Braxtel can provide services for customization of the Fluency Communicator IVR call flows, installation and configuration. Partners/Customers who have completed relevant training can install, configure, customize and create call flows using the Drag and Drop Fluency Call Flow Designer supplied as part of the Fluency Communicator package.

The tested configuration is shown in **Figure 1**.

The IP Office was setup with two PRI trunk cards. The first PRI trunk port was connected to the central office. The second PRI trunk port was connected to the Fluency IVR. The IP Office routed all inbound trunk calls (analog and PRI) to the Fluency IVR PRI trunk. The Fluency IVR handled the incoming calls with a call flow setup to behave like an automated attendant. Transfers were made to various IP Office extensions based on digits entered and/or DTMF input. Routing by DNIS and cell phone notification were verified after making minor adjustments to the call flow through the IVR Dialog Generator.



**Figure 1: Braxtel Fluency Communicator and Avaya IP Office Configuration**

## 2. Equipment and Software Validated

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

Equipment	Software
Avaya IP 412 Office System with 2 T1/PRI modules	2.1(15)
Avaya IP 400 Phone 30 Expansion Module	4.1(15)
Avaya IP 400 Digital Station 16 Expansion Module	4.1(15)
Avaya IP 400 Analog Trunk 16 Expansion Module	4.1(15)
Avaya IP Office Manager software	4.1(15)
Avaya 4624 IP Telephones	1.81
Avaya 6408D+, 6416D+M Telephones	-
Braxtel Fluency Communicator	3.8
Generic PC for Avaya IP Office Manager	Windows 2000 Professional Service Pack 4
Generic PC for Braxtel Fluency Communicator Server	Windows 2000 Server Service Pack 4

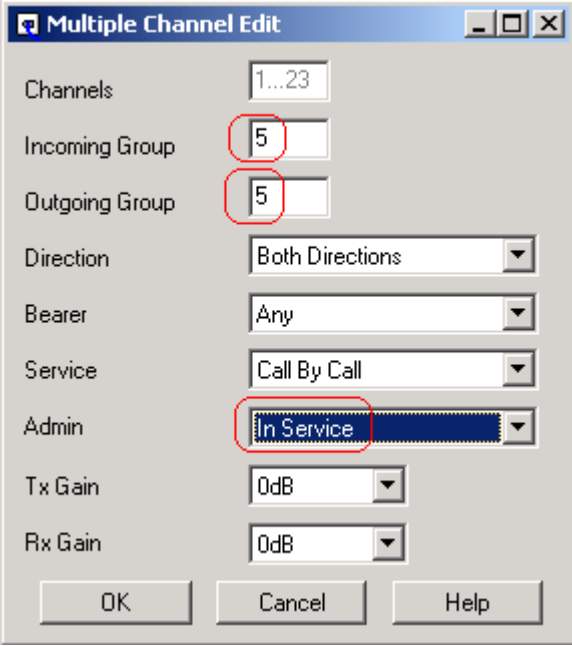
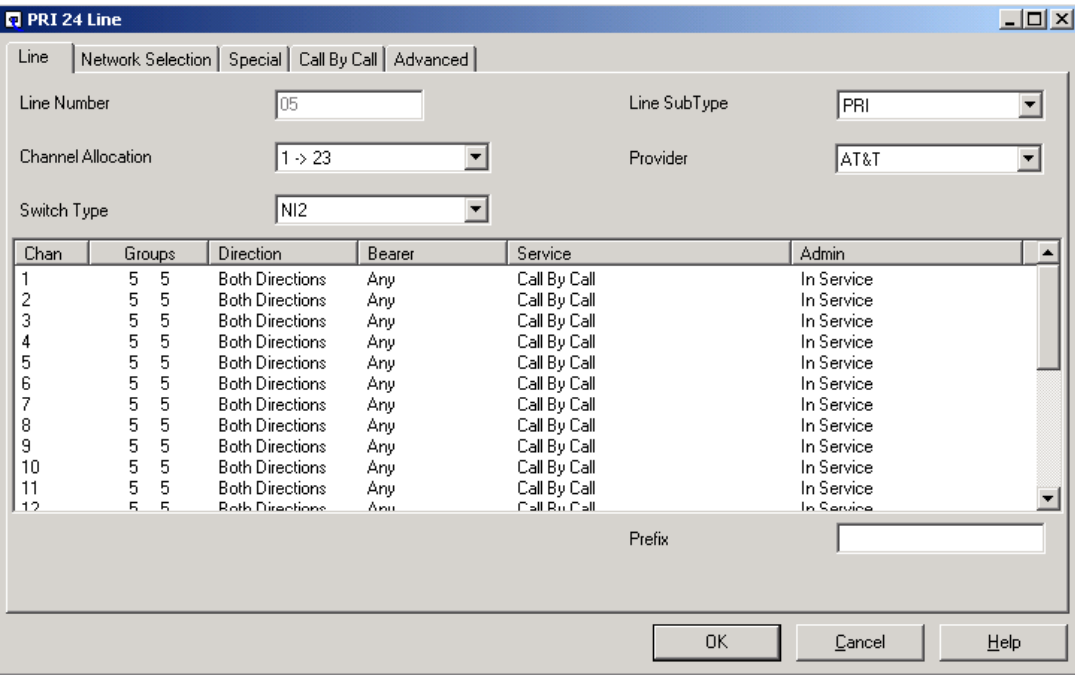
### 3. Configure Avaya IP Office

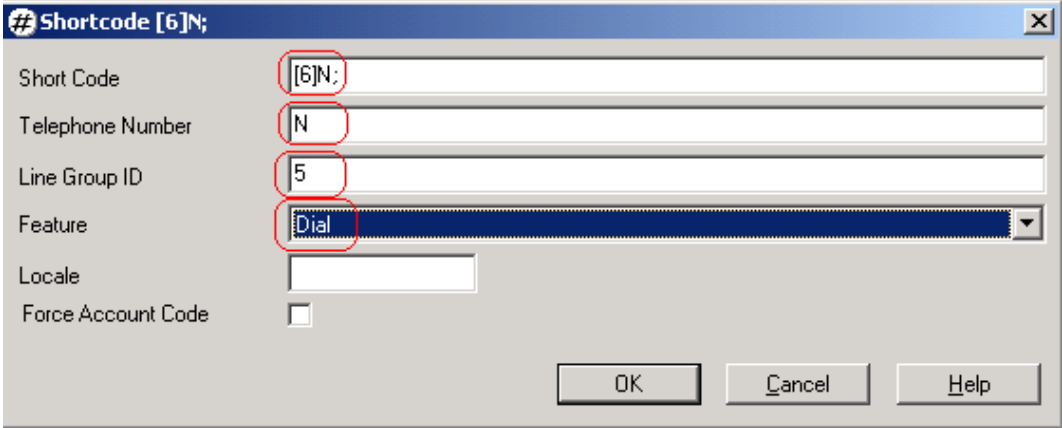
This section addresses provisioning of the IP Office as it relates to integration of the Fluency Communicator. This includes configuring the PRI trunk connected to the Fluency IVR, defining the shortcode and configuring the incoming call route. For all other provisioning information, such as provisioning of the trunks for regular inbound and outbound dialing, call coverage, extensions, etc., please refer to the IP Office documentation.

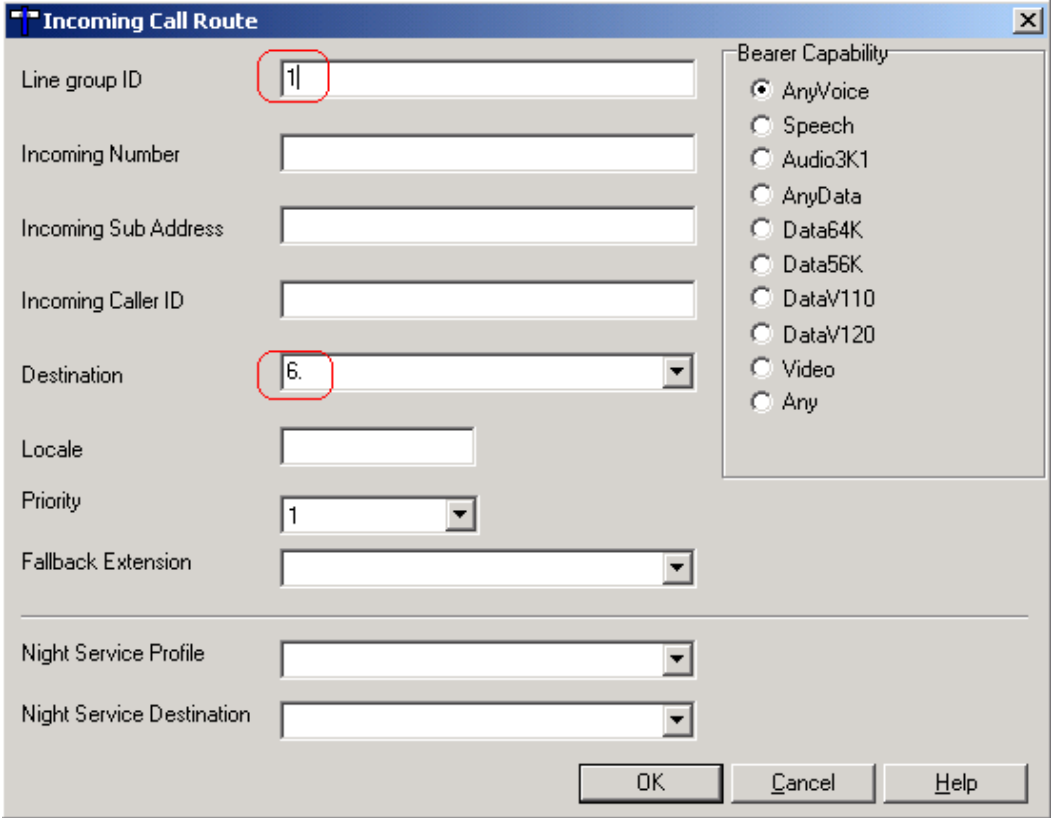
Step	Description
<b>Connect to IP Office</b>	
1.	Log in to the IP Office Manager PC and go to <b>Start</b> → <b>Programs</b> → <b>IP Office</b> → <b>Manager</b> to launch the Manager application. Log in to the Manager application using the appropriate credentials.
2.	In the Manager window that appears, select <b>File</b> → <b>Open</b> to search for the IP Office system in the network.
3.	Log in to the IP Office system using the appropriate login credentials to receive its configuration.
<b>Configure PRI trunk connected to Fluency Communicator</b>	
4.	In the Manager window, go to the Configuration Tree and double-click <b>Line</b> to open the list of lines (trunks) available on the IP Office.
5.	Double-click the Line connected to Fluency Communicator, e.g. <b>05</b> .
6.	In the Line tab of the PRI 24 Line window that appears, set <i>Line SubType</i> to <b>PRI</b> , <i>Channel Allocation</i> to <b>1 -&gt; 23</b> , <i>Provider</i> to <b>AT&amp;T</b> and <i>Switch Type</i> to <b>NI2</b> . Highlight all the channels listed in the channel pane of the PRI 24 Line window, right click and select <b>Edit</b> .

Chan	Groups	Direction	Bearer	Service	Admin
1	0 0	Both Directions	Any	Call By Call	Out of Service
2	0 0	Both Directions	Any	Call By Call	Out of Service
3	0 0	Both Directions	Any	Call By Call	Out of Service
4	0 0	Both Directions	Any	Call By Call	Out of Service
5	0 0	Both Directions	Any	Call By Call	Out of Service
6	0 0	Both Directions	Any	Call By Call	Out of Service
7	0 0	Both Directions	Any	Call By Call	Out of Service
8	0 0	Both Directions	Any	Call By Call	Out of Service
9	0 0	Both Directions	Any	Call By Call	Out of Service
10	0 0	Both Directions	Any	Call By Call	Out of Service
11	0 0	Both Directions	Any	Call By Call	Out of Service
12	0 0	Both Directions	Any	Call By Call	Out of Service

Step	Description																																																																														
7.	<p>In the Multiple Channel Edit window that appears, set <i>Incoming Group</i> to <b>5</b>, <i>Outgoing Group</i> to <b>5</b>, <i>Admin</i> to <b>In Service</b> and click <b>OK</b>.</p> 																																																																														
8.	<p>In the PRI 24 Line window, click <b>OK</b>.</p>  <table border="1" data-bbox="370 1318 1422 1591"> <thead> <tr> <th>Chan</th> <th>Groups</th> <th>Direction</th> <th>Bearer</th> <th>Service</th> <th>Admin</th> </tr> </thead> <tbody> <tr><td>1</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> <tr><td>2</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> <tr><td>3</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> <tr><td>4</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> <tr><td>5</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> <tr><td>6</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> <tr><td>7</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> <tr><td>8</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> <tr><td>9</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> <tr><td>10</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> <tr><td>11</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> <tr><td>12</td><td>5 5</td><td>Both Directions</td><td>Any</td><td>Call By Call</td><td>In Service</td></tr> </tbody> </table>	Chan	Groups	Direction	Bearer	Service	Admin	1	5 5	Both Directions	Any	Call By Call	In Service	2	5 5	Both Directions	Any	Call By Call	In Service	3	5 5	Both Directions	Any	Call By Call	In Service	4	5 5	Both Directions	Any	Call By Call	In Service	5	5 5	Both Directions	Any	Call By Call	In Service	6	5 5	Both Directions	Any	Call By Call	In Service	7	5 5	Both Directions	Any	Call By Call	In Service	8	5 5	Both Directions	Any	Call By Call	In Service	9	5 5	Both Directions	Any	Call By Call	In Service	10	5 5	Both Directions	Any	Call By Call	In Service	11	5 5	Both Directions	Any	Call By Call	In Service	12	5 5	Both Directions	Any	Call By Call	In Service
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<b>Define Shortcode for routing calls to Fluency IVR</b>																																																																															

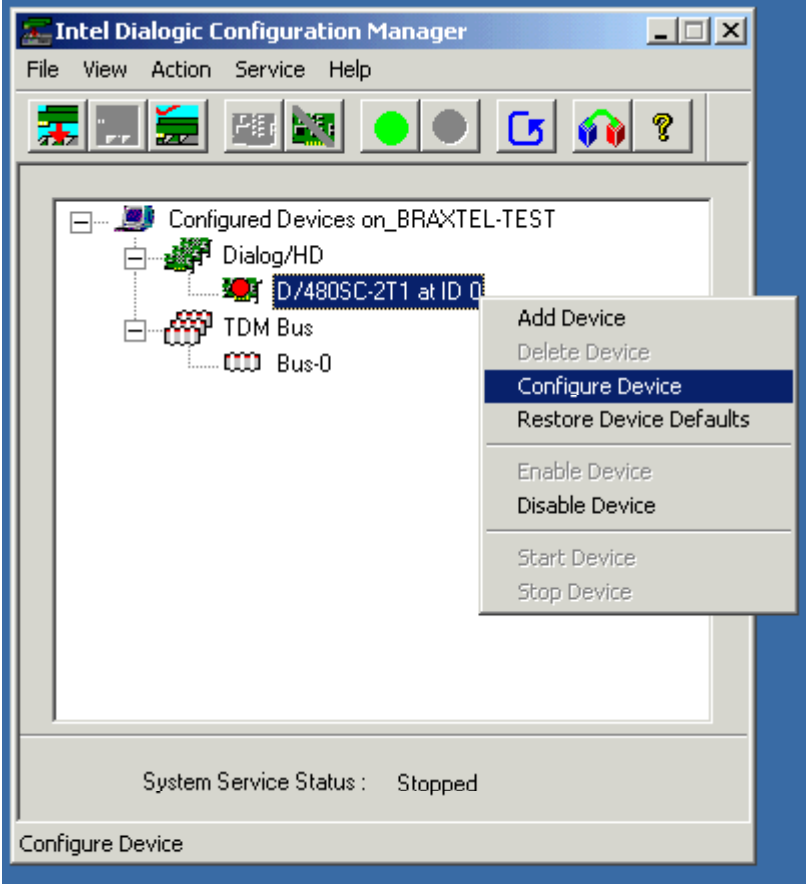
Step	Description
9.	In the Manager window, go to the Configuration Tree and double-click <b>Shortcode</b> to open the list of short codes on the IP Office.
10.	Right click in the Shortcode window and select <b>New</b> .
11.	<p>In the Shortcode window that appears, set <i>Short Code</i> to <b>[6]N</b>; and set <i>Telephone Number</i> to <b>N</b>, set <i>Line Group ID</i> to <b>5</b> (the Incoming Group number defined for the PRI trunk to the Fluency Communicator) and set <i>Feature</i> to <b>Dial</b>. Click <b>OK</b>.</p> 
<b>Configure Incoming Call Route</b>	
12.	In the Manager window, go to the Configuration Tree and double-click <b>Incoming Call Route</b> to open the list of incoming call routes on the IP Office.
13.	Right click the call route in the incoming call route window and select <b>New</b> .

Step	Description
14.	<p>In the Incoming Call Route window that appears, set the <i>Line Group ID</i> to <b>1</b> (or a number that is not already in use), set <i>Destination</i> to <b>6</b>, and click <b>OK</b>.</p>  <p>For the purposes of these Application Notes, all PRI and analog trunks on the IP Office, except the PRI trunk connected to the Fluency Communicator, were assigned Line Group ID 1 to allow Fluency Communicator to process all incoming calls.</p>
<b>Save the configuration</b>	
15.	<p>In the Manager window, select <b>File</b> → <b>Save</b> to save the configuration to the IP Office system and wait for the system to update.</p>

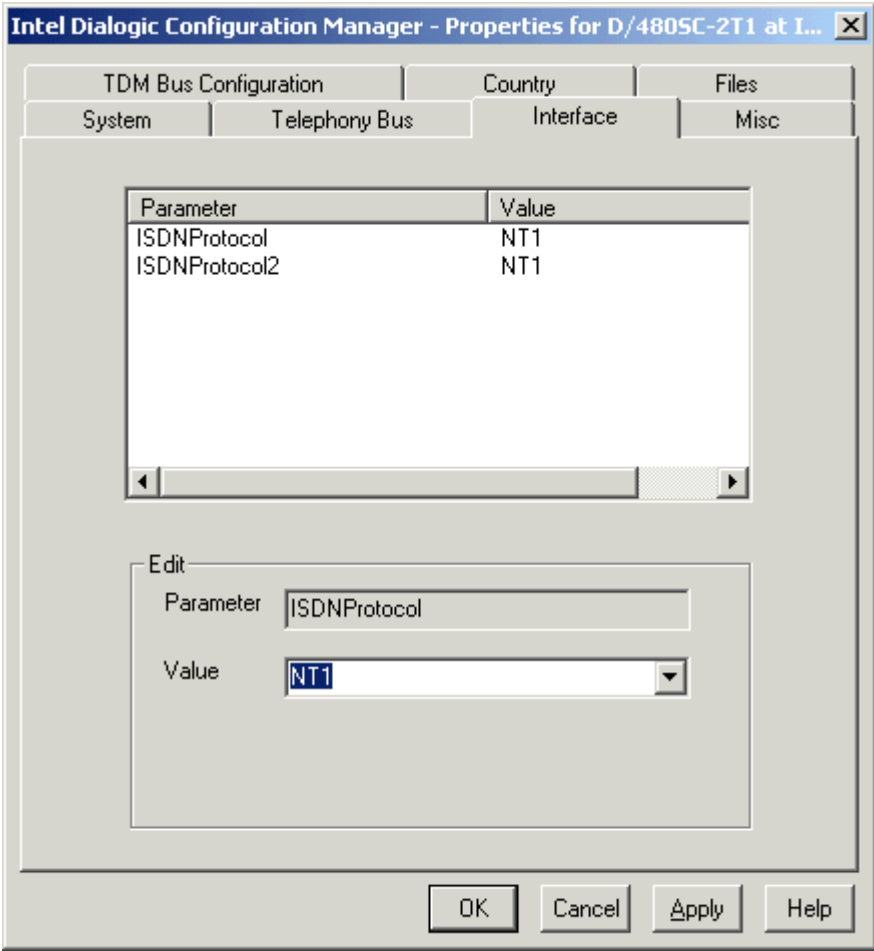
## 4. Configure Braxtel Fluency Communicator IVR

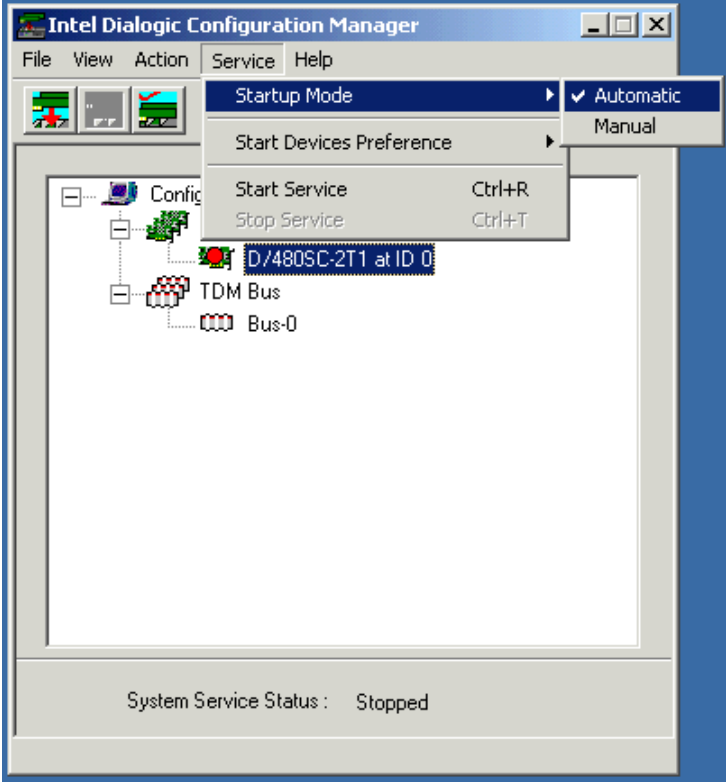
This section addresses provisioning of the Fluency Communicator IVR as it relates to the IP Office. For all other provisioning information, such as installation of Fluency IVR components including Oracle Database, configuring and/or customizing the Fluency IVR server and/or components for use, please refer to the Braxtel product documentation and/or contact Braxtel technical support.

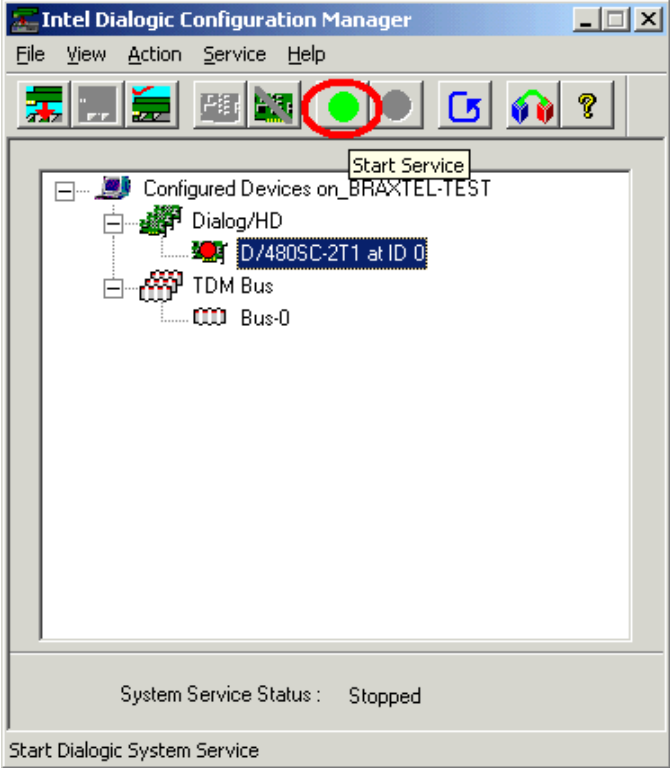
## 4.1. Configure the Fluency IVR

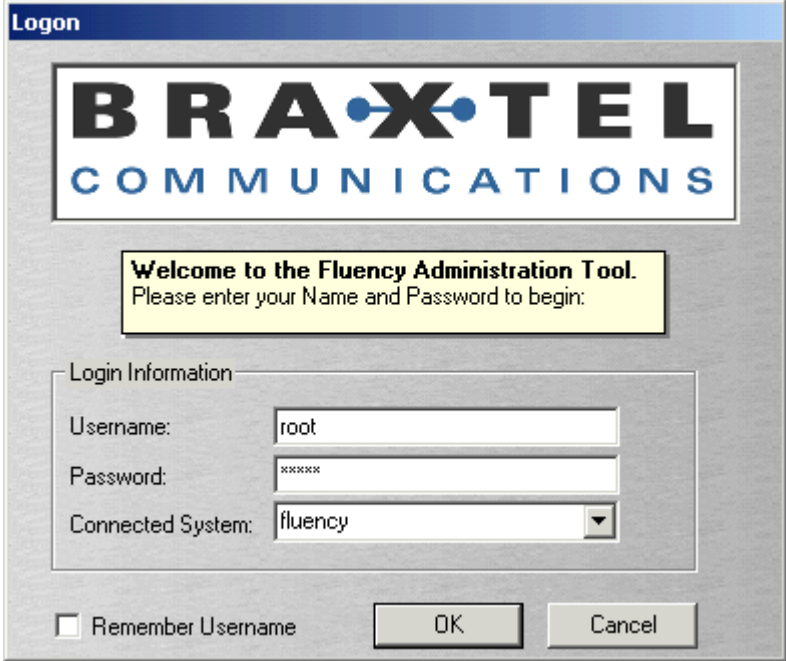
Step	Description
<b>Configure Intel Dialogic card for PRI</b>	
1.	Log into the Fluency IVR server with the appropriate administrative privileges. Go to <b>Start → Programs → Intel Dialogic System Software → Configuration Manager → DCM</b> .
2.	<p>In the Intel Dialogic Configuration Manager window that appears, right click on the board to be configured (in this case D/480SC-2T1 at ID 0) and select <b>Configure Device</b>.</p> 

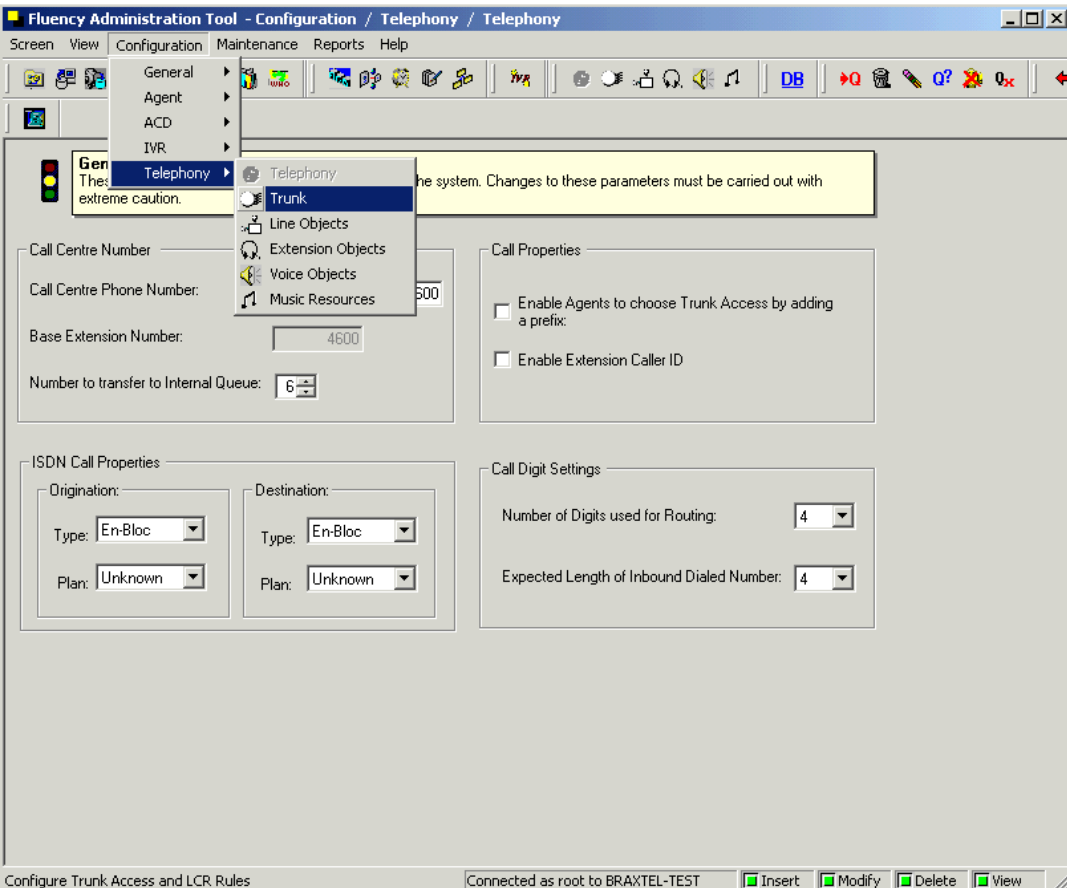


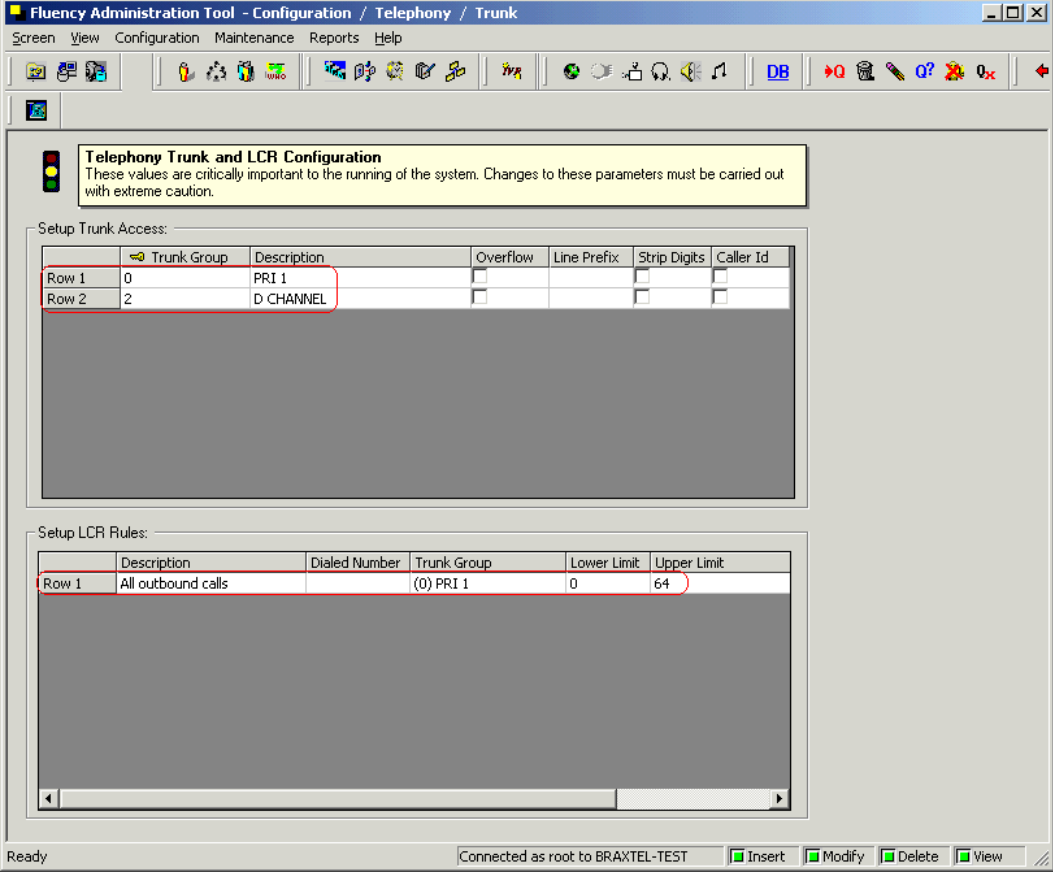
Step	Description
3.	<p>In the Interface tab of the Intel Dialogic Configuration Manager – Properties for D/480SC-2T1 at I... window that appears, set <i>ISDNProtocol</i> to <b>NT1</b> and click <b>OK</b>.</p>  <p><b>NOTE:</b> <i>ISDNProtocol</i> is listed twice because the D/480SC is a dual-port PRI card. If a single port PRI card were used, <i>ISDNProtocol</i> would appear only once.</p>

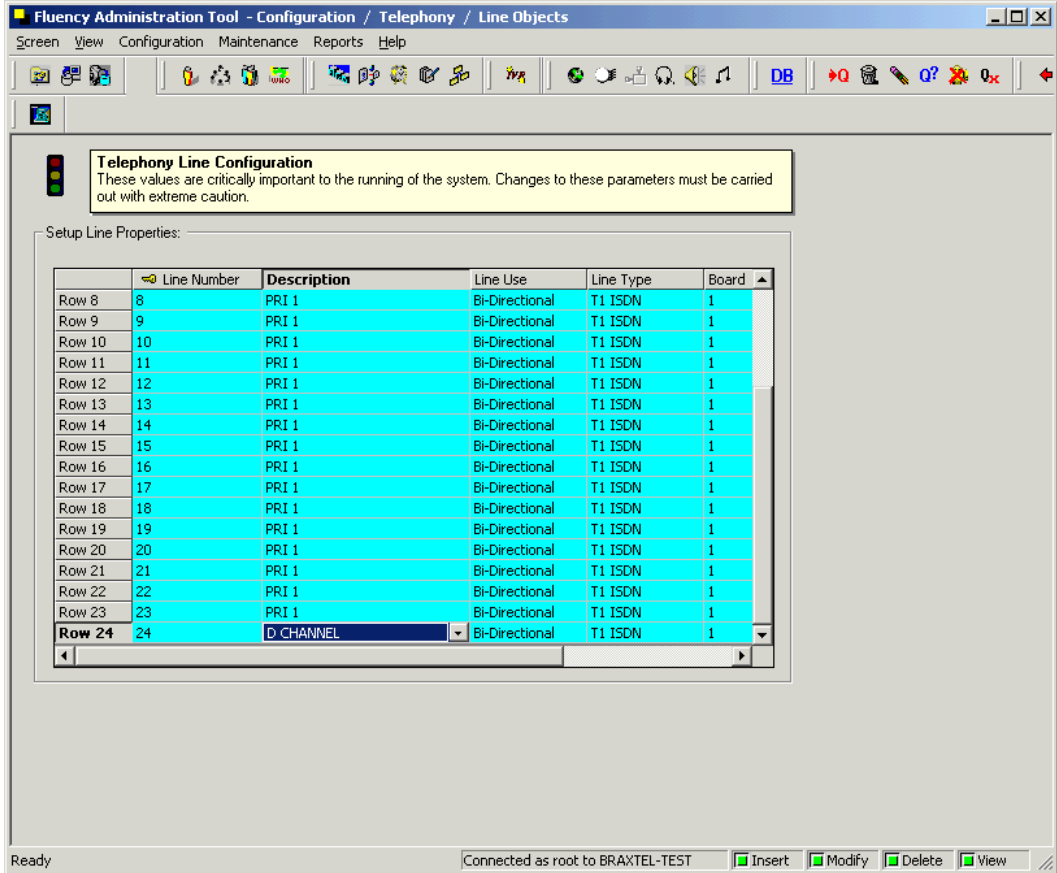
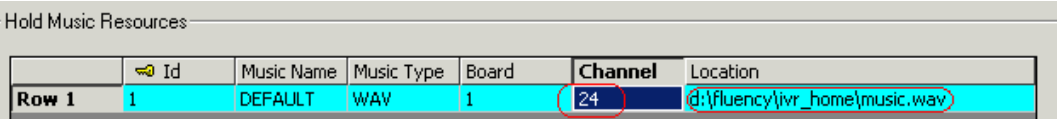
Step	Description
	<b>Setup Intel Dialogic Service for automatic startup</b>
4.	<p>In the Intel Dialogic Configuration Manager window, select <b>Service</b> → <b>Startup Mode</b> → <b>Automatic</b>.</p>  <p>The screenshot shows the Intel Dialogic Configuration Manager application window. The 'Service' menu is open, and the 'Startup Mode' sub-menu is also open, with 'Automatic' selected. The main window displays a tree view with 'Config' expanded to show 'D/480SC-2T1 at ID 0', 'TDM Bus', and 'Bus-0'. At the bottom, the 'System Service Status' is shown as 'Stopped'.</p>

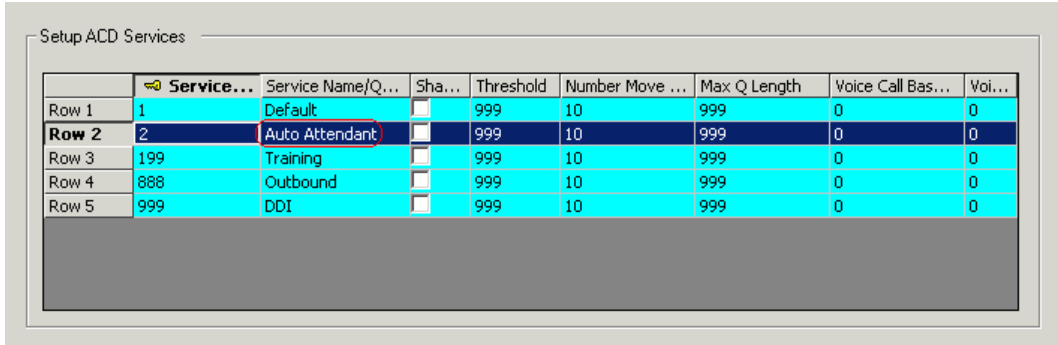
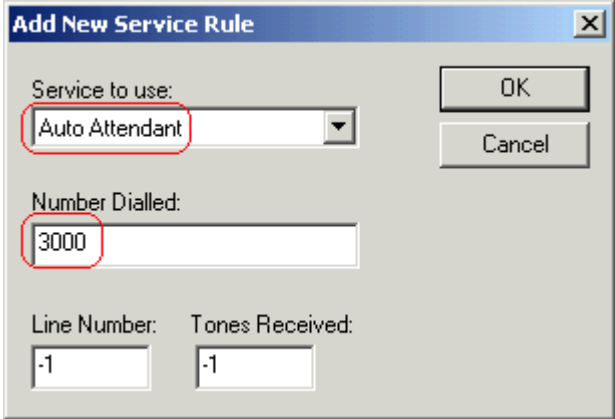
Step	Description
	<b>Start the Intel Dialogic Service</b>
5.	<p>In the Intel Dialogic Configuration Manager window, click the circled button on the toolbar to start the Intel Dialogic Service.</p> 

Step	Description
6.	<p>Go to <b>Start</b> → <b>Program Files</b> → <b>Fluency</b> → <b>Fluency Supervisor</b> → <b>Administration Tool</b>. In the Logon window that appears, enter the appropriate administrative privileges, set <i>Connected System</i> to <b>fluency</b> and click <b>OK</b>.</p> 

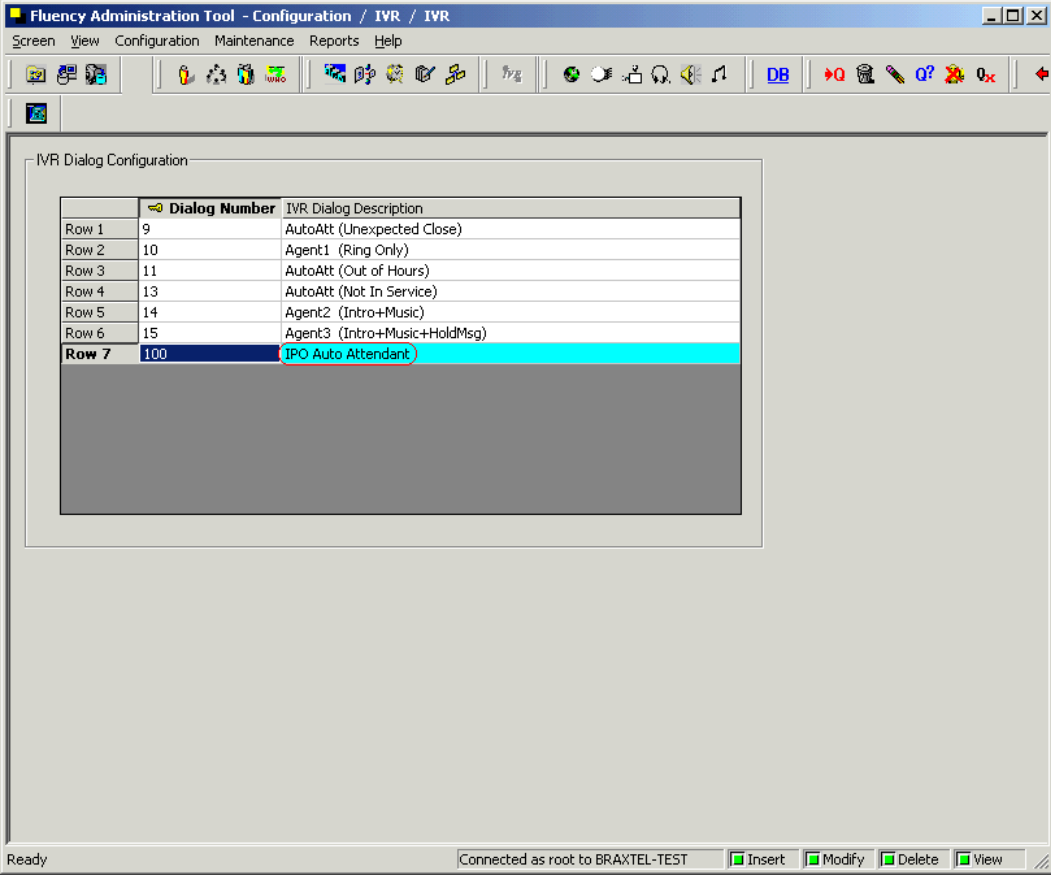
Step	Description
7.	<p>In the Fluency Administration Tool window that appears, select <b>Configuration</b> → <b>Telephony</b> → <b>Trunk</b>.</p>  <p>The screenshot shows the 'Fluency Administration Tool - Configuration / Telephony / Telephony' window. The 'Configuration' menu is open, and the 'Telephony' option is selected, which has opened a sub-menu with 'Trunk' highlighted. The main window displays various configuration fields for a trunk, including Call Centre Number, Call Centre Phone Number, Base Extension Number (4600), and Number to transfer to Internal Queue (6). There are also sections for ISDN Call Properties and Call Digit Settings.</p>

Step	Description
8.	<p>In the Fluency Administration Tool – Configuration / Telephony / Trunk window, right click in the Setup Trunk Access pane and select <b>Insert Row</b>. In the row that appears, set <i>Trunk Group</i> to <b>0</b> and <i>Description</i> to <b>PRI 1</b>. Perform another right click and select <b>Insert Row</b>. In the row that appears, set <i>Trunk Group</i> to <b>2</b> and <i>Description</i> to <b>D-CHANNEL</b> for the second row added. Right click in the Setup LCR Rules pane and select <b>Insert Row</b>. In the row that appears, set <i>Description</i> to <b>All outbound calls</b>, <i>Trunk Group</i> to <b>(0) PRI 1</b>, <i>Lower Limit</i> to <b>0</b> and <i>Upper Limit</i> to <b>64</b>.</p> 
9.	<p>In the Fluency Administration Tool window, select <b>Configuration</b> → <b>Telephony</b> → <b>Line Objects</b>. In the Fluency Administration Tools – Configuration / Telephony / Line Objects window that appears, right click the Setup Line Properties pane and select <b>Insert Row</b>. In the Insert Row(s) popup that appears, set <i>Number of rows to insert</i> to <b>24</b> and <i>Block start number</i> to <b>1</b> and click <b>OK</b>.</p>
10.	<p>In the Fluency Administration Tools – Configuration / Telephony / Line Objects window, set <i>Description</i> to <b>PRI 1</b> for Row 1.</p>
11.	<p>In the Fluency Administration Tools – Configuration / Telephony / Line Objects window, right-click the Description field for Row 1 and select <b>Fill Column</b>. In the <i>Are you sure you want to fill all the rows to the value 'PRI 1'?</i> confirmation pop up that appears, click <b>Yes</b>.</p>
12.	<p>In the Fluency Administration Tools – Configuration / Telephony / Line Objects window, set <i>Line Use</i> to <b>Bi-Directional</b> for Row 1. Set all rows to <b>Bi-Directional</b> by repeating Step 11 for the Line Use field.</p>

Step	Description
13.	In the Fluency Administration Tools – Configuration / Telephony / Line Objects window, set <i>Line Type</i> to <b>T1 ISDN</b> for Row 1. Set all rows to <i>T1 ISDN</i> by repeating Step 11 for the <i>Line Type</i> field.
14.	In the Fluency Administration Tools – Configuration / Telephony / Line Objects window, set <i>Description</i> to <b>D-CHANNEL</b> for Row 24.
	
15.	In the Fluency Administration Tool window, select <b>Configuration</b> → <b>Telephony</b> → <b>Music Resources</b> . In the Fluency Administration Tools – Configuration / Telephony / Music Resources window that appears, set <i>Channel</i> to <b>24</b> and <i>Location</i> to the location of the wave file to be used, e.g., <b>d:\fluency\ivr_home\music.wav</b> .
	
16.	In the Fluency Administration Tool window, select <b>Configuration</b> → <b>ACD</b> → <b>Service and Group</b> . In the Fluency Administration Tools – Configuration / ACD / Service and Group window that appears, right click the Setup ACD Service pane and select <b>Insert Row</b> . In the Insert Row(s) pop up that appears, set <i>Number of rows to insert</i> to <b>1</b> and <i>Block start number</i> to <b>2</b> and click <b>OK</b> .

Step	Description																																																						
17.	<p>In the Fluency Administration Tools – Configuration / ACD / Service and Group window, select the newly inserted row in the Setup ACD Services pane and set <i>Service Name</i> to <b>Auto Attendant</b>.</p>  <table border="1" data-bbox="410 428 1383 575"> <thead> <tr> <th></th> <th>Service...</th> <th>Service Name/Q...</th> <th>Sha...</th> <th>Threshold</th> <th>Number Move ...</th> <th>Max Q Length</th> <th>Voice Call Bas...</th> <th>Voi...</th> </tr> </thead> <tbody> <tr> <td>Row 1</td> <td>1</td> <td>Default</td> <td><input type="checkbox"/></td> <td>999</td> <td>10</td> <td>999</td> <td>0</td> <td>0</td> </tr> <tr> <td><b>Row 2</b></td> <td><b>2</b></td> <td><b>Auto Attendant</b></td> <td><input type="checkbox"/></td> <td>999</td> <td>10</td> <td>999</td> <td>0</td> <td>0</td> </tr> <tr> <td>Row 3</td> <td>199</td> <td>Training</td> <td><input type="checkbox"/></td> <td>999</td> <td>10</td> <td>999</td> <td>0</td> <td>0</td> </tr> <tr> <td>Row 4</td> <td>888</td> <td>Outbound</td> <td><input type="checkbox"/></td> <td>999</td> <td>10</td> <td>999</td> <td>0</td> <td>0</td> </tr> <tr> <td>Row 5</td> <td>999</td> <td>DDI</td> <td><input type="checkbox"/></td> <td>999</td> <td>10</td> <td>999</td> <td>0</td> <td>0</td> </tr> </tbody> </table>		Service...	Service Name/Q...	Sha...	Threshold	Number Move ...	Max Q Length	Voice Call Bas...	Voi...	Row 1	1	Default	<input type="checkbox"/>	999	10	999	0	0	<b>Row 2</b>	<b>2</b>	<b>Auto Attendant</b>	<input type="checkbox"/>	999	10	999	0	0	Row 3	199	Training	<input type="checkbox"/>	999	10	999	0	0	Row 4	888	Outbound	<input type="checkbox"/>	999	10	999	0	0	Row 5	999	DDI	<input type="checkbox"/>	999	10	999	0	0
	Service...	Service Name/Q...	Sha...	Threshold	Number Move ...	Max Q Length	Voice Call Bas...	Voi...																																															
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18.	<p>In the Fluency Administration Tool window, select <b>Configuration</b> → <b>ACD</b> → <b>Service Rules</b>. In the Fluency Administration Tools – Configuration / ACD / Service Rules window that appears, right click the Setup Service Rules pane and select <b>Insert Row</b>. In the Add New Service Rule popup that appears, set <i>Service to use</i> to <b>Auto Attendant</b>, <i>Number Dialed</i> to <b>3000</b>, and click <b>OK</b>.</p> 																																																						
19.	<p>In the Fluency Administration Tool window, select <b>Configuration</b> → <b>IVR</b> → <b>IVR</b>. In the Fluency Administration Tools – Configuration / IVR / IVR window that appears, right click the IVR Dialog Configuration pane and select <b>Insert Row</b>. In the Insert Row(s) popup that appears, set <i>Number of rows to insert</i> to <b>1</b>, <i>Block start number</i> to <b>100</b>, and click <b>OK</b>.</p>																																																						

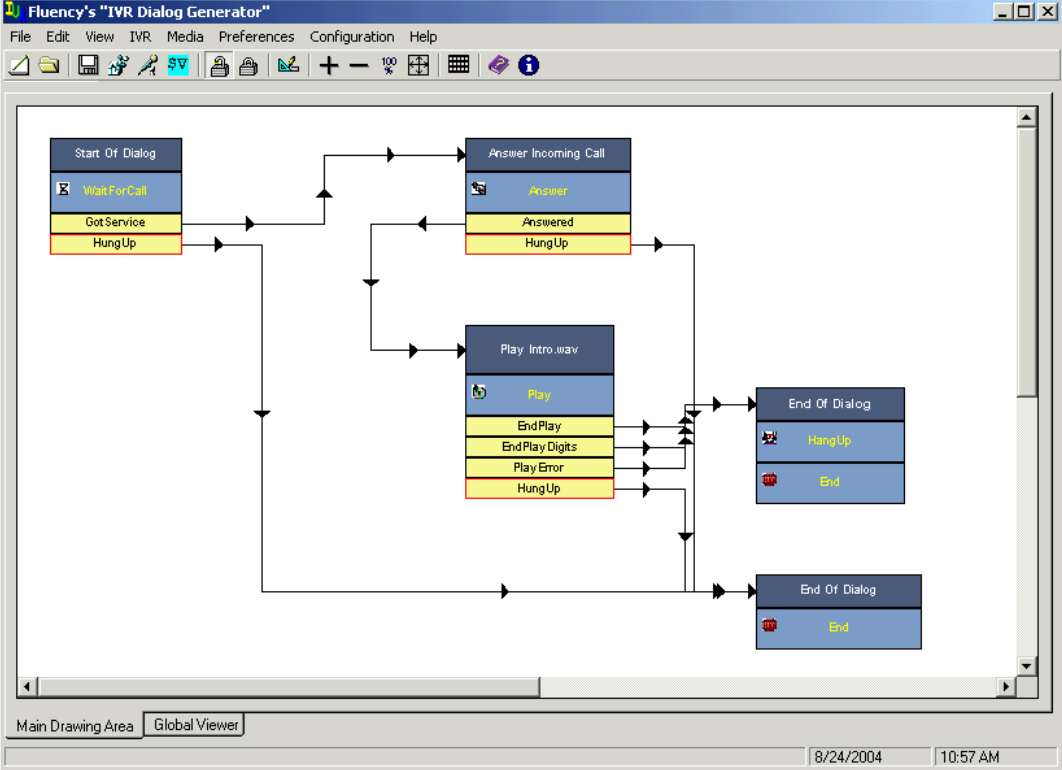


Step	Description
20.	<p>In the Fluency Administration Tools – Configuration / IVR / IVR window, select the newly inserted row in the IVR Dialog Configuration pane and set <i>IVR Dialog Description</i> to <b>IPO Auto Attendant</b>.</p> 
21.	<p>In the Fluency Administration Tool window, select <b>Configuration</b> → <b>ACD</b> → <b>Routing Rules</b>. In the Fluency Administration Tools – Configuration / ACD / Routing Rules window that appears, right click the Setup Routing Rules pane and select <b>Insert Row</b>. In the Add New Routing Rule popup that appears, set <i>Service to Use</i> to <b>Auto Attendant</b>, <i>Time Type</i> to <b>Peak Time</b>, set <i>Day Type</i> to <b>Normal Working Day</b>, set <i>IVR Dialog</i> to <b>IPO Auto Attendant</b> and click <b>OK</b>.</p>

## 4.2. Sample Call Flows viewed from the IVR Dialog Generator

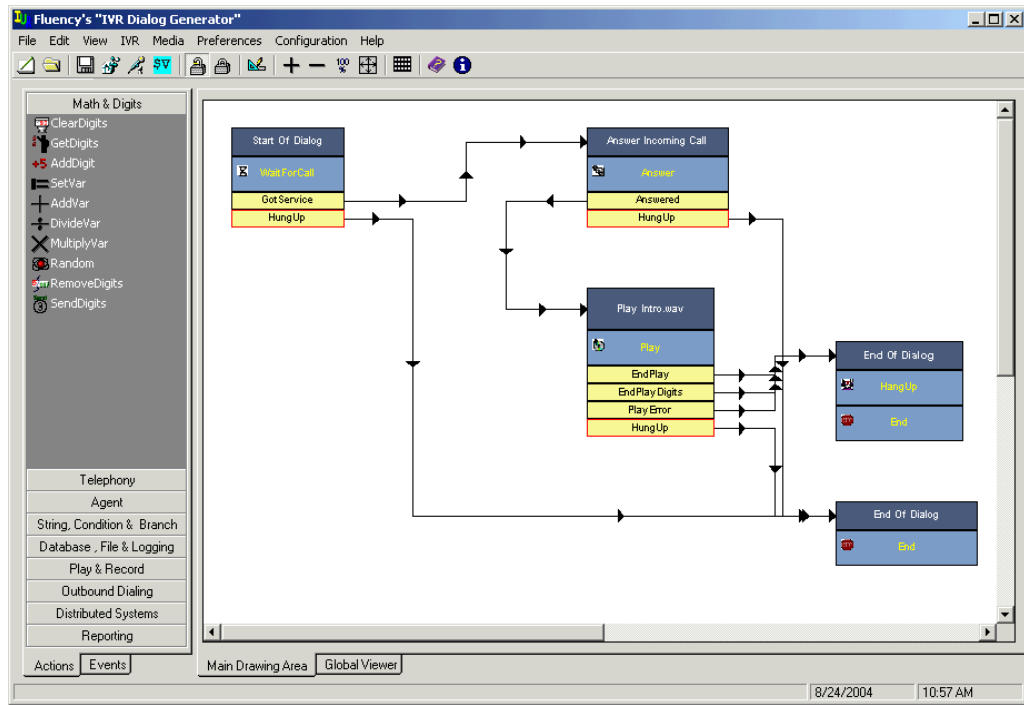
Please refer to the appropriate Braxtel Fluency product documentation for information on how to use the IVR Dialog Generator to define and/or modify call flows. The call flow displayed in this section is a default generic call flow for example purposes.

Step	Description
1.	On the Fluency IVR server, go to <b>Start</b> → <b>Programs</b> → <b>Fluency</b> → <b>Fluency Supervisor</b> → <b>IVR Dialog Generator</b> .

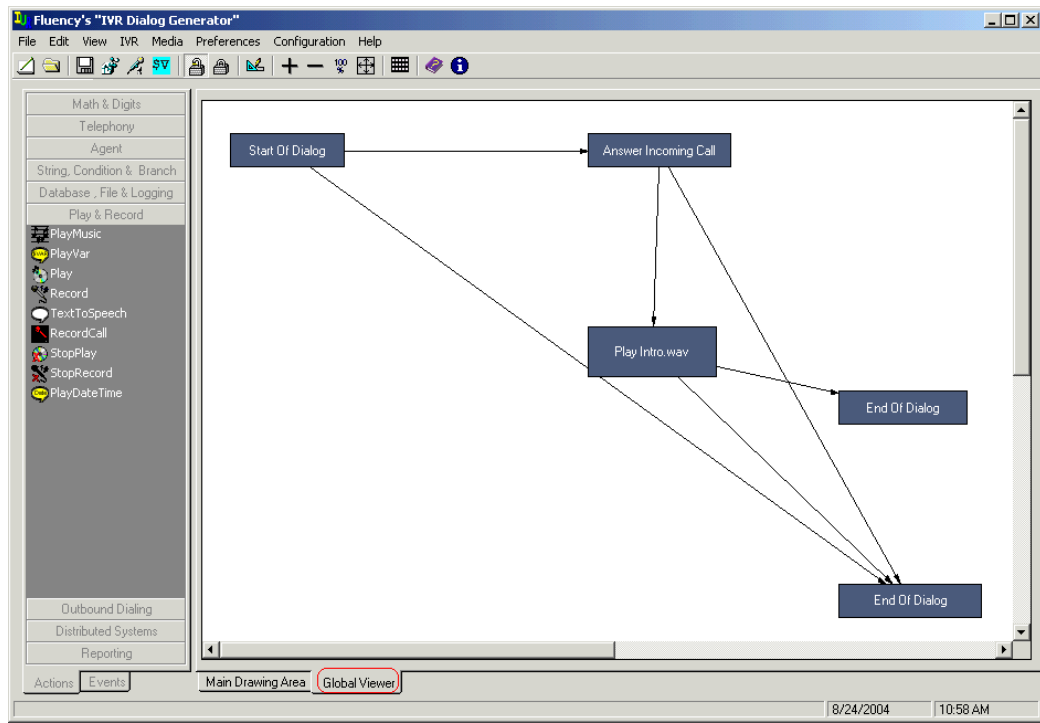
Step	Description
2.	In the IVR Dialog Generator login window that appears, enter the appropriate login credentials and click <b>Ok</b> .
3.	In the Startup wizard window that appears, select <b>Create a new IVR dialog from the template</b> , set <i>Template</i> to <b>AutoAtt_Not_In_Service.ivr</b> and click <b>Next &gt;&gt;</b> .
4.	<p>In the Fluency “IVR Dialog Generator” window that appears, define the desired call flow.</p> 

**Step**      **Description**

5.      In the IVR Dialog Generator window, select **View** → **Toolbox** to display the toolbox.



6.      To display another view of the call flow, click the Global Viewer tab on the bottom of the window.



## 5. Interoperability Compliance Testing

This Interoperability Compliance Test included feature, functionality and performance load testing. Feature and functionality testing examined Braxtel Fluency Communicator IVR's ability to work with Avaya IP Office. The following features were verified: transfers based on collected digits, transfers based on DTMF, barge-in, cell phone notification, and call routing based on DNIS. Performance load tests verified the configuration continued operating under load.

### 5.1. General Test Approach

Feature and functionality testing was performed manually. The IP Office was setup with two PRI trunk cards. The first PRI trunk port was connected to the central office. The second PRI trunk port was connected to the Fluency IVR. The IP Office routed all inbound trunk calls (analog and PRI) to the Fluency IVR PRI trunk. The Fluency IVR handled the incoming calls with a call flow setup to behave like an automated attendant. Transfers were made to various IP Office extensions based on digits entered and/or DTMF input. Routing by DNIS and cell phone notification were verified after making minor adjustments to the call flow through the IVR Dialog Generator.

Performance testing was accomplished using a call generation tool connected to the IP Office. The PRI trunk connecting the IP Office to the central office was connected to the call generation tool. Analog station ports on the IP Office were connected to analog station ports on the call generation tool. The Fluency IVR call flow was modified to transfer calls to IP Office extensions connected to the call generation tool. Three call generation tool scripts were written. The first placed a call to the IP Office over the PRI trunk, dialed a sequence of digits for transfer to an extension, paused for a few seconds then hung up. The second script placed a call to the IP Office over the PRI trunk, paused for a longer interval then hung up. The third script placed a call to the IP Office over the PRI trunk, entered a predefined digit that caused the Fluency IVR to play a message and then the Fluency IVR hung up the call. Throughout the performance test run, the call generator was configured to place calls using no more than 17\* of the 24 channels on the PRI trunk.

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\* Because each transfer uses an additional PRI channel, some channels had to remain open to permit successful transfers.

## 5.2. Test Results

Most feature, functionality, and performance test cases passed. All issues and/or observations noted during testing are presented in Section 5.2.1 of these Application Notes. Overnight performance testing at a rate of 1,000 – 4,000<sup>\*\*</sup> BHCA as reported by the call generation tool was conducted by placing calls from seventeen PRI channels on the call generator. Performance statistics were captured on the Fluency Communicator server and clients to ensure that they were able to handle the call volume.

### 5.2.1. Compliance Test Notes / Observations

- **CallerID not passing to Fluency IVR.** Fluency IVR server did not appear to receive CallerID information for calls from the IP Office. Problem could not be reproduced using when a second hammer was connected to the IP Office in place of the Fluency IVR.
- **Issues maintaining call load during performance testing.** The Fluency IVR initially keeps up with the call load directed at it. However, something occurs on the server shortly after midnight,<sup>\*\*\*</sup> which causes the server to give a delayed response to all incoming calls within the timeout period expected for ISDN calls. When this occurs, the calls are disconnected by IP Office, which in turn causes the call generator to interpret that an error has occurred and it stops placing new calls. This is under investigation by Braxtel.

## 6. Verification Steps

The following steps can be used to verify system operation after a field installation:

- Go to **Start** → **Programs** → **Intel Dialogic System Software** → **Configuration Manager** → **DCM** and verify the service is running.
- Place an internal call to the Fluency IVR Automated Attendant, e.g., dial 63000. Verify the Fluency IVR automated attendant prompt answers the call.
- Follow the instructions provided by the attendant menu and transfer to an extension. Verify the correct extension rings.

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<sup>\*\*</sup> Problems encountered during testing resulted in loss of channels dropping the hourly call rate from 4000 to 1000.

<sup>\*\*\*</sup> The issue has been pinpointed to occur around midnight regardless of whether the performance test was started at noon or at five o'clock in the afternoon.

## 7. Support

Customers should call the Braxtel Customer Service Center when having problems related to the Fluency Communicator IVR product. Braxtel will then determine the nature of the problem and recommend the best plan to the customer whether it is to:

- Fix the problem through remote access.
- Dispatch, at Braxtel's discretion, on-site technical support.

For technical support on the Fluency Communicator IVR software and/or server, contact the Braxtel Customer Service Center at US (800) 589-2477 and EU +44-115-988-6209. Technical support email can be sent to [support@braxtel.com](mailto:support@braxtel.com).

## 8. Conclusion

These Application Notes describe the required configuration steps for Braxtel Fluency Communicator IVR to successfully interoperate with Avaya IP Office. Features, functionality, and performance were successfully validated.

## 9. Additional References

[1] Avaya IP Office Installation Manual, 40DHB0002USCL, Issue 10c (5/11/2004)

### 9.1. Glossary

<b>BHCA</b>	Busy Hour Call Attempts
<b>DTMF</b>	Dual Tone Multi-Frequency
<b>DNIS</b>	Dialed Number Identification Service
<b>PRI</b>	Primary Rate Interface
<b>ISDN</b>	Integrated Services Digital Network

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