



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

---

# **Application Notes for Presence OpenGate with Avaya IP Office 9.0 – Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps required for Presence OpenGate to interoperate with Avaya IP Office 9.0. Presence OpenGate is a VoIP gateway integrated with Presence Contact Center Suite. Presence OpenGate and Presence Contact Center Suite provide ACD and CTI capabilities to companies that do not have such capabilities in existing PBXs.

In the compliance testing, Presence OpenGate used SIP trunks to Avaya IP Office to support ACD and CTI capabilities together with Presence Contact Center Suite.

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 Presence OpenGate to interoperate with Avaya IP Office 9.0. Presence OpenGate is a VoIP gateway integrated with Presence Contact Center Suite. Presence OpenGate and Presence Contact Center Suite provide ACD and CTI capabilities to companies that do not have such capabilities in existing PBXs. In the compliance testing, Presence OpenGate used SIP trunks to Avaya IP Office to support ACD and CTI capabilities together with Presence Contact Center Suite.

In the testing, agents were administered as users on Avaya IP Office, and have desktops running the Presence Agent application to initiate ACD and call related CTI actions, such as login/logout, change work modes, answer, and hang up calls. Presence Contact Center Suite was used to support interface with Presence Agent and outbound campaigns including call classifications.

Upon agents logging in via Presence Agent, SIP trunks were used to establish dedicated audio connections between Presence OpenGate and the agent telephones. From this point on, all call related actions were performed from Presence Agent. The dedicated audio connections stay in place until the agents log out.

Inbound ACD calls from the PSTN were delivered by Avaya IP Office over the SIP trunks to Presence OpenGate, with Presence OpenGate providing all ACD functionality such as announcements/music, digits collection, and skill based routing. Once determined there is an available agent, Presence OpenGate bridges the relevant trunk ports to enable two-way talk paths between agent and PSTN. Similarly, all transfer and conference features were accomplished by bridging of relevant trunk ports.

Outbound campaign calls were launched by Presence Contact Center Suite to PSTN via Presence OpenGate, using the SIP trunks with Avaya IP Office. Similar bridging method was used by Presence OpenGate to enable connected talk paths between agent and PSTN for the outbound ACD calls, and for transfer and conference of such calls.

Presence OpenGate also supports the Extension Observing feature, with the supervisor using a third party SIP softphone application to register directly to Presence OpenGate. In the compliance testing, the PhonerLite SIP softphone application was used.

The focus of the compliance testing was on the SIP trunk interface between Presence OpenGate and Avaya IP Office.

## **2. General Test Approach and Test Results**

The feature test cases were performed both automatically and manually. Inbound ACD calls were manually made from the PSTN, and outbound ACD calls were automatically launched by Contact Center Suite.

The serviceability test cases were performed manually by disconnecting and reconnecting the Ethernet connection to OpenGate and to Agent.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

### **2.1. Interoperability Compliance Testing**

The interoperability compliance test included feature and serviceability testing.

The feature testing included basic call, screen pop, G.711, G.729, codec negotiation, drop, hold/reconnect, music on hold, DTMF, session refresh, transfer, conference, voicemail, supervisor monitor, multiple agents, multiple VDN, queuing, and blending.

In addition, the feature testing for outbound ACD calls also included ring no answer, busy, answering machine, invalid number, invalid route, end of list, system classification, and agent classification.

The serviceability testing focused on verifying the ability of OpenGate and Agent to recover from adverse conditions, such as disconnecting and reconnecting the Ethernet connection to OpenGate and to Agent.

## 2.2. Test Results

All test cases were executed and verified. The following were observations on OpenGate from the compliance testing:

- OpenGate does not support direct media.
- OpenGate responded with 407 Proxy Authentication Required to the initial invite for each inbound ACD call, and IP Office sent re-INVITE in return.
- After the conference-from agent drops from a conference call, the remaining conversation between the conference-to party and the PSTN is dropped by OpenGate by design.
- OpenGate does not support dialing of short codes that include any special characters.
- Agents using the Agent application to dial into voicemail on IP Office were not recognized as local subscribers, and need to use DTMF to input credentials.

## 2.3. Support

Technical support on OpenGate can be obtained through the following:

- **Phone:** +34 93 10 10 300
- **Email:** [support@presenceco.com](mailto:support@presenceco.com)
- **Web:** [www.presenceco.com](http://www.presenceco.com)

### 3. Reference Configuration

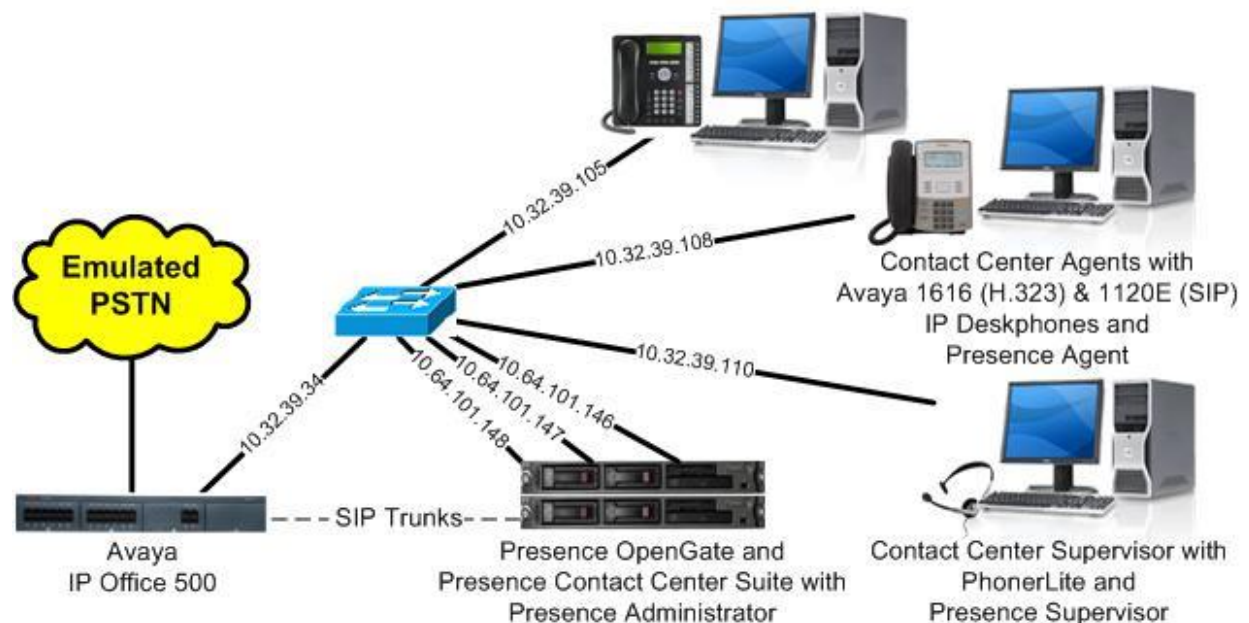
Contact Center Suite can be configured on a single server or with components distributed across multiple servers. The compliance test used a single server configuration.

Contact Center Suite includes an Administrator application, which was used to configure both OpenGate and Contact Center Suite. In the compliance testing, Administrator was running on the Contact Center Suite server.

OpenGate utilized two Ethernet connections, a public one to interface with IP Office, and a private one to interface with local agents on Contact Center Suite that was not used in the testing. The Supervisor application was used to verify the outbound call classification results.

A five digit dial plan was used in the compliance testing, with calls to extensions 27xxx routed over the SIP trunks to OpenGate. The table below shows the extensions used in the compliance testing.

Device Type	Extension
Agents	20031, 20041
Supervisor	27005
Inbound VDN	27001, 27002
Outbound VDN	27003



**Figure 1: Compliance 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 IP500V2	9.0 SP1 (9.0.100.845)
Avaya 1616 IP Deskphone (H.323)	1.343A
Avaya 1120E IP Deskphone (SIP)	4.3.18.00
Avaya 9650 IP Deskphone (H.323)	3.212A
Presence OpenGate on Linux CentOS <ul style="list-style-type: none"><li>MySQL</li></ul>	10.0.0.0 5.7 5.0.45
Presence Contact Center Suite on Windows 2008 R2 Standard <ul style="list-style-type: none"><li>Presence Administrator</li></ul>	10.0.0.0 10.0.0.0
Presence Agent on Windows 7 Enterprise	10.0.0.0 SP1
Presence Supervisor and PhonerLite on Windows XP Professional	10.0.0.0 2.10 2002 SP1

*Testing was performed with IP Office 500 V2 R9.0, but it also applies to IP Office Server Edition R9.0. Note that IP Office Server Edition requires an Expansion IP Office 500 V2 R9.0 to support analog or digital endpoints or trunks. IP Office Server Edition does not support TAPI Wave or Group Voicemail.*

## 5. Configure Avaya IP Office

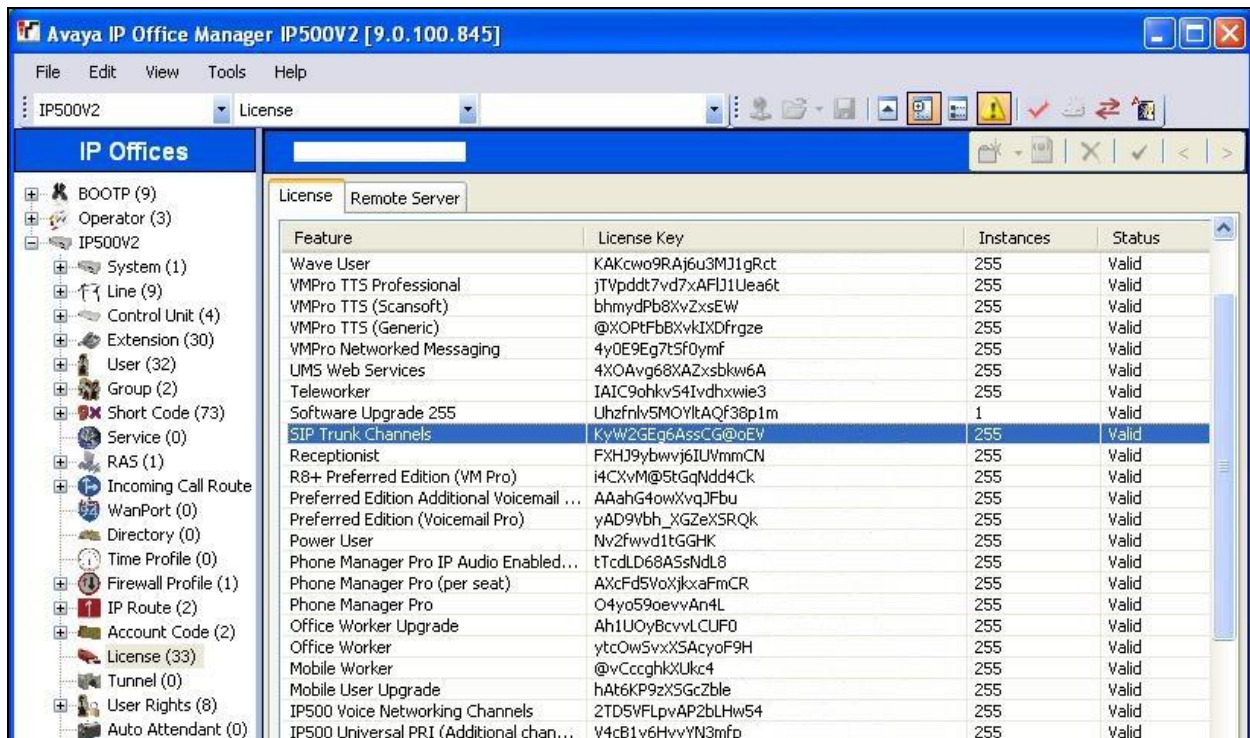
This section provides the procedures for configuring IP Office. The procedures include the following areas:

- Verify license
- Obtain LAN IP address
- Enable SIP trunks
- Administer SIP line
- Administer incoming call route
- Administer short code

### 5.1. Verify License

From a PC running the IP Office Manager application, select **Start → All 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 Manager** screen is displayed. From the configuration tree in the left pane, select **License** to display a list of licenses in the right pane. Verify that there is a license for **SIP Trunk Channels** and that the **Status** is “Valid”, as shown below.

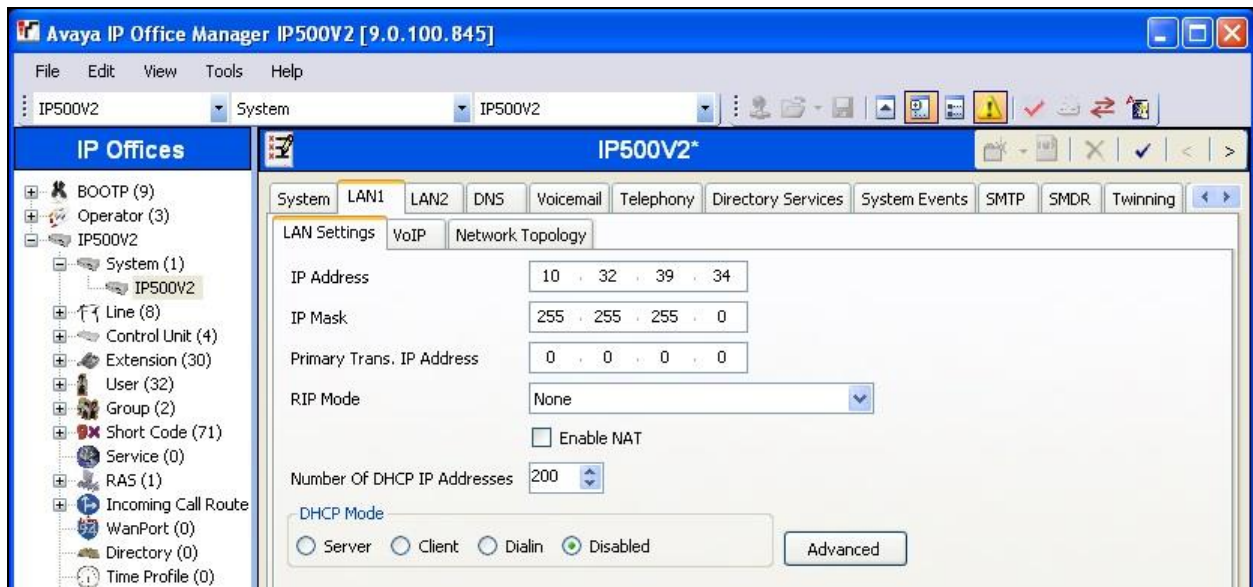


Feature	License Key	Instances	Status
Wave User	KAKcwo9RAj6u3MJ1gRct	255	Valid
VMPro TTS Professional	jTVpddt7vd7xAFI1Uea6t	255	Valid
VMPro TTS (Scansoft)	bhmydPb8XvZxsEW	255	Valid
VMPro TTS (Generic)	@XOPtFb8XvkIXDfrgze	255	Valid
VMPro Networked Messaging	4y0E9Eg7t5f0ymf	255	Valid
UMS Web Services	4XOAvG68XAZxsbkW6A	255	Valid
Teleworker	IAIC9ohkyS4Ivdhxwie3	255	Valid
Software Upgrade 255	Uhzfnlv5MOYltAQf38p1m	1	Valid
<b>SIP Trunk Channels</b>	<b>KyW2EG6AssCG@oEV</b>	<b>255</b>	<b>Valid</b>
Receptionist	FXHJ9ybwwj6IUvmmCN	255	Valid
R8+ Preferred Edition (VM Pro)	i4CXvM@5tGqNdd4Ck	255	Valid
Preferred Edition Additional Voicemail ...	AAahG4owXvqJFbu	255	Valid
Preferred Edition (Voicemail Pro)	yAD9Vbh_XGZeXSRQk	255	Valid
Power User	Nv2fwvd1tGGHK	255	Valid
Phone Manager Pro IP Audio Enabled...	tTcdLD68ASsNdL8	255	Valid
Phone Manager Pro (per seat)	AXcFd5VoXjKxaFmCR	255	Valid
Phone Manager Pro	O4yo59oevvAn4L	255	Valid
Office Worker Upgrade	Ah1UOyBcvvLCUF0	255	Valid
Office Worker	ytCOW5vXSAcyoF9H	255	Valid
Mobile Worker	@vCccghkXUkc4	255	Valid
Mobile User Upgrade	hAt6KP9zXSGzcble	255	Valid
IP500 Voice Networking Channels	2TD5VFLpvAP2bLHw54	255	Valid
IP500 Universal PRI (Additional chan...	V4cB1y6HvvYN3mfp	255	Valid



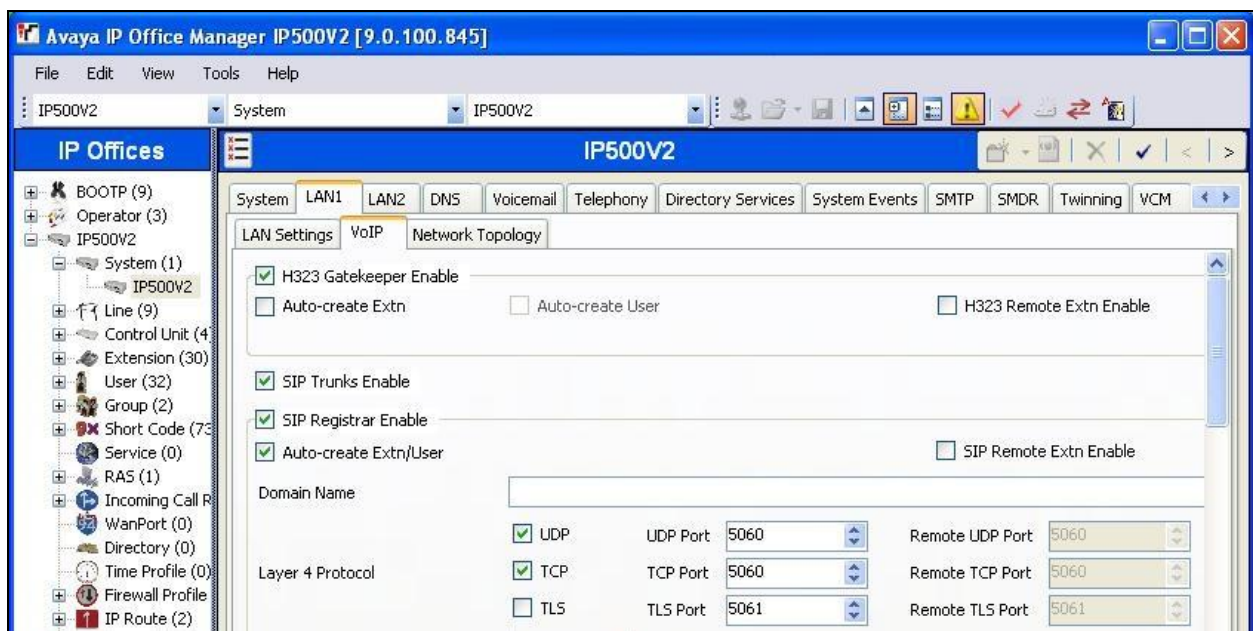
## 5.2. Obtain LAN IP Address

From the configuration tree in the left pane, select **System** to display the **IP500V2** screen in the right pane, where **IP500V2** is the name of the IP Office system. Select the **LAN1** tab, followed by the **LAN Settings** sub-tab in the right pane. Make a note of the **IP Address**, which will be used later to configure OpenGate. Note that IP Office can support SIP trunks on the LAN1 and/or LAN2 interfaces, and the compliance testing used the LAN1 interface.



## 5.3. Enable SIP Trunks

Select the **VoIP** sub-tab. Make certain that **SIP Trunks Enable** is checked, as shown below.





## 5.4. Administer SIP Line

From the configuration tree in the left pane, right-click on **Line**, and select **New → SIP Line** from the pop-up list to add a new SIP line.

In the **SIP Line** tab, for **ITSP Domain Name**, enter the IP address of the OpenGate connection used to interface with IP Office. Retain the defaults in the remaining fields.

The screenshot shows the Avaya IP Office Manager interface. The left pane displays the configuration tree with 'Line (8)' selected. The main pane shows the 'SIP Line - Line 18\*' configuration. The 'SIP Line' tab is active, showing the following fields:

Field	Value	Field	Value
Line Number	18	In Service	<input checked="" type="checkbox"/>
ITSP Domain Name	10.64.101.146	URI Type	SIP
Prefix		Check OOS	<input checked="" type="checkbox"/>
National Prefix	0	Call Routing Method	Request URI
Country Code		Originator number for forwarded and twinning calls	
International Prefix	00	Name Priority	System Default
Send Caller ID	None	Caller ID from From header	<input type="checkbox"/>
Association Method	By Source IP address	Send From In Clear	<input type="checkbox"/>
		User-Agent and Server Headers	

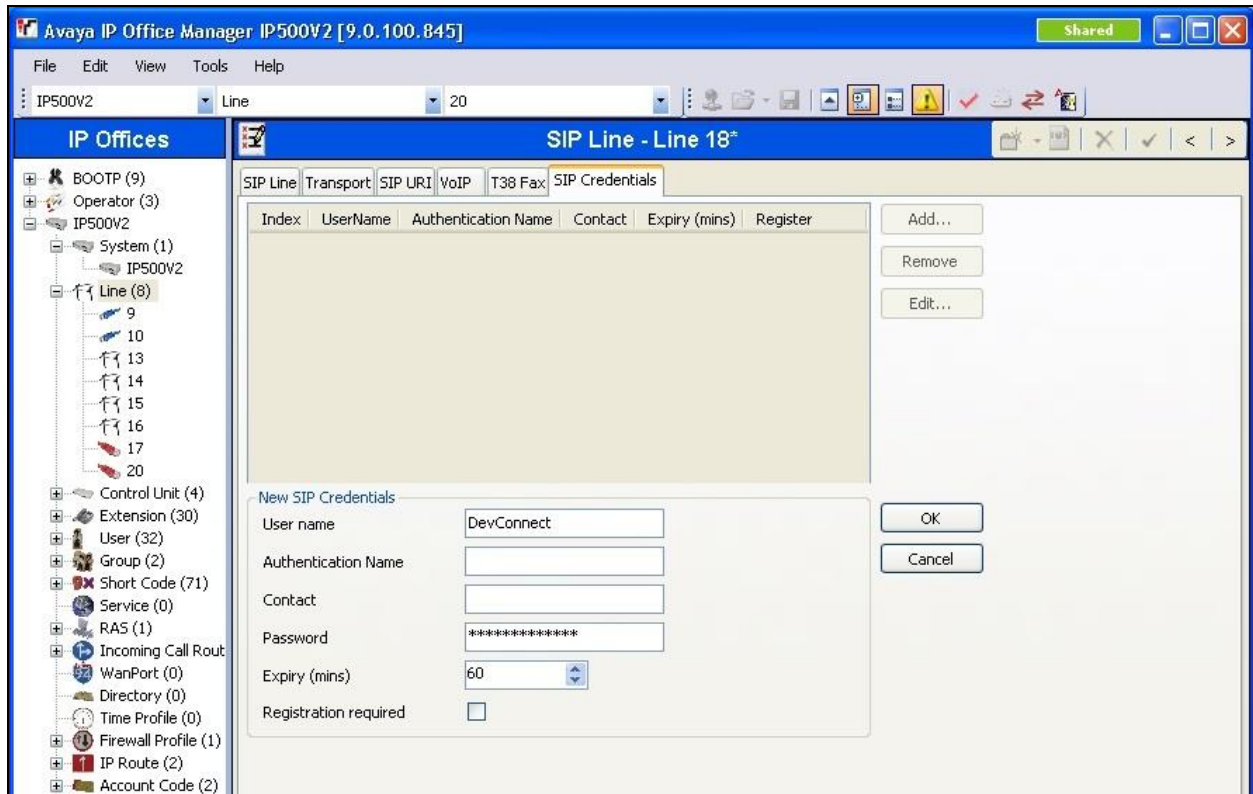
Select the **Transport** tab. For **ITSP Proxy Address**, enter the IP address of the OpenGate connection used to interface with IP Office. Retain the defaults in the remaining fields. Note that OpenGate only supports UDP.

The screenshot shows the Avaya IP Office Manager interface with the 'Transport' tab selected for 'SIP Line - Line 18\*'. The configuration fields are as follows:

Field	Value	Field	Value
ITSP Proxy Address	10.64.101.146		
Network Configuration			
Layer 4 Protocol	UDP	Send Port	5060
Use Network Topology Info	None	Listen Port	5060
Explicit DNS Server(s)	0 . 0 . 0 . 0		
Calls Route via Registrar	<input checked="" type="checkbox"/>		
Separate Registrar			

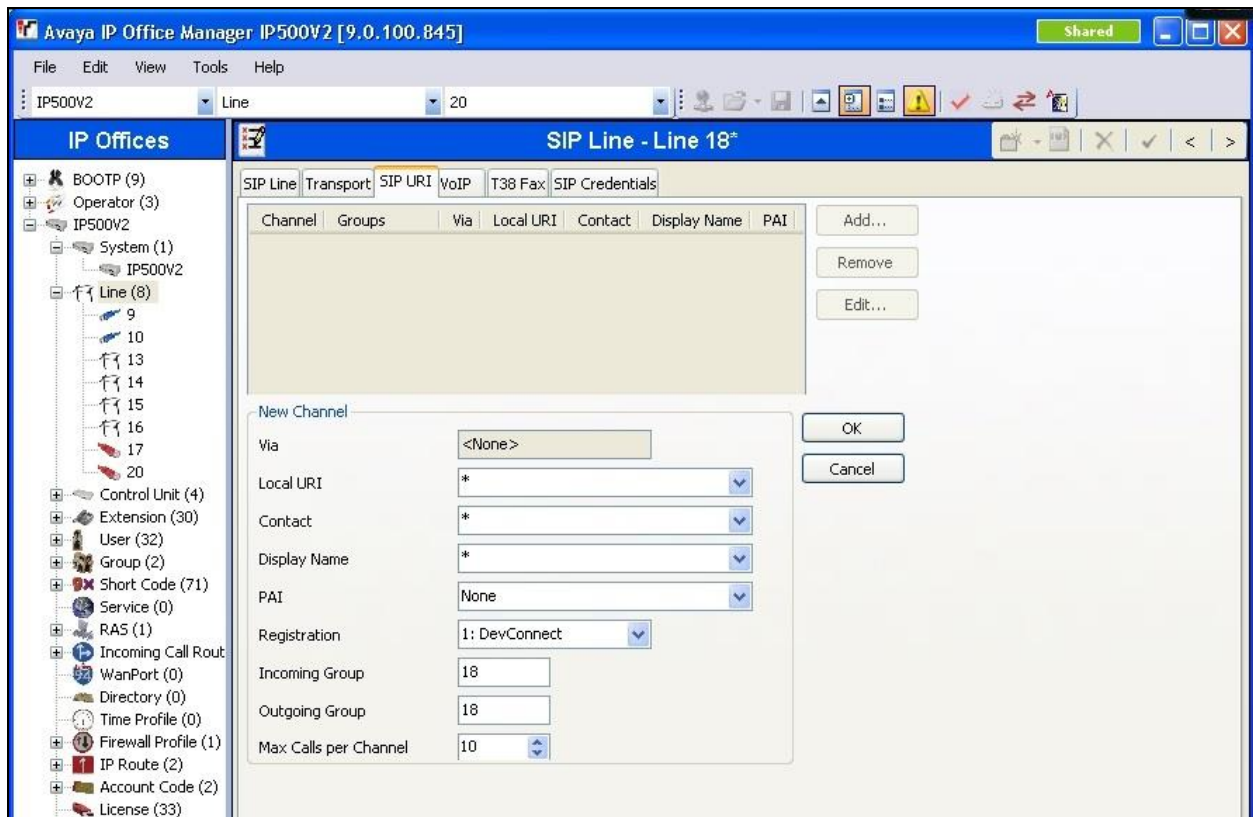
Select the **SIP Credentials** tab, and click **Add** to display the **New SIP Credentials** sub-section. Enter desired values for **User name** and **Password**, to be used as the SIP account credentials with OpenGate in **Section 6.4**. Retain the default values in the remaining fields.

Make a note of the **User name** value, which will be used next to configure the **SIP URI** tab.

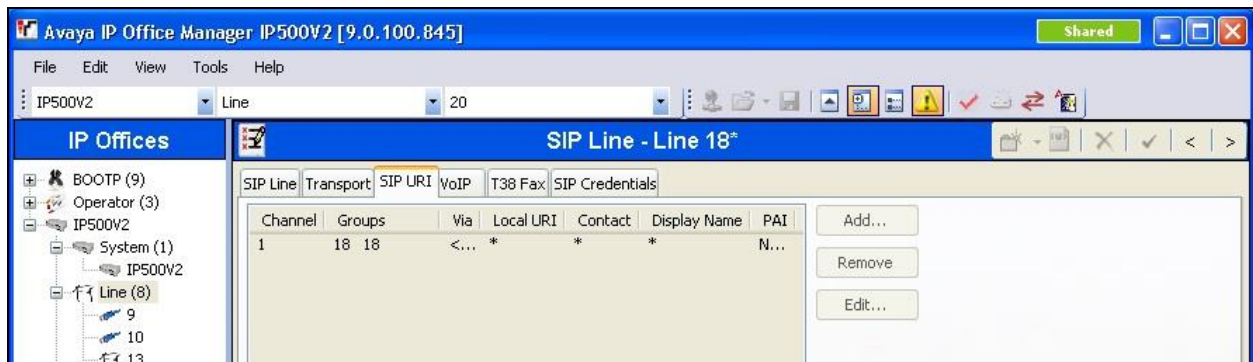


Select the **SIP URI** tab, and click **Add** to display the **New Channel** sub-section. Enter the wildcard character “\*” for **Local URI**, **Contact**, and **Display Name**. For **Registration**, enter the SIP user name from the **SIP Credentials** tab.

For **Incoming Group** and **Outgoing Group**, enter unused group numbers. Set **Max Calls per Channel** to support the applicable maximum number of simultaneous calls. Note that the number needs to take into account the dedicated connections to the logged in agents. Retain the default values in the remaining fields.

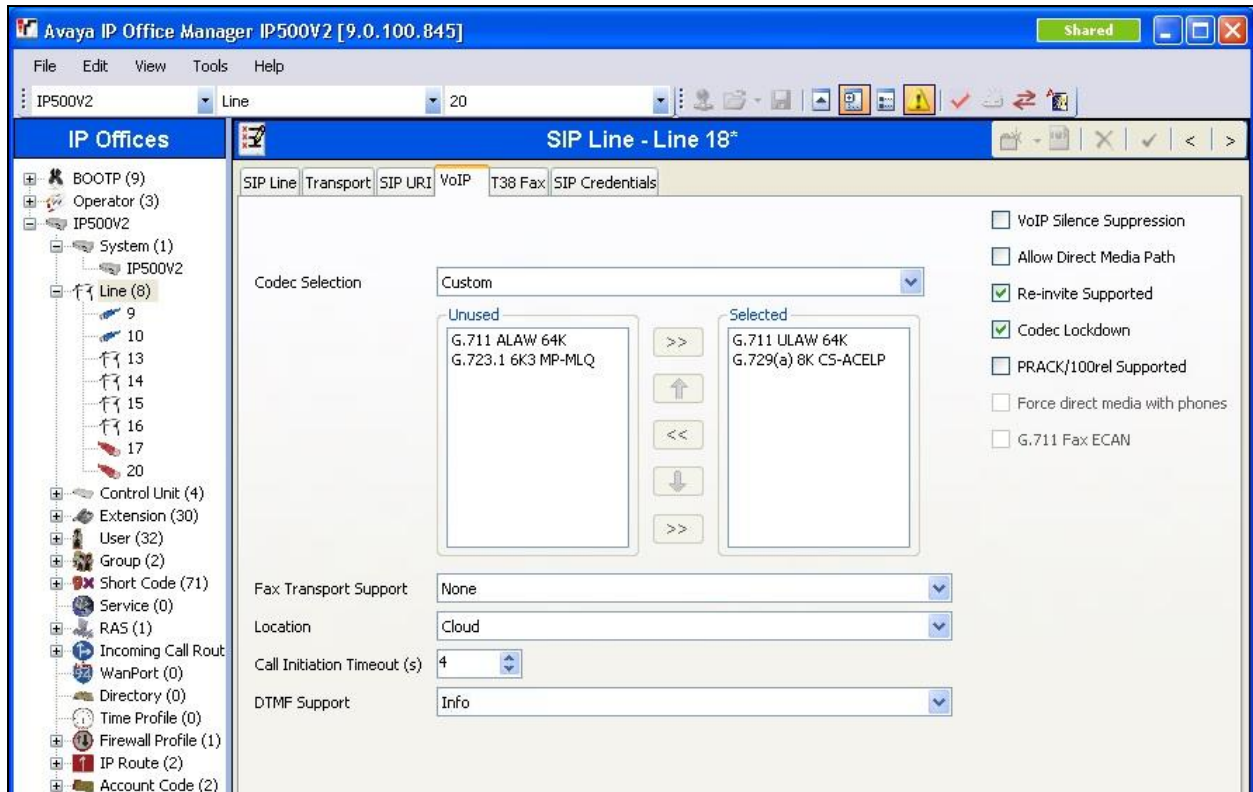


The screen is updated, as shown below.



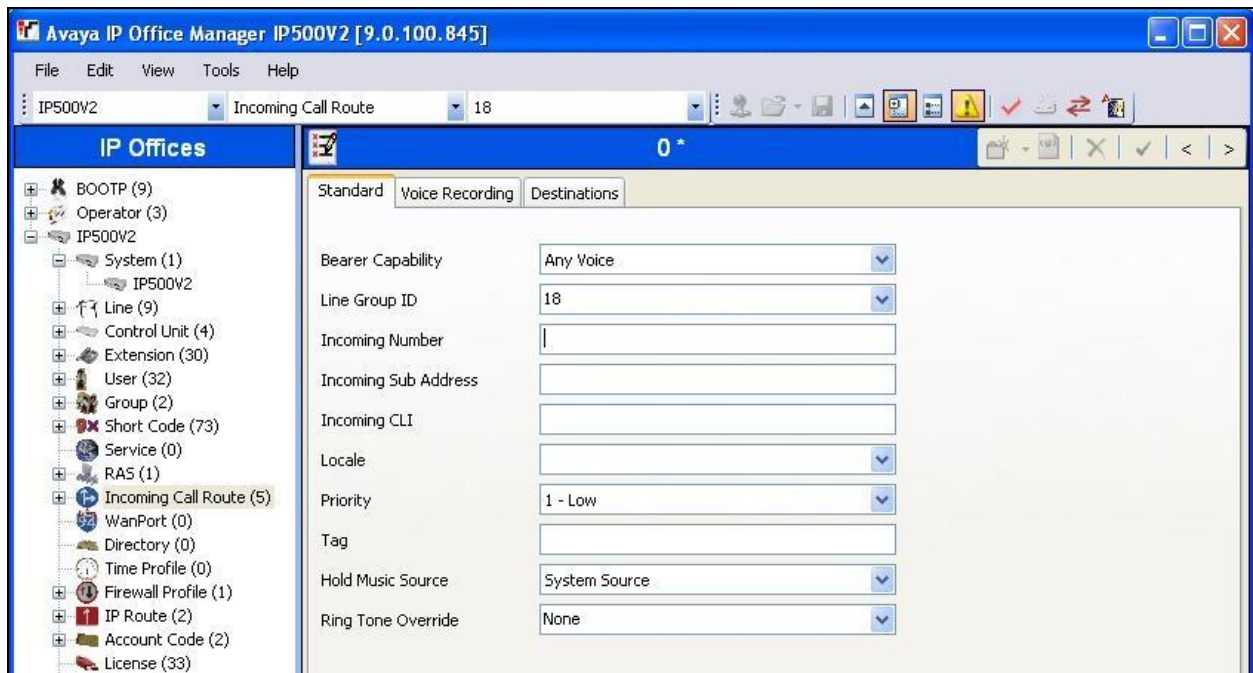
Select the **VoIP** tab. For **Codec Selection**, select “Custom” from the drop-down list. Retain the applicable codecs in the **Selected** column, in this case G.729 and the proper G.711 variant.

Check **Re-invite Supported** and **Codec Lockdown**. For **DTMF Support**, select “Info” from the drop-down list. Retain the default values in the remaining fields.

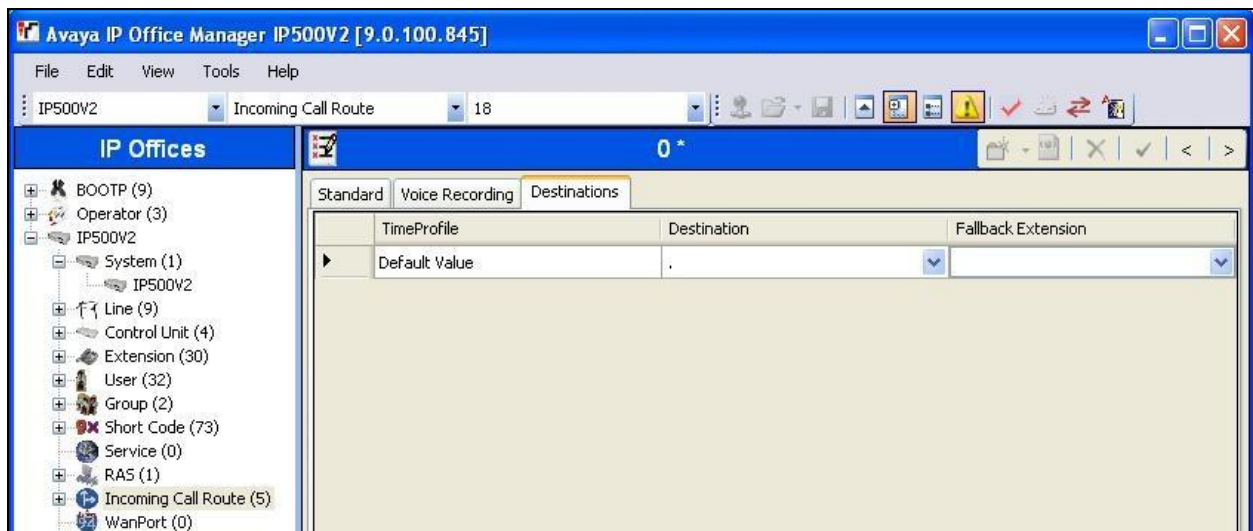


## 5.5. Administer Incoming Call Route

From the configuration tree in the left pane, right-click on **Incoming Call Route**, and select **New** from the pop-up list to add a new route for incoming calls from OpenGate. For **Line Group Id**, select the incoming group number from **Section 5.4**, in this case “18”.



Select the **Destinations** tab. For **Destination**, enter “.” to match any dialed number from OpenGate.

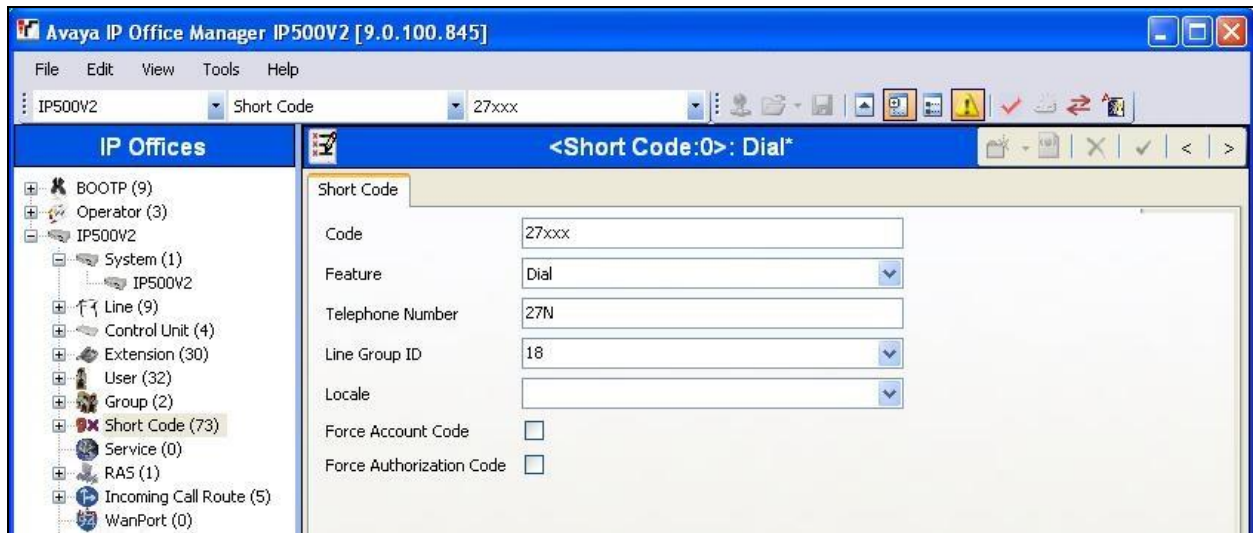




## 5.6. Administer Short Code

From the configuration tree in the left pane, right-click on **Short Code** and select **New** from the pop-up list to add a new short code for outgoing calls to OpenGate. In the compliance testing, all calls to 27xxx are routed over the SIP trunks to OpenGate.

For **Code**, enter “27xxx”. For **Telephone Number**, enter the appropriate value where “27N” corresponds to the dialed number. For **Line Group ID**, enter the outgoing group number from **Section 5.4**. Retain the default values in the remaining fields.



## 6. Configure Presence OpenGate and Contact Center Suite

This section provides the procedures for configuring OpenGate and Contact Center Suite. The procedures include the following areas:

- Launch Presence Administrator
- Administer PBX trunks
- Administer PBX inbound routes
- Administer PBX outbound routes
- Administer extensions agent
- Administer extensions user
- Administer ACD logins
- Administer services inbound
- Administer services outbound

The configuration of OpenGate and Contact Center Suite is performed by Presence Operations personnel and business partners. The procedural steps are presented in these Application Notes for informational purposes.

### 6.1. Launch Presence Administrator

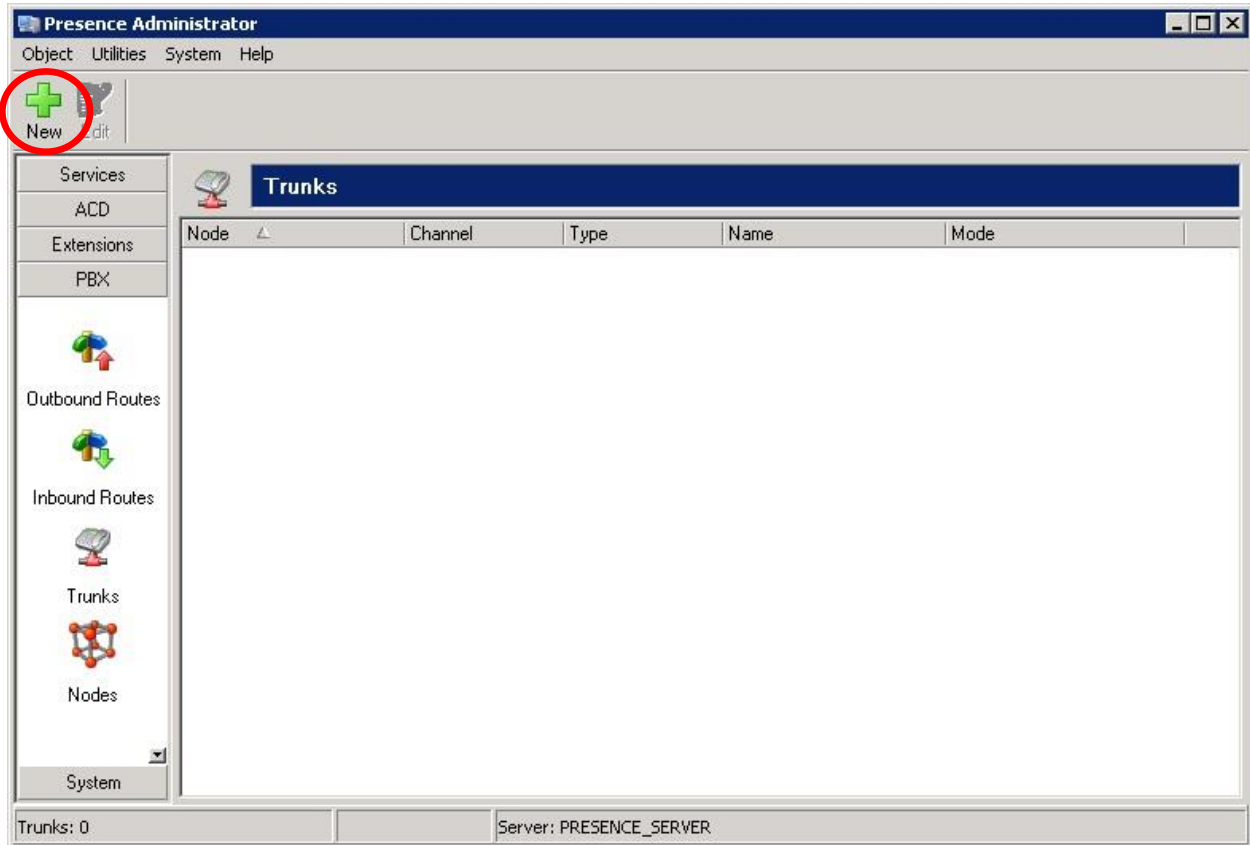
From the server or administrator PC running the Presence Administrator application, select **Start → All Programs → Presence Suite → Administrator → Administrator** to launch the application, and log in using the appropriate credentials.





## 6.2. Administer PBX Trunks

The **Presence Administrator** screen is displayed. Select **PBX → Trunks** in the left pane, to display the **Trunks** screen in the right pane. Click **New** to add a new trunk.



The **New trunk** screen is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields. Note that all parameters and values shown in the lower pane were entered manually.

- **Node:** “All”
- **Channel:** “SIP Peer”
- **Mode:** “Advanced”
- **User:** The SIP account user name from **Section 5.4**.
- **type:** “friend”
- **secret:** The SIP account password from **Section 5.4**.
- **host:** The LAN IP address from **Section 5.2**.
- **port:** “5060”
- **disallow:** “all”
- **allow:** Enter one line per codec, with “ulaw” corresponding to G.711.
- **context:** “presence-inbound”
- **quality:** “yes” to enable response to OPTIONS messages.
- **dtmfmode:** “info”

New trunk

Node: All

Channel: SIP Peer

Mode: Advanced

User: DevConnect

type=friend  
secret=DevConnect123  
host=10.32.39.34  
port=5060  
disallow=all  
allow=g729  
allow=ulaw  
context=presence-inbound  
quality=yes  
dtmfmode=info

OK Cancel Apply

### 6.3. Administer PBX Inbound Routes

Select **PBX → Inbound Routes** from the left pane, to display the **Inbound Routes** screen in the right pane. Click **New** to add a new inbound route.



The **Add inbound route** screen is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields.

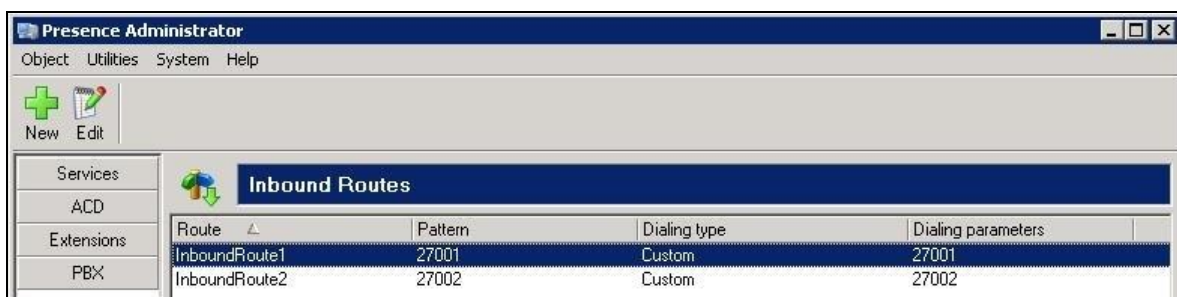
- **Route:** A descriptive name.
- **Input pattern:** The digits passed from IP Office, in this case “27001”.
- **Dialing string:** “Custom”, and enter the same input pattern digits.

The 'Add inbound route' dialog box is shown. It contains the following fields and values:

Field	Value
Route	InboundRoute1
Input pattern	27001
Dialing string	Custom
Dialing parameters	27001

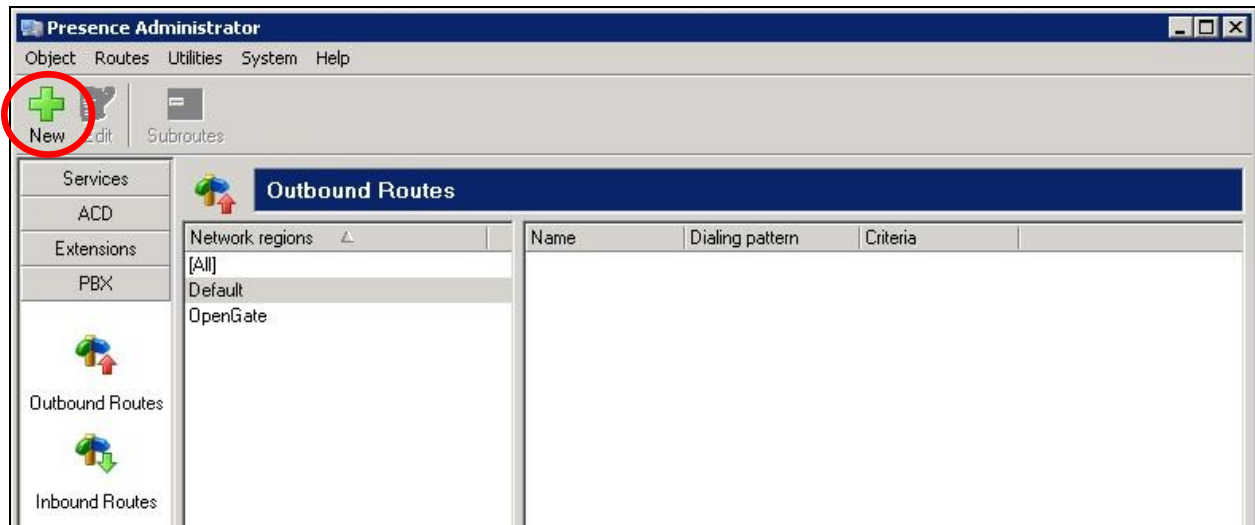
Buttons: OK, Cancel, Apply

Repeat this section to create all desired inbound routes. In the compliance testing, two inbound routes with dialed pattern “27001” and “27002” were created, as shown below.



## 6.4. Administer PBX Outbound Routes

Select **PBX → Outbound Routes** from the left pane, to display the **Outbound Routes** screen in the right pane. Select the **Default** entry from the **Network regions** column. Click **New** to add a new outbound route.

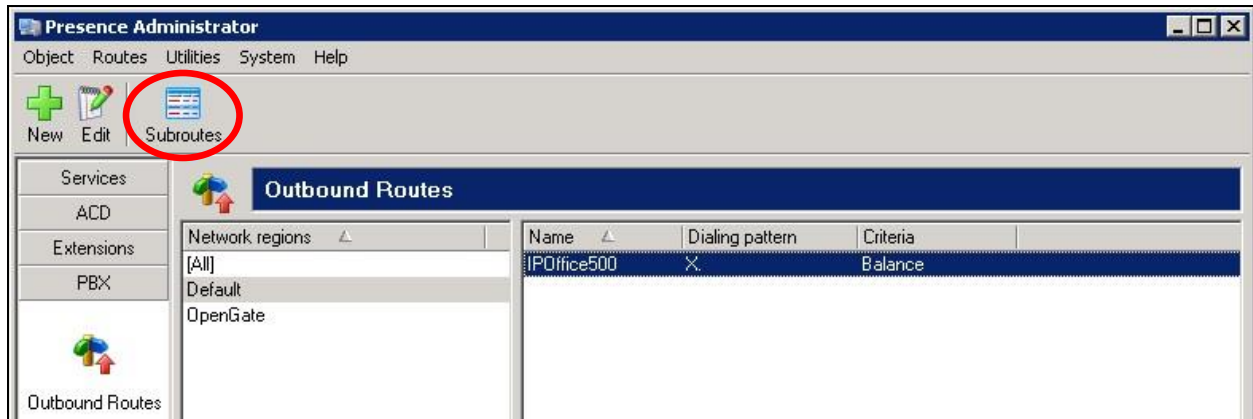


The **Add outbound route** screen is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Route:** A descriptive name.
- **Pattern:** "X." to match on any dialed number.

The 'Add outbound route' dialog box is shown. It has three input fields: 'Route' with the text 'IPOffice500', 'Pattern' with the text 'X.', and 'Criteria' with a dropdown menu showing 'Balance'. At the bottom are three buttons: 'OK', 'Cancel', and 'Apply'.

The **Outbound Routes** screen is displayed again, and updated with the new outbound route and the **Subroutes** option, as shown below. Click **Subroutes**.



The **Outbound subroutes** screen is displayed. Click **New** to add a new sub-route.



The **Add outbound subroute** screen is displayed. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Channel:** “SIP”, and select the SIP account user name from **Section 5.4**.
- **Dialing string:** “Custom”, and enter “\${EXTEN}” to match on any dialed number.

Node: masternode

Channel: SIP DevConnect

Dialing string: Custom \${EXTEN}

Weight: 0

Billing code:

Outgoing calls identification

☐ Enable outgoing calls identification

## 6.5. Administer Extensions Agent

Select **Extensions** → **Agent** from the left pane, to display the **Agent extensions** screen in the right pane. Click **New** to add a new agent.



The **Add agent extensions** screen is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields.

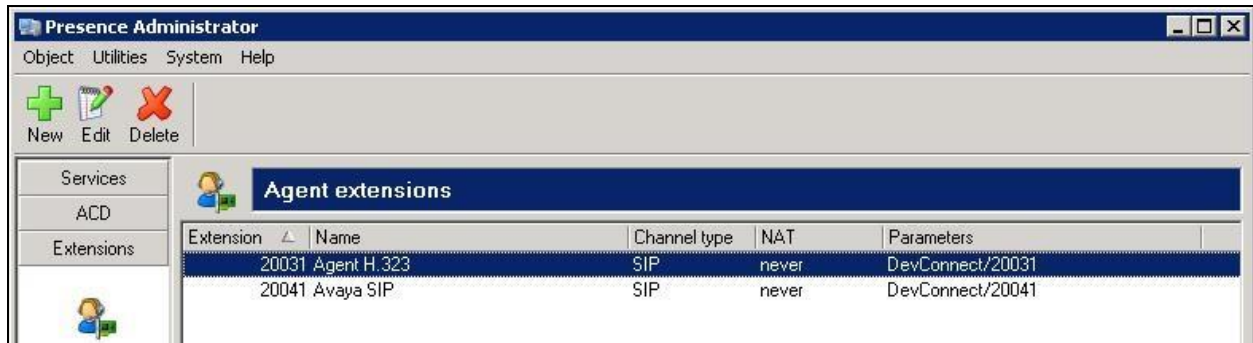
- **Extension:** A desired extension to denote the agent, in this case “20031”.
- **Name:** A desired name.
- **Channel:** “SIP”, and the SIP account user name from **Section 5.4** with extension.
- **Network regions:** “OpenGate”, and click **Add**.

Note that the extension here is local to Contact Center Suite and does not need to match the user telephone extension on IP Office.

The screenshot shows the 'Add agent extensions' dialog box. It contains the following fields and controls:

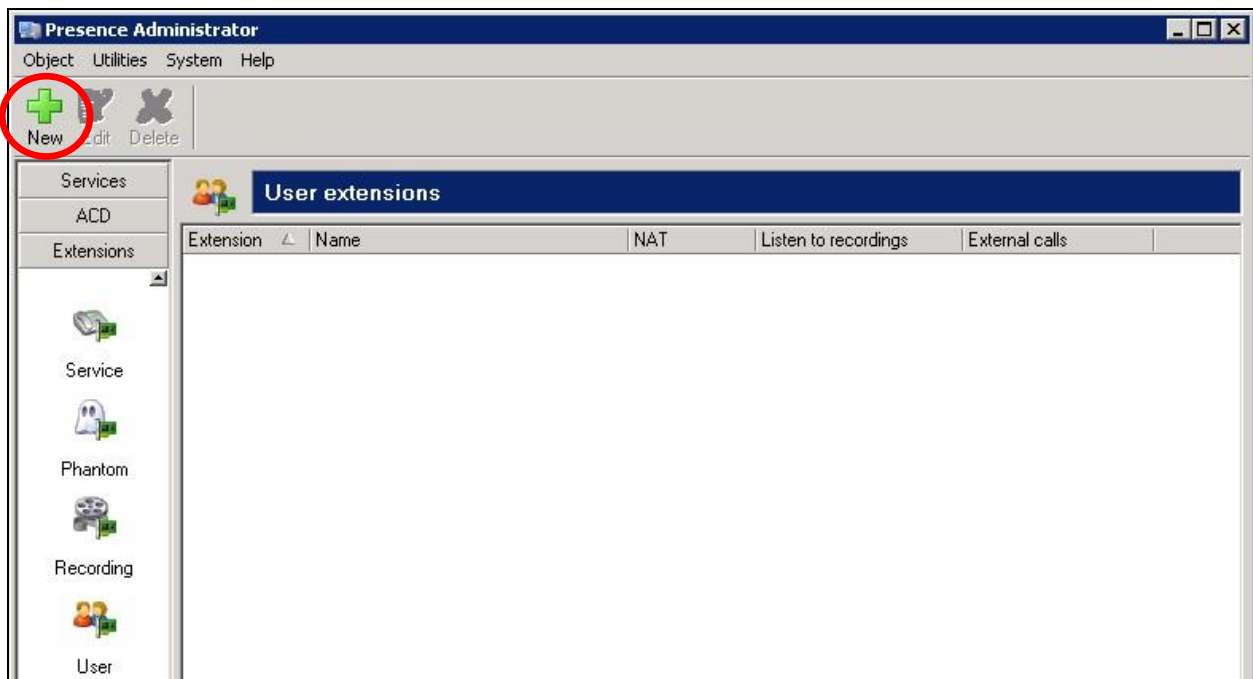
- Extension:** Text box containing '20031'.
- Name:** Text box containing 'Agent H.323'.
- Password:** Text box (empty) and a checkbox labeled 'Use extension as password' (unchecked).
- Channel:** A dropdown menu set to 'SIP' and a text box containing 'DevConnect/20031'.
- NAT:** A dropdown menu set to 'never'.
- Network regions:** A section containing a dropdown menu set to 'OpenGate' and an 'Add' button, which is circled in red.
- Below the 'Network regions' section is a table with a header 'Region' and an empty body.
- At the bottom right are two buttons: a green up arrow and a blue down arrow.

Repeat this section to add an agent extension for each agent from **Section 3**. In the compliance testing, two agent extensions of “20031” and “20041” were created.



## 6.6. Administer Extensions User

Select **Extensions** → **User** from the left pane, to display the **User extensions** screen in the right pane. Click **New** to add a new supervisor user.





The **Add user extensions** screen is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Extension:** The supervisor extension from **Section 3**.
- **Name:** A desired name.
- **Password:** A desired password.
- **Allow extension observing:** Check this field.

Repeat this section to add all supervisor users from **Section 3**. In the compliance testing, one supervisor user with extension “27005” was created.

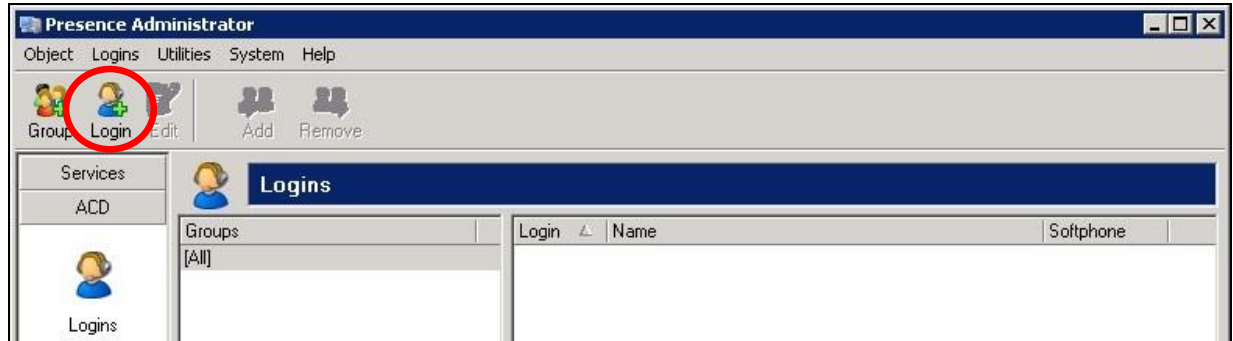
The screenshot shows a Windows-style dialog box titled "Add user extensions". On the left is a sidebar with three icons and labels: "General" (checked), "Pickup groups", and "Permissions". The main area is titled "General" and contains the following fields and controls:

- Extension:** Text box containing "27005".
- Name:** Text box containing "Supervisor 1".
- Password:** Text box containing "xxxxx". To its right is an unchecked checkbox labeled "Use extension as password".
- NAT:** A dropdown menu currently showing "never".
- Call forward type:** A dropdown menu.
- Call forward:** A dropdown menu.
- Call forward reason:** A dropdown menu.
- Timeout:** A spinner box set to "25" with the label "seconds" to its right.
- Line limit:** A spinner box set to "6".
- Allow extension observing:** A checked checkbox.

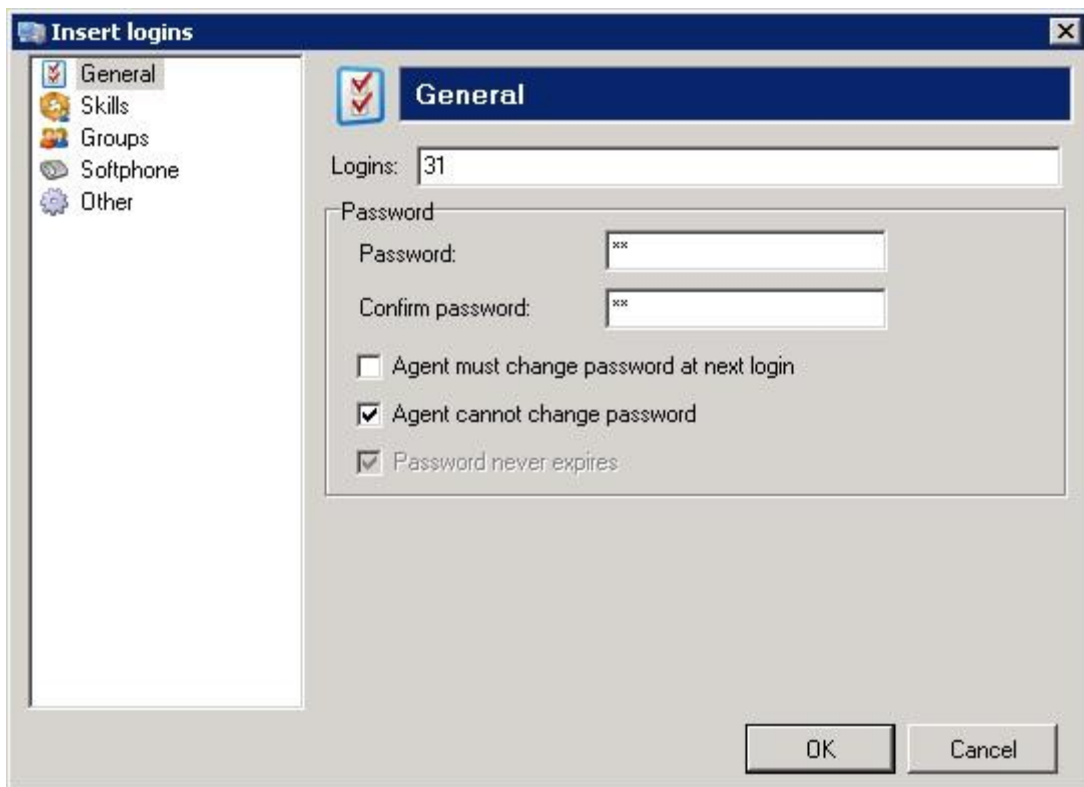
At the bottom right of the dialog are three buttons: "OK", "Cancel", and "Apply".

## 6.7. Administer ACD Logins

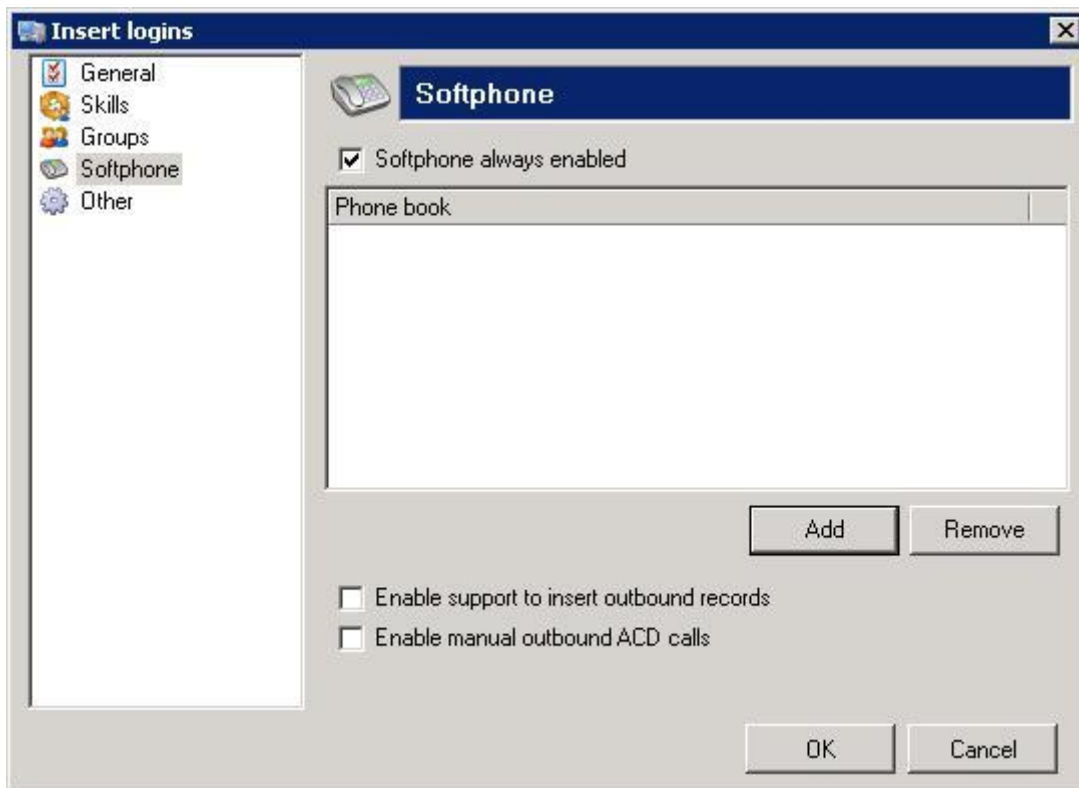
Select **ACD** → **Logins** from the left pane, to display the **Logins** screen in the right pane. Click **Login** to add a new login.



The **Insert logins** screen is displayed next. For **Logins**, enter a unique number to denote the agent, in this case “31”. Enter a desired number for **Password** and **Confirm password**. Retain the default values for the remaining fields.



Select **Softphone** from the left pane, to display the **Softphone** screen in the right pane. Check **Softphone always enabled**. This parameter is needed to support the transfer and conference features.

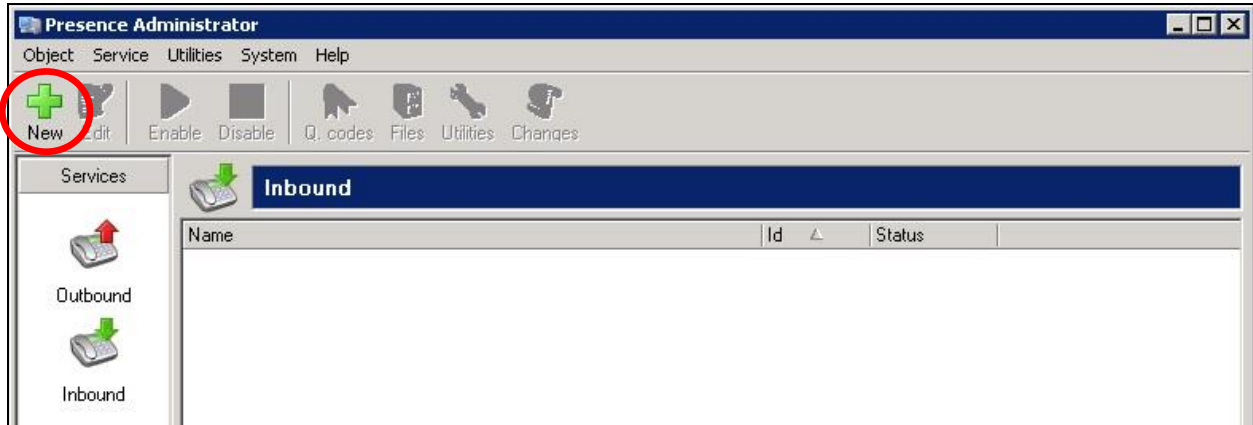


Repeat this section to add an agent login for each agent from **Section 3**. In the compliance testing, two agent logins of “31” and “41” were created, as shown below.



## 6.8. Administer Services Inbound

Select **Services** → **Inbound** in the left pane, to display the **Inbound** screen in the right pane. Click **New** to add a new inbound service.

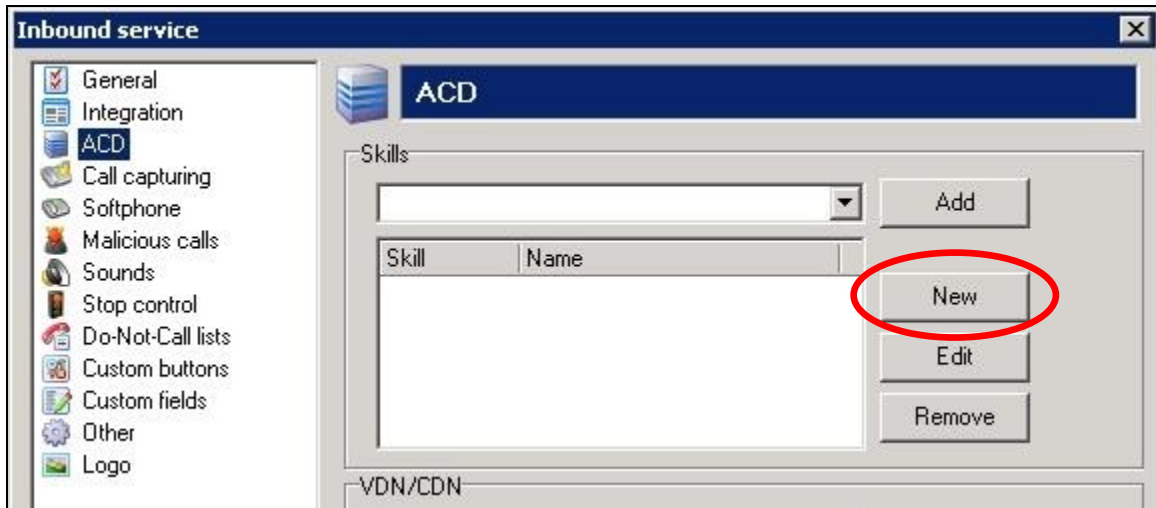


The **Inbound service** screen is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Id:** A unique number to denote the service.
- **Name:** A desired name for the service.



Select **ACD** from the left pane, to display the **ACD** screen in the right pane. In the **Skills** sub-section, click **New** to add a new skill.

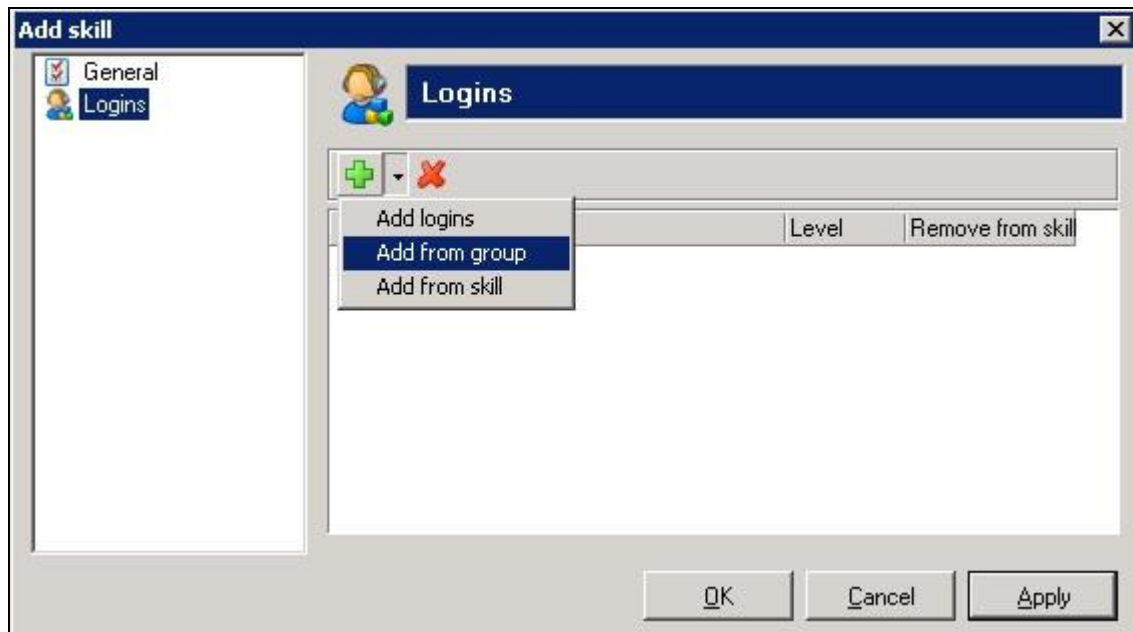


The **Add skill** screen is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Skill:** A unique number denoting the skill.
- **Name:** A desired name.
- **Strategy:** Select the desired strategy and routing algorithm.
- **Priority:** The desired priority in the range of 1-99, with 1 being the highest priority.

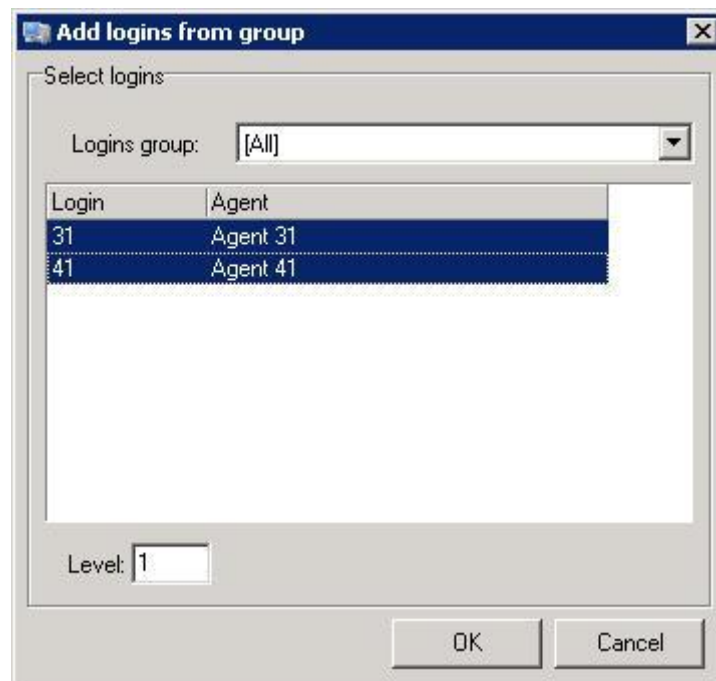
The screenshot shows a dialog box titled 'Add skill'. It has a left pane with 'General' and 'Logins' tabs, and a right pane with a 'General' tab. The 'General' tab contains the following fields: 'Skill' (text box with '101'), 'Name' (text box with 'Skill 101'), 'Strategy' (dropdown menu with 'Skill Level measurement'), 'Agent Available the Longest' (dropdown menu), 'Priority' (text box with '1'), 'RONA' (text box with '0' followed by 'seconds'), and an unchecked checkbox labeled 'Answer calls automatically (auto-answer)'. At the bottom are 'OK', 'Cancel', and 'Apply' buttons.

Select **Logins** from the left pane, to display the **Logins** screen in the right pane. Select the drop-down associated with the add icon and select **Add from group**, as shown below.



The **Add logins from group** screen is displayed next. Select both login entries, and enter a desired value for **Level**. Retain the default value for the remaining fields.

Repeat this section to create all desired skills. In the compliance testing, skill “101” was created and used for both inbound and outbound ACD calls.



The **Inbound service** → **ACD** screen is displayed again. In the **VDN/CDN** sub-section, click **New** to add a new VDN.

The screenshot shows the 'Inbound service' window with the 'ACD' sub-section selected. On the left is a tree view with options like General, Integration, ACD, Call capturing, Softphone, Malicious calls, Sounds, Stop control, Do-Not-Call lists, Custom buttons, Custom fields, Other, and Logo. The main area has two sections: 'Skills' and 'VDN/CDN'. The 'Skills' section has a dropdown, an 'Add' button, and a table with columns 'Skill' and 'Name' containing '101 Skill 101'. To the right of the table are 'New', 'Edit', and 'Remove' buttons. The 'VDN/CDN' section has a dropdown, an 'Add' button, and a table with columns 'VDN' and 'Name'. A 'New' button is circled in red to the right of the 'VDN/CDN' table.

The **Add service extension** screen is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Extension:** An available extension.
- **Name:** A desired name.
- **Enable adjunct routing:** Check this field to enable transfer and conference features.
- **Skill:** Select the skill created earlier in this section.
- **Music:** “default”
- **Repeat loop:** Check this field to enable music to be repeated.

The screenshot shows the 'Add service extension' window. Fields are filled as follows: Extension: 27001, Name: Sales, Mode: Basic (dropdown), Ringback: 0 seconds, Enable adjunct routing: checked, Welcome: (dropdown), Skill: 101 - Skill 101 (dropdown), Priority: Low (dropdown), Wait: (dropdown), Music: default (dropdown), Play music on hold before speech: unchecked, Wait time: 30 seconds, Repeat loop: checked. A 'View dialplan' button is at the bottom right.



Select **Other** from the left pane, to display the **Other** screen in the right pane. Check **Enable direct transfer to agents of this service**, and select an available VDN from the drop-down list.

The screenshot shows the 'Inbound service' configuration window with the 'Other' tab selected. The left pane lists various service options, with 'Other' highlighted. The right pane contains the following settings:

- After-call work:**
  - ☐ Minimum after-call work time: [ ] seconds
  - ☐ Maximum after-call work time: [ ] seconds
  - Q. code for maximum time: [ ]
  - ☐ Use q. code only if contact has not yet been qualified
- Transfer to agents:**
  - ☒ Enable direct transfer to agents of this service
  - Use the following VDN/CDN for transfer: [27001]
- Outgoing calls identification:**
  - ☐ Enable outgoing calls identification
  - Phone no: [ ]
  - Description: [ ]

Repeat this section to create all desired VDN. In the compliance testing, two VDNs with extensions “27001” and “27002” were created for the inbound service.

In addition, follow [2] to create the desired number of reason codes to associate with the inbound service (not shown below). Note that at least one reason code needs to be configured.

The screenshot shows the 'Inbound service' configuration window with the 'ACD' tab selected. The left pane lists various service options, with 'ACD' highlighted. The right pane contains the following settings:

- Skills:**
  - [ ] Add

Skill	Name
101	Skill 101

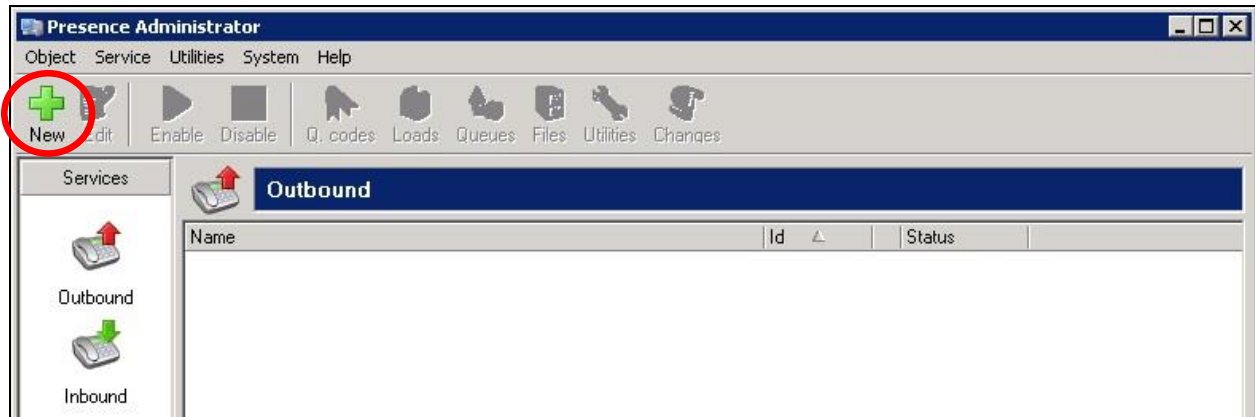
  - [ ] New
  - [ ] Edit
  - [ ] Remove
- VDN/CDN:**
  - [ ] Add

VDN	Name
27001	Sales
27002	Support

  - [ ] New
  - [ ] Edit

## 6.9. Administer Services Outbound

The **Presence Administrator** screen is displayed again. Select **Services** → **Outbound** in the left pane, to display the **Outbound** screen in the right pane. Click **New** to add a new outbound service.



The **Outbound service** screen is displayed. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Id:** A unique number to denote the service.
- **Name:** A desired name for the service.
- **Outbound calling hours:** The desired calling interval.

The screenshot shows the 'Outbound service' configuration window. On the left is a tree view with categories like 'General', 'Integration', 'Outbound type', 'Outbound options', 'Call analysis', 'Maximums', 'Queues', 'Schedule', 'Softphone', 'Alternative phones', 'Time zones', 'Do-Not-Call lists', 'Sounds', 'Custom buttons', 'Custom fields', 'Other', and 'Logo'. The 'General' category is selected. The main area is titled 'General' and contains the following fields:

- Id:** A text box containing the value '2'.
- Name:** A text box containing the value 'OUTBOUND-SERVICE'.
- Resource profile:** A dropdown menu with 'General' selected.
- Stop reasons:** A dropdown menu with '[All]' selected.
- Scheduled calling hours:** A section containing:
  - A checkbox for 'Do not schedule records for the last' followed by a dropdown menu with '15' and the text 'minutes of a time range'.
  - A checkbox for 'Limit date:' followed by a date picker showing '10/05/2014'.
- Outbound calling hours:** A text box containing the value '00:00-23:59'.

Select **Outbound type** from the left pane, to display the **Outbound type** screen in the right pane. For **Extension/Skill**, select an existing skill or to add a new one. In the compliance testing, the same skill from **Section 6.8** was used.

For **VDN/CDN**, select the plus icon to add a new VDN.

The **Add service extension** screen is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Extension:** An available extension.
- **Name:** A desired name.
- **Skill:** Select an existing desired skill.
- **Music:** “default”
- **Repeat loop:** Check this field to enable music to be repeated.

Select **Call analysis** from the left pane, to display the **Call analysis** screen in the right pane. Check **Detect answering machine and fax**, and retain the default values in the remaining fields.

The screenshot shows the 'Outbound service' window with the 'Call analysis' tab selected. The left pane lists various settings, with 'Call analysis' highlighted. The right pane contains the following configuration options:

- Detection settings:**
  - ☒ Detect answering machine and fax
  - No. of rings for 'No answer':
- Answering machines:**
  - ☐ Enable redirection for answering machines
  - Target extension:
  - ☐ Q. code for answering machine:

Select **Queues** from the left pane, to display the **Queues** screen in the right pane. For **Number of agents**, enter the applicable number of agents to handle outbound calls, and click **Calculate**.

The screenshot shows the 'Outbound service' window with the 'Queues' tab selected. The left pane lists various settings, with 'Queues' highlighted. The right pane contains the following configuration options:

- ☐ Alternate queues
- Insert:  initial records every  invalid records
- Number of agents:  **Calculate**
- Initial records buffer:**
  - Minimum:  records
  - Maximum:  records
- Invalid records buffer:**
  - Minimum:  records
  - Maximum:  records
- Scheduled records buffer:**
  - Minimum:  records
  - Maximum:  records

Select **Other** from the left pane, to display the **Other** screen in the right pane. If any dialing prefix is required by IP Office for outbound calls to the PSTN, then check **Phone prefix**, and enter the applicable prefix. In the compliance testing, all outbound calls to the PSTN were prefixed with “9”, as shown below.

Follow [2] to create the desired number of reason codes to associate with the outbound service, and the desired loads with calling records (not shown below). Save the configuration, and enable the desired services.

The screenshot shows the 'Outbound service' configuration window with the 'Other' tab selected. The left pane lists various configuration options, with 'Other' highlighted. The right pane contains the following settings:

- Phone prefix:** ☒ Phone prefix: 9 + ☐ Switch prefix +  + Customer's phone no.
- After-call work:**
  - ☐ Minimum after-call work time:  seconds
  - ☐ Maximum after-call work time:  seconds
  - Q. code for maximum time:
  - ☐ Use q. code only if contact has not yet been qualified
- Outgoing calls identification:**
  - ☐ Enable outgoing calls identification
  - Phone no:
  - Description:
- ☐ Enable customer calling hours

At the bottom right are 'OK' and 'Cancel' buttons.

## 7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of IP Office, OpenGate, and Contact Center Suite.

From the agent user PC, select **Start → All Programs → Presence Suite → Agent → Agent** to launch the application to launch the Agent application. The Agent screen below is displayed. For **Login** and **Password**, enter the applicable login credential from **Section 6.7**. For **Extension**, enter the applicable agent station extension from **Section 3**, in this case “20031”.

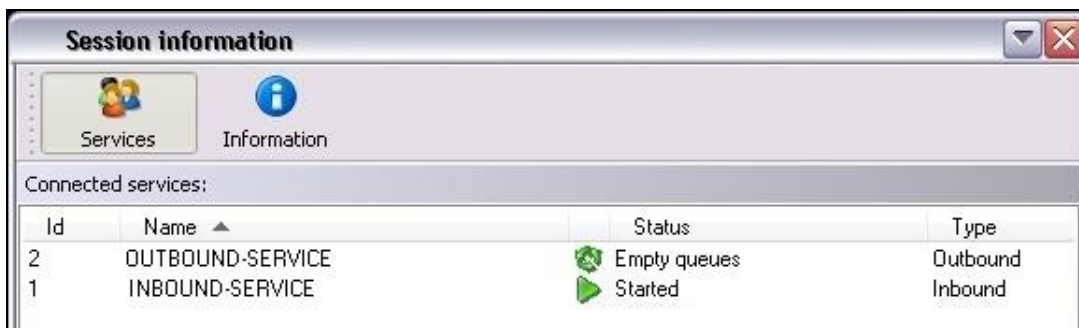


Verify a call is made from Presence over the SIP trunks to the agent telephone. Answer the call at the agent telephone to establish the dedicated connection. Verify that a task bar is displayed on the agent desktop along with a **Session information** screen, as shown below. Click on the green icon in the task bar to make the agent available for ACD calls.





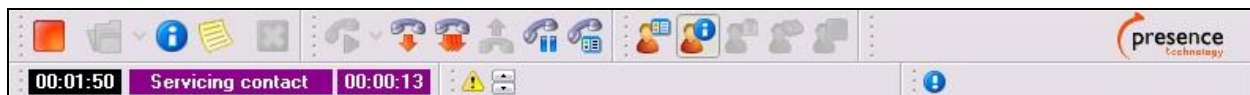
Verify the task bar is updated to reflect agent in the **Available** state, and that the **Status** are updated in the **Session information** screen.



Make an incoming ACD call from the PSTN. Verify that the agent task bar is updated to reflect a ringing call, an **Incoming call** screen appears with pertinent information for the call, and a **Contact** window is popped showing the calling party number. Click on the answer icon in the task bar to answer the call.



Verify that the agent is connected to the PSTN with two-way talk paths, and that the task bar on the agent desktop is updated showing **Servicing contact**.





## 8. Conclusion

These Application Notes describe the configuration steps required for Presence OpenGate to successfully interoperate with Avaya IP Office 9.0. All feature and serviceability test cases were completed with observation noted in **Section 2.2**.

## 9. Additional References

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

1. *Avaya IP Office Manager*, Release 9.0, Issue 9.01, September 2013, Document Number 15-601011, available at <http://support.avaya.com>.
2. *Presence Administrator Manual Presence Suite*, Version 9.2, Date 02/2014, available upon request to Presence Support.
3. *Presence Agent Manual Presence Suite*, Version 9.2, Date 02/2014, available upon request to Presence Support.

---

**©2014 Avaya Inc. All Rights Reserved.**

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at [devconnect@avaya.com](mailto:devconnect@avaya.com).