

Avaya Solution & Interoperability Test Lab

## Application Notes for Enghouse Interactive Communications Center 2016R2 with Avaya IP Office Server Edition 9.1 – Issue 1.0

## Abstract

These Application Notes describe the configuration steps required for Enghouse Interactive Communications Center 2016R2 to interoperate with Avaya IP Office Server Edition 9.1. Enghouse Interactive Communications Center is a multi-channel and multi-contact solution that can handle voice, fax, web, and email contacts. The compliance testing focused on the voice integration with Avaya IP Office Server Edition using the TAPI and SIP user interfaces.

The Avaya IP Office Server Edition configuration consisted of two Avaya IP Office systems, a primary Linux server at the Main site and an expansion IP500V2 at the Remote site that were connected via Small Community Network trunks. In the compliance testing, two Enghouse Interactive Communications Center servers were deployed, a primary server at the Main site to interface with the primary IP Office system via TAPI and SIP user interfaces, and an expander server at the Remote site to interface with the expansion IP Office system via TAPI only.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as any observations noted in **Section 2.2**, to ensure that their own use cases are adequately covered by this scope and results.

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 Enghouse Interactive Communications Center (EICC) 2016R2 to interoperate with Avaya IP Office Server Edition 9.1. EICC is a multi-channel and multi-contact solution that can handle voice, fax, web, and email contacts. The compliance testing focused on the voice integration with Avaya IP Office Server Edition using the TAPI and SIP user interfaces.

The Avaya IP Office Server Edition configuration consisted of two Avaya IP Office systems, a primary Linux server at the Main site and an expansion IP500V2 at the Remote site that were connected via Small Community Network trunks. In the compliance testing, two EICC servers were deployed, a primary server at the Main site to interface with the primary IP Office system via TAPI and SIP user interfaces, and an expander server at the Remote site to interface with the expansion IP Office system via TAPI only.

The agents were configured as users on IP Office systems, with ACD functionality provided by EICC. Each EICC server used TAPI 2 in third party mode to monitor agent users on the local IP Office system and provided call control via the Enghouse Interactive Desktop client application. The status of agent users on the expansion IP Office system were relayed by the expander EICC server to the primary EICC server, for tracking of agent availability.

All groups were required by EICC to be configured on the primary IP Office system, and were monitored by the primary EICC server. Upon notified of an incoming group call via TAPI events, the primary EICC server used TAPI line redirect capability to redirect call to an available agent that can reside on either the Main or Remote site, and populated answering agent's desktop with call related information received via the TAPI interface. Call related actions such as answer and drop can be initiated via the agent desktop, or via the agent telephone. The call related actions from the agent desktops, including park and un-park, were supported by EICC using TAPI line control capabilities. In addition, EICC used TAPI short codes to support forwarding, message waiting indicator (MWI), and supervisor monitor features.

The SIP user interface and the Aculab SIP stack were used by the primary EICC server to support voicemail, announcement, and basic call recording features. Voicemail and announcement calls were redirected to an available virtual SIP user to terminate to EICC, and recording was accomplished by intruding a virtual SIP user onto an active call to pick up the media.

## 2. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. Upon start of the EICC application, the application automatically registered virtual SIP users with the primary IP Office system, and established TAPI connection for each EICC server with its local IP Office system.

For the manual part of testing, incoming calls were made to the general routing groups configured on the primary IP Office system. EICC used the TAPI event messages to track agent states, and specified calls to redirect to available agents. Manual call controls from both the agent desktops and the agent telephones were exercised to verify remaining features such as answering and transferring of calls.

Voicemail was tested by not answering personal calls at the agent, and have the call cover to EICC for proper leaving of voice message and activation of MWI. Manual call was made subsequently from agent to the voicemail group for retrieval of voice message and proper deactivation of MWI.

The serviceability test cases were performed manually by disconnecting and reconnecting the Ethernet connection to the EICC servers and clients.

The verification of tests included human checking of proper states at the agent desktops and agent telephone displays, and of reviewing the log files from EICC.

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 compliance testing included feature and serviceability areas.

The feature testing focused on verifying the following on EICC:

- Virtual SIP user registrations, G.711and G.729 codec, and inbound DTMF.
- Use of TAPI functions to monitor users and groups, redirect incoming calls, support call control and supervisor monitor via agent desktops, and set call forwarding and MWI.
- Proper handling of call scenarios including incoming calls to different groups, screen pop, hold, reconnect, blind/attended transfer, attended conference, voicemail, announcement, call forwarding, MWI, supervisor monitor, non-ACD call, queuing, hot desking, supervisor monitor, outgoing call, outpulse of DTMF digits, multiple calls, multiple agents, long duration, park/unpark at destination agent, follow me, overflow, fallback, and recording of basic calls.

The feature testing call flows included calls between the two IP Office systems.

The serviceability testing focused on verifying the ability of EICC to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet connection to EICC servers and clients.

## 2.2. Test Results

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

- By design, for a hold and reconnect call scenario, the basic call recording feature captures the audio up to the hold action. After the call is reconnected, the Record icon becomes visible again and can be pressed to record the reconnected segment of the call. Note that each Record action produces one call recording accessible via the agent mailbox/voicemail.
- Only one EICC expander server is supported in the current version.
- EICC does not support the IP Office resiliency feature, therefore agents that re-registered to the other IP Office system as part of resiliency will not be used by EICC for routing of subsequent calls.
- For the attended conference scenarios, after any party drops, the call entry in the remaining agents' desktop are updated with agents' own information in the Caller Info column, and with "Outbound" in the Origin column.

#### 2.3. Support

Technical support on EICC can be obtained through the following:

- **Phone:** (800) 513-2810
- Web: <u>www.enghouseinteractive.com</u>
- Email: <u>usa.support@enghouse.com</u>

## 3. Reference Configuration

The configuration used for the compliance testing is shown below.

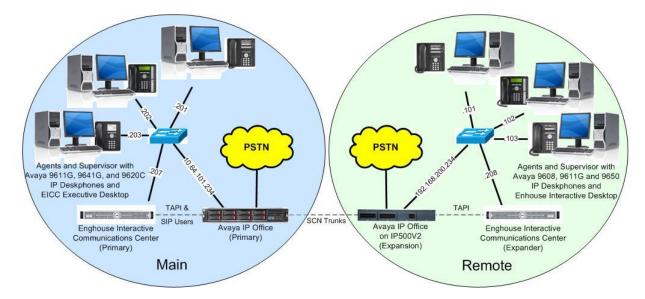


Figure 1: Compliance Testing Configuration

## 4. Equipment and Software Validated

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

Equipment/Software	<b>Release/Version</b>
Main Site	
Avaya IP Office Server Edition (Primary)	9.1.701.1
Avaya 9620C IP Deskphone (H.323)	3.260A
Avaya 9611G & 9641G IP Deskphone (H.323)	6.6229
<ul> <li>Enghouse Interactive Communications Center on Windows Server 2012 R2</li> <li>CTI Application Server</li> <li>Avaya IP Office TAPI2 Driver (tspi2w)</li> <li>Aculab SIP Stack</li> </ul>	2016R2 (9.1.0.4502) Standard 9.1.0.4502 1.0.0.43 2.0.11
Enghouse Interactive Desktop on Windows 10 Pro	2016R2 (9.1.0.4502)
Remote Site	
Avaya IP Office on IP500V2 (Expansion)	9.1.701.1
Avaya 9608, 9611G & 9641G IP Deskphone (H.323)	6.6229
<ul> <li>Enghouse Interactive Communications Center on</li> <li>Windows Server 2012 R2</li> <li>CTI Auxiliary Services</li> <li>Avaya IP Office TAPI2 Driver (tspi2w)</li> </ul>	2016R2 (9.1.0.4502) Standard 9.1.0.4502 1.0.0.43
Enghouse Interactive Desktop on Windows 7 Enterprise	2016R2 (9.1.0.4502) Service Pack 1

Compliance Testing is applicable when the tested solution is deployed with a standalone IP Office 500 V2 and also when deployed with IP Office Server Edition configurations consisting of no more than two IP Office systems.

# 5. Configure Avaya IP Office

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

- Verify licenses
- Administer groups
- Administer agent users
- Assign agents users to monitor group
- Administer supervisors
- Administer SIP registrar
- Administer SIP extensions
- Administer SIP users
- Administer short code

Note that all procedures above apply to the primary IP Office system, and only a subset of the procedures below apply to the expansion IP Office systems.

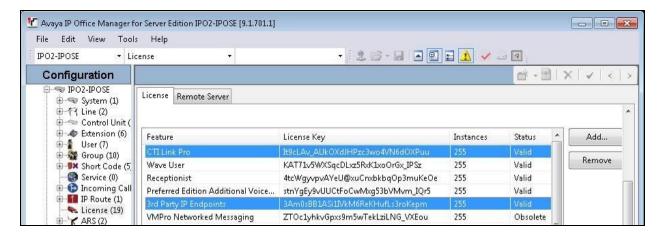
- Verify licenses
- Administer agent users
- Administer supervisors

### 5.1. Verify Licenses

From a PC running the IP Office Manager application, select **Start**  $\rightarrow$  **All Programs**  $\rightarrow$  **IP Office**  $\rightarrow$  **Manager** to launch the application. Select the primary IP Office system, and log in using the appropriate credentials.

The Avaya IP Office Manager for Server Edition IPO2-IPOSE screen is displayed, where IPO2-IPOSE is the name of the primary IP Office system.

From the configuration tree in the left pane, select the primary IP Office system, in this case **IPO2-IPOSE**, followed by **License** to display licenses in the right pane. Verify that there are licenses for **CTI Link Pro** and **3<sup>rd</sup> Party IP Endpoints**, and with both license **Status** being "Valid", as shown below.



From the configuration tree in the left pane, select the expansion IP Office system, in this case **IPO2-IP500V2**, followed by **License** (not shown) to display licenses in the right pane. Verify that there is a **CTI Link Pro** license, and with the license **Status** being "Valid", as shown below.

File Edit View Tools	Server Edition IPO2-IP500V2 [9.1.7)				
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Configuration				r - 🖻   >	<   <   <
⊡-∰ Operator (3) ▲	License Remote Server				
● 1 User(15) ● 30 Group(12) ● 50 Short Code(50)	Feature	License Key	Instances	Status	Add
Group(12)     Group(12)     Short Code(50)     Directory(0)	Feature CTI Link Pro	License Key NAMnt99YtUpNVF6cCIxG9mZdMhdDICDB	Instances	Status Valid	
Group(12)     Short Code(50)     Directory(0)     Time Profile(0)		*			Add Remove
Group(12)     Short Code(50)     Directory(0)     Time Profile(0)     Account Code([	CTT Link Pro	NAMnt99YtUpNVF6cCIxG9mZdMhdDICDB	255	Valid	
Group(12)     Short Code(50)     Directory(0)     Time Profile(0)	CTI Link Pro Wave User	NAMnt99YtUpNVF6cCIxG9mZdMhdDICDB KAKcwo9RAj6u3MJ1gRct6yhrdGVrNzzJ	255 255	Valid Valid	
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## 5.2. Administer Groups

From the configuration tree in the left pane, right-click on **Group** under the primary IP Office system and select **New** from the pop-up list to add a new group. For **Name** and **Extension**, enter desired values. Retain the default values for the remaining fields.

M Avaya IP Office Manager for Server Edition IPO2-IPOSE [9.1.701.1]									
File Edit View Tools	Help								
🕴 IPO2-IPOSE 🔹 🔹 Group 🔹 21883 Combo Hot 🔹 🗟 🗁 - 🔙 🖪 🔛 🖬 🚺 🖌 🎺 🐸 🚳									
Configuration									
BOOTP (13) BOOTP (13) BOOTP (3)	Group Queuing Overflow Fa	Ilback Voicemail Voice Recording Announ	cements SIP						
🖻 🚋 Solution	Name	EICC Hold	Profile Standard Hunt Group						
⊞…¶ User(15) ⊕…∰ Group(12)	Extension	21771	Ex Directory						
Short Code(50)     More Code(50)     Market Directory(0)	Ring Mode	Sequential 🔻	No Answer Time (secs) System Default (15)						
	Hold Music Source	No Change 🔹							
🗄 📲 User Rights(9)	Ring Tone Override	None 👻							
i - 🌆 Location(2) i - 🤜 IPO2-IPOSE i - 🖘 System (1) 🗉	Agent's Status on No-Answer Applies To	None 🔻	E						
⊞~作子 Line (2)	Central System	IPO2-IPOSE	✓ Advertize Group						
🖶 🖘 Control Unit 🗄 🛷 Extension (6)	User List								
● ● User (7)	Extension Name System								

Select the Voicemail tab, and uncheck Voicemail On as shown below.

Avaya IP Office Manager for Server Editi File Edit View Tools Help		
IPO2-IPOSE 🔻 Group	🝷 21777 EICC Support 💿 🝷 🚨 🗁 🖌 💽 📰 🔔 🕓	🖌 😅 🖪 👘
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	Group       Queuing       Overflow       Fallback       Voicemail       Voice Recording       Anno         Voicemail Code	uncements SIP Voicemail On Voicemail Answer Time (secs) Voicemail Help Broadcast UMS Web Services

Repeat this section to create the groups shown below. These groups are used by EICC for routing and handling of incoming calls. Note that all groups are required by EICC to be configured on the primary IP Office system.

Extension	Name
21771	EICC Hold
21772	EICC Voicemail
21773	EICC Operator
21774	EICC Monitor
21775	EICC Fallback
21776	EICC Sales
21777	EICC Support

The created groups are shown in the left pane of the screen below.

O2-IPOSE - Group		<ul> <li>21995 Adhoc Hot</li> </ul>	- 🔝 🗁 - 🖃 💽 🖬 🔥 🖌		
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⊕作了 Line (2)		Name	Adhoc Hot	Profile Standard Hu	
🕀 🖘 Control Unit (8) 🕀 🛷 Extension (9)		Extension	21995	🔲 Ex Directory	
	User (9) Dive Made		Sequential 👻	No Answer Time (secs) System Def	
21995 Adhoc Hot 21883 Combo Hot 21884 Combo Hot 2		Hold Music Source	No Change 🔹		
		Ring Tone Override	None 👻		
21881 Combo Sales		Agent's Status on No-Answer Applies To	None		
22881 Combo via Exp 21991 DR Main 21992 DR Secondary		Central System User List	IPO2-IPOSE	Advertize Group	
21775 EICC Fallback		Extension Name	System		
21774 EICC Monitor 21773 EICC Operator 21776 EICC Sales 21777 EICC Support 21777 EICC Support 21772 EICC Voicemail	Ju	✓ 22032 H323 Expansi	on2 IPO2-IP500V2		

## 5.3. Administer Agent Users

From the configuration tree in the left pane, select the primary IP Office system, followed by the first user on the system that will be used for answering ACD calls, in this case "21031". Select the **Voicemail** tab, and uncheck **Voicemail On** as shown below.

Avaya IP Office Manager for Server Editi File Edit View Tools Help	on IPO2-IPOSE [9.1.701.1]					
IPO2-IPOSE • User	- 21031 H323 Prim	nary 🔹	2 13 - 13 🖪	E 🖬 🚺	v - 4	9
Configuration	12	H323 F	Primary: 2103	1*		📸 - 🕑 🗙 🗸 🗸 🕹
ia - 🖘 IPO2-IPOSE ia - 🐄 System (1)	User Voicemail DND	Short Codes	Source Numbers	Telephony	Forwarding	Dial In Voice Recording Bu + +
B-43 Line (2) B-∞ Control Unit (8) B-∞ Extension (6) C-1 User -1 21033 Extn21033 -2 21034 Extn21034 -2 21035 Extn21035 -2 21033 H323 Primary	Voicemail Code Confirm Voicemail Code Voicemail Email					<ul> <li>Voicemail On</li> <li>Voicemail Help</li> <li>Voicemail Ringback</li> <li>Voicemail Email Readir</li> <li>UMS Web Services</li> </ul>
	Voicemail Email Off Copy Fo	onward 🔘 Aler	t			E

Select the **Telephony** tab, followed by the **Supervisor Settings** sub-tab. Uncheck **Cannot be Intruded**, and set **Can Intrude** to the desired setting.

🗺 Avaya IP Office Manager for Server Editio	on IPO2-IPOSE [9.1.701.1]	
File Edit View Tools Help IPO2-IPOSE - User	🔹 21031 H323 Primary 💿 🔹 🧟 🗁 🚚 🛋 🖭 🔝 🔥	/ -= @
Configuration	H323 Primary: 21031*	🖆 🕶 🛛 🗙 🖌 🖌 🔿
BOOTP (13)     Operator (3)     Operator (3)     Solution     Solution     User(15)     Operator (19)     Operator (19)     Operator (19)     Operator (19)     Operator (20)     Operator	User Voicemail DND Short Codes Source Numbers Telephony For Call Settings Supervisor Settings Multi-line Options Call Log TUI Login Code Confirm Login Code Login Idle Period (secs) Monitor Group <none> Coverage Group <none> Status on No-Answer Logged On (No change) Reset Longest Idle Time @ All Calls @ External Incoming</none></none>	rwarding Dial In Voice Recording B. ( ) Force Login Force Account Code Force Authorization Code Incoming Call Bar Outgoing Call Bar Can Intrude Can Intrude Cannot be Intruded Cannot be Intruded Deny Auto Intercom Calls

Select the **Forwarding** tab. Check **Forward On Busy**, **Forward On No Answer**, and **Forward Internal calls**. For **Forward Number**, enter the EICC Voicemail group extension from **Section 5.2**.

Repeat this section for all users on the Main site that will be used for answering ACD calls. In the compliance testing, two users on the Main site with extensions "21031" and "21032" were configured on the primary IP Office system.

Repeat this section for all users on the Remote site that will be used for answering ACD calls. In the compliance testing, two users on the Remote site with extensions "22031" and "22032" were configured on the expansion IP Office system.

🗶 Avaya IP Office Manager for Server Editi	on IPO2-IPOSE [9.1.701.1]		
File Edit View Tools Help			
IPO2-IPOSE • User	<ul> <li>21031 H323 Primary</li> </ul>	- 🔍 🔝 - 🔙 💽 🖬 🗘 🛹 🔤	9
Configuration	н	323 Primary: 21031*	📥 - 🔄 🗙 🛛 🗸 🗠 🕹
<ul> <li>BOOTP (13)</li> <li>         ⊕</li></ul>	User Voicemail DND Short	Codes Source Numbers Telephony Forwarding	9 Dial In Voice Recording Bu + +
⊕_¶ User(15) ⊕-∰ Group (19) ⊕-♥× Short Code(50)	Block Forwarding		
- A Directory(0) - (7) Time Profile(0) - A Account Code(0) B - L Ser Rights(9)	Follow Me Number		•
	Forward Unconditional		
⊞ 作了 Line (2)	To Voicemail		
🕀 🖘 Control Unit (8) 🕀 🛷 Extension (6)	Forward Number	99088485601	
User (7)	Forward Hunt Group Calls	<b>V</b>	
	Forward Internal Calls		
	Forward On Busy		
21031 H323 Primary	Forward On No Answer		
	Forward Number	21772	
🕀 🎆 Group (17)			
⊕ ♥¥ Short Code (5) ∰ Service (0)	Forward Internal calls		
🕀 🚺 Incoming Call Route (1)			
IP Route (1)			

## 5.4. Assign Agent Users to Monitor Group

From the configuration tree in the left pane, select the EICC Monitor group under the primary IP Office system, in this case "21774". Click on **Edit** (not shown) in the **User List** sub-section to add members.

In the next screen (not shown), select all agent users on both IP Office systems from Section 5.3.

Edit View Tools Help 2-IPOSE - Group	✓ 21774 EICC Monito	e 🔹 🔍 🗁 🖬 🔺 💽 🕯		
Configuration		uential Group EICC Monitor		
IPO2-IPOSE	Group Queuing Overflow F	allback Voicemail Voice Recording	Announcements SIP	
⊕~行? Line (2) ⊕~≪ Control Unit (8)	Name	EICC Monitor	Profile	Standard Hunt Group
Extension (6)	Extension	21774	Ex Directory	
🖨 🎆 Group (17)	Ring Mode	Sequential	<ul> <li>No Answer Time (secs)</li> </ul>	System Default (15)
	Hold Music Source	No Change	•	
21884 Combo Hot 2 21881 Combo Sales	Ring Tone Override	None		
21882 Combo Supp	Agent's Status on No-Answer Applies To	None	•	
- Transformed File States and Sta	Central System User List	IPO2-IPOSE	🖉 Advertize Group	
	Extension Name System			

The resultant screen after the selection is shown below.

🖌 Avaya IP Office Manager for Server Ed	ition IPO2-IPOSE [9.1.7	'01.1]			
File Edit View Tools Help					
IPO2-IPOSE • Group	· 21774	4 EICC Monito	or 🔹 🕴 🤽 🗁 👻 📘 🛛	🔺 🔝 🔜 🚹 🖌 🐸 🖉	
Configuration	17	Seq	uential Group EICC N	Aonitor: 21774*	📸 • 🔛   🗙   🗸   >
E	Group Queuing	Overflow F	allback Voicemail Voice Re	cording Announcements S	IP
⊕ - 🖘 System (1)	Name		EICC Monitor	Profile	Standard Hunt Group
●…行了 Line (2) ●…≪ Control Unit (8)	Extension		21774	🔲 Ex Dire	ectory
iander and the second	Ring Mode		Sequential	<ul> <li>No Answ</li> </ul>	ver Time (secs) System Default (15)
Group (17)	Hold Music Source		No Change	•	
21883 Combo Hot 21884 Combo Hot 2	Ring Tone Override		None 👻		
- 🙀 21881 Combo Sales	Agent's Status on No Applies To	-Answer	None	•	
	Central System		IPO2-IPOSE	✓ Adver	tize Group
	User List				
🛛 🙀 21775 EICC Fallback	Extension	Name	System		
	21031	H323 Prima	ry IPO2-IPOSE		
21773 EICC Operato	<ul> <li>☑ 21032 H323 Primar</li> <li>☑ 22031 H323 Expans</li> </ul>		ry2 IPO2-IPOSE		
			sion IPO2-IP500V2		
- 🙀 21993 Exp via Prima	22032	H323 Expan	sion2 IPO2-IP500V2		
22992 NJ Secondary 22993 Primary via E					

### 5.5. Administer Supervisors

From the configuration tree in the left pane, select the primary IP Office system, followed by the first user on the Main site that will be used as the supervisor, in this case "21035".

Y Avaya IP Office Manager for Server Ed File Edit View Tools Help	ition IPO2-I	POSE [9.1.70	1.1]						
IPO2-IPOSE - User		• 21035 B	xtn2103	5 -	2 🗃 - 🖬 🛛	- 🖭 🖬 🗸	1 🗸 🖂	9	
Configuration	17			Extr	21035: 21035	*		C	🛉 • 🕑 🗙 🖌 🖌 👘
	Confir	Voicemail nail Code m Voicemail nail Email	DND	Short Codes	Source Numbers	Telephony	Forwarding	[ [ [	Voice Recording But  Voicemail On Voicemail Help Voicemail Ringback Voicemail Email Reading UMS Web Services

Select the Voicemail tab, and uncheck Voicemail On as shown below.

Select the **Telephony** tab, followed by the **Supervisor Settings** sub-tab. Check **Can Intrude**, and set **Cannot be Intruded** to the desired setting. For **Monitor Group**, select the EICC Monitor group from **Section 5.2**.

📶 Avaya IP Office Manager for Server Edit	ion IPO2-IPOSE [9.1.701.1]	
File Edit View Tools Help IPO2-IPOSE • User	🔹 21035 Extn21035 🔹 🕴 🚨 🗁 🖌 💽 🖬 🚺	) 🗸 🍜 A
Configuration	<b>Extn21035</b> : 21035*	📸 - 🔛   🗙   🖌   <   >
BOOTP (13)         Operator (3)         Solution         User (15)         Directory(0)         Time Profile(0)         Account Code(0)         User Rights(9)         User Rights(9)         DO2-IPOSE         System (1)         Time Vortrol Unit (8)         Ever (7)         Z1033 Extn21033         Z1034 Extn21034         Z1035 Extn21035         Z1032 H323 Primary         Z1041 SIP Primary	User       Voicemail       DND       Short Codes       Source Numbers       Telephony         Call Settings       Supervisor Settings       Multi-line Options       Call Log       TUI         Login Code	Forwarding Dial In Voice Recording But

Select the **Forwarding** tab. Check **Forward On Busy**, **Forward On No Answer**, and **Forward Internal calls**. For **Forward Number**, enter the EICC Voicemail group extension from **Section 5.2**.

Repeat this section for all supervisors on the Main site. In the compliance testing, one supervisor on the Main site with extension "21035" was configured on the primary IP Office system.

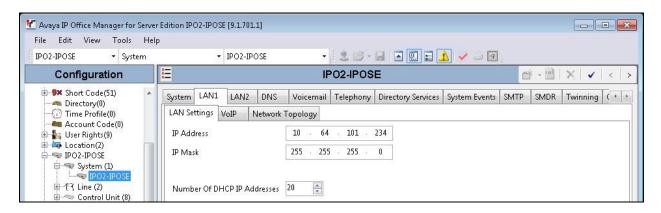
Repeat this section for all supervisors on the Remote site. In the compliance testing, one supervisor on the Remote site with extension "22035" was configured on the expansion IP Office system.

🕐 Avaya IP Office Manager for Server Edit	tion IPO2-IPOSE [9.1.701.1]		
File Edit View Tools Help			
IPO2-IPOSE   User	<ul> <li>21035 Extn21035</li> </ul>	•   🚨 🗁 • 🖬 🖪 🔛 🖬	🚺 🖌 🗁 🕢
Configuration	12	Extn21035: 21035*	📸 🕶 🛛 🗙 🗸 🗸 🕞
BOOTP (13)     Gperator (3)     Solution	User Voicemail DND :	Short Codes Source Numbers Telephony	Forwarding Dial In Voice Recording But + >
User (15)     Group (19)     Short Code(50)	Block Forwarding		
Directory(0) 	Follow Me Number		-
⊕ 😽 Location(2) ⊖ 🖘 IPO2-IPOSE	Forward Unconditional		
⊕…≪ System (1) ⊕…行{ Line (2)	To Voicemail		
🕀 🖘 Control Unit (8)	Forward Number		5 <b></b>
😟 🛷 Extension (6) 🖃 🥼 User (7)	Forward Hunt Group Calls		
21033 Extn21033	Forward Internal Calls		
21035 Extr21035			
21055 Extra21055	Forward On Busy		
	Forward On No Answer		
🔲 🚰 21041 SIP Primary 🕀 豵 Group (17)	Forward Number	21772	
Short Code (5)     Service (0)     For Common Call Route (1)	Forward Internal calls		
er filonning Can Route (1) ⊕ 11 IP Route (1)			

## 5.6. Administer SIP Registrar

From the configuration tree in the left pane, select **System** under the primary IP Office system to display the system screen in the right pane. Select the **LAN1** tab, followed by the **LAN Settings** sub-tab.

Make a note of the IP Address, which will be used later to configure EICC. Note that IP Office can support SIP on the LAN1 and/or LAN2 interfaces, and the compliance testing used the LAN1 interface.



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

iile Edit View Tools Hel IPO2-IPOSE → System	₽ ▼ IPO2-IPOSE	• E. 2. 163 •		A 🗸 🖂 🖪		
Configuration	×=	IP02-IP0S			1	×   <   <
Short Code(51)     Short Code(51)     Directory(0)     Time Profile(0)	System LAN1 LAN2 DNS LAN Settings VoIP Network To	Voicemail Telephony opology	Directory Services	System Events	SMTP SMDR	Twinning (
Account Code(0)  Superind Code	- ☑ H323 Gatekeeper Enable ☐ Auto-create Extn	🗌 Auto-create U	ser		ote Extn Enable Signalling Port	1720
Control Unit (8)     Extension (9)     User (9)     User (9)     Group (19)	SIP Trunks Enable SIP Registrar Enable Auto-create Extn/User				🔲 SIP Re	emote Extn Enable
9× Short Code (5) 9× *66*N#	Domain Name					
	Layer 4 Protocol	UDP V TCP V TLS	UDP Port 5060 TCP Port 5060 TLS Port 5061		Remote UDF Remote TCF Remote TLS	Port 5060
100 Incoming Call Rout     100 8 30353300000	Challenge Expiry Time (secs)	10	1			

## 5.7. Administer SIP Extensions

From the configuration tree in the left pane, right-click on **Extension** under the primary IP Office system, and select **New**  $\rightarrow$  **SIP Extension** from the pop-up list to add a new SIP extension. For **Base Extension**, enter an available extension number, in this case "21441". Uncheck Force **Authorization**, as shown below.

📶 Avaya IP Office Manager for Se	rver Edition IPO2-IPOSE [9.1.701.1]		
File Edit View Tools I	Help		
IPO2-IPOSE - Extensi	ion 🝷 11202 21032	• 🗟 💣 • 🖬 🖪 🔛 🖬 🔨 🛹 🛶 🚳	
Configuration	3	SIP Extension: 8000 *	🖄 - 🖻   X   🗸   <   >
■- <b>8</b> BOOTP (13)	Extn VoIP		
⊕ ∲ Operator (3) ⊡ ♥ Solution	Extension ID	8000	
⊞-1 User (15) ⊞-100 Group (19)	Base Extension	21441	
⊕-9× Short Code(50) →-≪ Directory(0)	Caller Display Type	On	*
	Reset Volume After Calls		
⊕-¶g User Rights(9) ⊕-₩ Location(2) ⊖-≪ IPO2-IPOSE	Device Type	Unknown SIP device	
🖻 🤜 System (1)	Location	Automatic	•
由一行了 Line (2) 由一一一 Control Unit (8)	Module	0	
🖨 🛷 Extension (6)	Port	0	
> 11201 21031 > 11202 21032	Force Authorization		

Select the VoIP tab, and uncheck Allow Direct Media Path, as shown below.

Repeat this section to add the desired number of SIP extensions with consecutive extension numbers. In the compliance testing, two SIP extensions "21441" and "21442" were created.

🚹 Avaya IP Office Manager for	Server Edition IPO2-IPO	SE [9.1.701.1]		
File Edit View Tools		<ul> <li>11201 21441</li> </ul>	• 🔍 🖻 • 🖬 🔺 💽 🖬 🚹 🗸 🛹 💷 🕢	
Configuration		1	Extension: 8000 *	<u> -                                   </u>
BOOTP (13) Operator (3) Solution User(17) Short Code(51) Directory(0) Time Profile(0) Account Code(0) Location(2) Directory(0) System (1) Directory(0) System (2) System (2) System (2) Directory(0) System (2) System (2)	Extn VoIP IP Address Codec Selection	0 0 0 0 0	0 Selected G.711 ULAW 64K G.711 ALAW 64K G.729(a) 8K CS-ACELP </td <td><ul> <li>Local Hold Music</li> <li>Re-invite Supported</li> <li>Codec Lockdown</li> <li>Allow Direct Media Path</li> </ul></td>	<ul> <li>Local Hold Music</li> <li>Re-invite Supported</li> <li>Codec Lockdown</li> <li>Allow Direct Media Path</li> </ul>

## 5.8. Administer SIP Users

From the configuration tree in the left pane, right-click on **User** under the primary IP Office system, and select **New** from the pop-up list. For **Name** and **Full Name**, enter desired values. For **Extension**, enter the first SIP base extension from **Section 5.7**.

🗶 Avaya IP Office Manager for Serv	rver Edition IPO2-IPOSE [9.1.701.1]	
File Edit View Tools H IPO2-IPOSE - User		
Configuration	📴 <user:0>: * 🗃 🚽</user:0>	$\times   \checkmark   <   >$
Configuration BOOTP (13) Operator (3) Solution User (15) Solution Directory(0) Time Profile(0) Account Code(0) User Rights(9) Control Unit (8) For System (1) Directory(1) Control Unit (8) Control	User     Voicemail     DND     Short Codes     Source Numbers     Telephony     Forwarding     Dial In     Voice Recording       Name     EICC21441       Password	Button Prog.
- 21031 H323 Prim - 21032 H323 Prim - 21041 SIP Primar ⊕ Sroup (17) ⊕ W Short Code (5)	System i none rugito	

Select the Voicemail tab, and uncheck Voicemail On as shown below.

	Server Edition IPO2-IPOSE [9.1.701.1]	
File Edit View Tools H IPO2-IPOSE - User	Help • 21035 Extra21035 • 💈 😂 • 🖬 🛋 🖭 🖬 📣 🛩 🖂	
Configuration		×   •   •   •
BOOTP (13) Operator (3) Solution User (15) Short Code(50) Time Profile(0) Account Code(0) User Rights(9) Location(2) IPO2-IPOSE IPO2-IPOSE	User       Voicemail       DND       Short Codes       Source Numbers       Telephony       Forwarding       Dial In       Voice Recording         Voicemail Code	back il Reading

Select the **Telephony** tab, followed by the **Supervisor Settings** sub-tab. Check **Can Intrude** and **Cannot be Intruded**. For **Monitor Group**, select the EICC Monitor group from **Section 5.2**.

Repeat this section to add a new user for each SIP extension from **Section 5.7**. In the compliance testing, two users with extensions of "21441" and "21442" were created.

File Edit View Tools H IPO2-IPOSE - User	felp 🔹 21035 Extn21035 🔹 🗟 🗁 - 🛃 💽 💽	E 🚺 🗸 🗤 🕢
Configuration	₩ <user:0>:*</user:0>	<u></u> ×   ×   ×   ×   ×   ×
BOOTP (13)     Operator (3)     Solution     User (15)     Group (19)     Short Code(50)	Call Settings Supervisor Settings Multi-line Options Call Log TUI Login Code	Forwarding Dial In Voice Recording Button Programes
← Directory(0) ← Time Profile(0) ← ← Account Code(0) ⊕ ← Location(2) ⊕ ← Location(2) ⊕ ← LocationSE	Confirm Login Code Login Idle Period (secs) Monitor Group Coverage Group Coverage Group	<ul> <li>Force Account Code</li> <li>Force Authorization Code</li> <li>Incoming Call Bar</li> </ul>
→ System (1)     → IPO2-IPOSE     → T Line (2)     → C Control Unit (8)     → Extension (8)     → User (7)	Status on No-Answer Logged On (No change)	<ul> <li>Dutgoing Call Bar</li> <li>Inhibit Off-Switch Forward/Transfer</li> <li>Can Intrude</li> </ul>
User (7)	All Calls     External Incoming	☑ Cannot be Intruded ☐ Can Trace Calls

#### 5.9. Administer Short Code

From the configuration tree in the left pane, right-click on **Solution**  $\rightarrow$  **Short Code** and select **New** from the pop-up list to add a new common short code for Call Listen. Configure the fields exactly as shown below. This fixed short code value will be used by EICC to intrude virtual SIP users onto active calls for basic call recording.

File Edit View Tools Solution • Sho	rt Code • 222	• 🔍 🗁 • 🛃 🔺 🔝 🖬 🗸 🛹 💷 🕢	
Configuration	E2	<short code:0="">: Barred*</short>	<u>  </u> -     ×   √   <
BOOTP (13) Operator (3) Solution User (17) Short Code(50) Short Code(50)	<ul> <li>▲ Short Code</li> <li>Code</li> <li>Feature</li> <li>Telephone Number</li> <li>Line Group ID</li> <li>E Locale</li> <li>Force Account Code</li> <li>Force Authorization Code</li> </ul>	*6*N# * This Short Code is common to all systems. Call Listen  N  0	

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## 6. Configure Enghouse Interactive Communications Center

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

- Administer TAPI driver
- Administer phone system type
- Administer phone system data
- Verify license
- Administer lines
- Administer queues
- Administer phonebook

Note that all procedures above apply to the primary EICC server, and only the administer TAPI driver procedure apply to the expander EICC server.

The configuration of EICC is typically performed by Enghouse Interactive installation technicians or third party resellers. The procedural steps are presented in these Application Notes for informational purposes.

#### 6.1. Administer TAPI Driver

From the primary EICC server, select Start  $\rightarrow$  Control Panel  $\rightarrow$  Phone and Modem, to display the Phone and Modem screen. Select the Advanced tab, followed by Avaya IP Office TAPI2 Service Provider, as shown below. Click Configure.

3	Phone and Modem	×
Dialing Rules Mo	dems Advanced	
	llowing telephony providers are inst	alled on this computer:
Providers: Avaya IP Office	TAPI2 Service Provider	
Microsoft HID P TAPI Kernel-Mo Unimodem 5 Se	de Service Provider	
	Add	nove 🛞 Configure
	Close	ancel Apply

The Avaya TAPI2 configuration screen is displayed. For Switch IP Address, enter the IP address of the primary IP Office system, in this case "10.64.101.234". Select the radio button for Third Party, and enter the applicable IP Office password into the Switch Password field. Check ACD Queues as shown below. Reboot the primary EICC server.

Avaya TAPI2 co	onfiguration
Switch IP Address 10.64.101.234	
C Single User	Cancel
User Name	
User Password	
<ul> <li>Third Party</li> </ul>	
Switch Password	
🗖 Ex Direct	ory Users
🖂 WAV Use	ers
🔽 ACD Que	ues

Repeat this section to administer TAPI driver on the expander EICC server, and use the IP address and credentials for the expansion IP Office system, as shown below.

Switch IP Address	192.168.200.234	OK
		Cancel
🖹 Single User		
User Name		
osci indine		
User Password		
Third Party		
Switch Password	*****	
	Ex Directory Users	
	WAV Users	

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### 6.2. Administer Phone System Type

At the conclusion of EICC installation, the **Installation Process** screen will be displayed on the primary EICC server by the Installation Wizard. Follow [2] to import licenses and configure the default company.

The **Installation Process** screen shown below is displayed next. Click the **Run** icon associated with **Define Phone System Type**.

٥		Installation Process	×
	Run Installation Wizards To continue the installation process, configure the parameter unction correctly. Complete the setup steps in the order sp		
	<ul> <li>Import Licenses</li> <li>Configure Default Company</li> </ul>	Register	Define Phone System Type Run to select the PBX type to be installed. You can set up connection details and number plan information required to configure the CTI server.
	<ul> <li>Define Phone System Type</li> <li>Set Phone System Data</li> </ul>	Run	If this information is not known at this point, you can continue to the next step or Close now and complete this wizard at a later time. This step must be completed before beginning the Set Phone System Data step.
	Configure Email Notification	🧑 Run	

The Phone System Type screen is displayed next. For PBX Type, select "Avaya IP Office".

ø	Phone System Type	x
	Define Phone System Type Select the type of Phone PBX to be installed. The PBX will be added to the database and Application Manager will launch afterwards for further configuration steps. This step must be completed before beginning the Configure Phone System Data step.	
	PBX Type: Avaya IP Office V	

### 6.3. Administer Phone System Data

The Installation Process screen below is displayed. Click the **Run** icon associated with Set **Phone System Data**  $\rightarrow$  **Configure PBX Connection** shown below.

0		Installation Process		x
1	Run Installation Wizards o continue the installation process, configure the parameter inction correctly. Complete the setup steps in the order sp			
	✓ Import Licenses	6	Configure PBX Connection Use the Connection Wizard to specify the SIP Registrar IP address and port number.	]
	<ul> <li>Configure Default Company</li> <li>Define Phone System Type</li> </ul>	<b>G</b>	IP address and porchamber.	
	<ul> <li>▲ Set Phone System Data</li> <li>◆ Configure PBX Connection</li> </ul>	Run		
	➔ Configure PBX Essentials	Image: Contract of the second secon		
	<ul> <li>Configure IP Voice Ports</li> <li>Configure Email Notification</li> </ul>			

The Avaya IP Office PBX Setup Wizard  $\rightarrow$  Configure PBX Connection screen is displayed. For SIP Registrar IP Address, enter the pertinent LAN IP address of the primary IP Office system from Section 5.6.

0	Avaya	IP Office PBX Setup Wi	zard	x
		nnection ation data for the Avaya IP Office	∋ PBX. Please enter it	
SIP Re	egistrar IP Address:	10.64.101.234	Test	

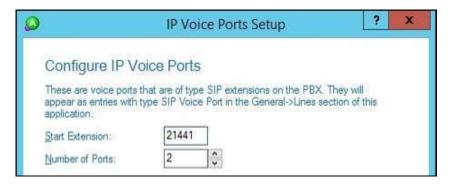
Continue with the Installation Wizard until the Avaya IP Office PBX Setup Wizard  $\rightarrow$  Create **Park Queue** screen is displayed. For **Park Queue Number**, enter the extension of the EICC Hold group from Section 5.2.

ø	Avaya IP Office PBX Setup Wizard	x
	Create Park Queue The Park queue is a Hunt Group for the management of parked calls. This number is not normally dialed by users. It must be dialable by any dialogic voiceport installed in the system. This will appear as an entry in the General->System Queues section of this application.	
	Park Queue Number: 21771	

The Avaya IP Office PBX Setup Wizard  $\rightarrow$  Create Voice Messaging Queue screen is displayed next. For Voice Messaging Queue Number, enter the extension of the EICC Voicemail group from Section 5.2.

٥	Avaya IP Office PBX Setup Wizard
	Create Voice Messaging Queue
	The Voice Messaging Queue is a Hunt Group used as the Pilot Number to dial Voicemail. When a user activates a Presence Profile the system will forward their phone to this number. The forward busy destination for users phones will need to be set manually or via the PBX Maintenance interface.
	This number is dialed by all users, and is normally an easily remembered number. This will appear as a entry in the General->System Queues section of this application.
	Voice Messaging Queue Number: 21772

Continue with the Installation Wizard until the IP Voice Ports Setup  $\rightarrow$  Configure IP Voice Ports screen is displayed. For Start Extension, enter the first SIP base extension from Section 5.7. For Number of Ports, select the total number of SIP extensions from Section 5.7.



#### 6.4. Verify License

The Administrator screen is displayed upon completion of the Installation Wizard. Select General  $\rightarrow$  Licenses from the left pane, to display All Licenses in the right pane. Verify that the following licenses are in place: Aculab SIP Ports, Agent Desktop, Avaya IP Office, and UCUL (UC User License).

٥	Adm	inistrator - [	Licenses]			>
ile <u>E</u> dit <u>W</u> indow <u>H</u> elp						
2 🕇 🖬 🐂 📈 🛛 Lan	guage: English 🗸					
🐶 Voice Messaging	All Licenses 🔻		Product Key: JDV	S-HGYF-UE	A-FBBZ-SG9Z	
Console	Description	Licenses	Units	Start Date	End Date	Days Left
	Aculab SIP Ports	100	Port User			
🎆 Queuing	Agent Desktop	100	Port			
Announce	Avaya IP Office	1	single Site			
⊘ General		1	(C.1978)			
general	Console	10	User			
Companies	CT Control	100	user			
companies	Custom Reporting	1	Single			
💓 Holidays	R Dashboard	10	User			
en nondays	Executive Desktop	10	User			
Kicenses	Recutive Insight	10	user			
T Licenses	Recutive Mobile	10	Named User			
Courtie	Rex Messaging	10	Port			
Security	Gateway for Microsoft Lync	1	Site			
S I Long	¶¶ IVR	10	Port			
Dines	Microsoft Skype for Business		site			
	Multimedia ALL	100	Agent			
1 Phonebook	🐂 Networked Queuing	1	Site			
	🐂 Outdial Queuing	10	User			
🌇 System Queues	R ProTIMS	10	Port			
and the second second second	🛛 👎 QMS Gateway	1	Site			
System Prompts	Redundancy	1	Site			
6 N 10	SIP Connect	1	Site			
🚰 Dialing Rules	SMS Gateway	1	Site			
	Snapshot	10	User			
	Survey	1	Site			
	R TAPI 2 Plug-in	10	User			
	R Third Party Email Plug-in	1	Site			
	TouchPoint	10	units			
	TouchPoint Console	10	units			
	TouchPoint UC User	10	units			
	R UCUL (UC User License)	100	User			

TLT; Reviewed: SPOC 10/28/2016

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### 6.5. Administer Lines

Select **General**  $\rightarrow$  **Lines** from the left pane, to display all extensions obtained automatically from both IP Office systems. Locate the entries associated with the EICC groups from **Section 5.2**, in this case extensions "21773-21777", right-click on the entries one at a time and select **Convert Into Queue**.

Note that the EICC groups with extensions "21771-217722" were already configured as part of the Installation Wizard in **Section 6.3**.

3		Administrat	or - [Lines]			_ <b>_</b> ×
ile <u>E</u> dit <u>W</u> indow <u>H</u> elp						
🖈 🐂 📝 🐚 🗙 🛛 Lang	uage: English	×				Δ. e
Voice Messaging	All PBXes  All Lines	•				
T TOICE I IESSugility	Name	Extension	Туре	Tenant	Monitor Status	Default Agent
🖁 Console	Added by System	21031	Dterm		Yes	
	Added by System	21032	Dterm		Yes	
🎇 Queuing	Added by System	21033	Dterm		Yes	
	Added by System	21034	Dterm		Yes	
Announce	Added by System	21035	Dterm		Yes	
General	Added by System	21041	Dterm		Yes	
y ucherai	Added by System	21991	Dterm		Yes	
Companies	Added by System	21992	Dterm		Yes	
un companies	Added by System	21881	Dterm		Yes	
💓 Holidays	Added by System	21882	Dterm		Yes	
A Holdays	Added by System	21883	Dterm		Yes	
R Licenses	Added by System	21884	Dterm		Yes	
In Licenses	Added by System	22881	Dterm		Yes	
Security	Added by System	22993	Dterm		Yes	
Jecunty	Added by System	21993	Dterm		Yes	
🔊 Lines	Added by System	21995	Dterm		Yes	
Ciries	Added by System	21773	Dterm		Yes	
💷 Phonebook	Added by System	21774	Dterm		Yes	
Honebook	Added by System	21775	Dterm		Yes	
System Queues	Added by System	21776	Dterm		Yes	
tig system Queues	Added by System	21777	Dterm		Yes	
System Prompts	Added by System	22021	Dterm		Yes	
System Prompts	Added by System	22022	Dterm		Yes	
🖄 Dialing Rules	Added by System	22031	Dterm		Yes	
	Added by System	22032	Dterm		Yes	
	Added by System	22033	Dterm		Yes	
	Added by System	22034	Dterm		Yes	
	Added by System	22035	Dterm		Yes	
	Added by System	22041	Dterm		Yes	
	Added by System	22024	Dterm		Yes	
	Added by System	22991	Dterm		Yes	
	Added by System	22992	Dterm		Yes	
	SIP Soft Port: 21441	21441	SIP Voice Port		Yes	
	SIP Soft Port: 21442	21442	SIP Voice Port		Yes	

## 6.6. Administer Queues

Select **Queuing**  $\rightarrow$  **Queues** from the left pane, to display a list of queues converted from Section 6.5. Right click on the entry associated with the EICC Operator group from Section 5.2, in this case extension "21773", and select **Convert to Operator Queue**.

۵	Commu	unications Center Administrat	or - [Queues]			X
<u>File E</u> dit <u>W</u> indow <u>H</u> elp	441	12				
💢 🐀 🔏 Lang	uage: English	~				e ?
😡 Voice Messaging	All PBXes 🔹 A	Il Queues excluding Operator/Syst	tem Queues 🔻			
wolce messaging	Queue	Name	Wrapups	Modes	Indial Modifiers	Callba
🛃 Console	21773	Added by System				
	21774	Added by System		Yes		
🙀 Queuing	21775	Added by System		Yes		
	> 21776	Added by System		Yes		
🧌 Queues	21777	Added by System		Yes		
🤹 Delivery Patterns						

Right click on each remaining entry, and select **Edit** to modify the **Name** as desired. The queue name will be used in agent desktop screen pops.

In the compliance testing, the queues were modified to match corresponding group names from **Section 5.2**, as shown below.

<b>)</b>	Cor	nmunications Center Admi	nistrator - [Queues]			×
ile <u>E</u> dit <u>W</u> indow <u>H</u> elp	14 I	762				
🔀 怕 💋 🖿 Lang	uage: English	~				1
🐶 Voice Messaging	All PBXes 🔻	All Queues excluding Operat	or/System Queues 🔻			
* Voice messaging	Queue	Name	Wrapups	Modes	Indial Modifiers	Callb
Console	21774	EICC Monitor		Yes		
	- 🔊 21775	EICC Fallback		Yes		
🖗 Queuing	21776	EICC Sales		Yes		
🧌 Queues	▲ ② 21777	EICC Support		Yes		
and Delivery Patterns						
🕵 Agent Login Classes						
0 Outdial	=					

## 6.7. Administer Phonebook

Select General  $\rightarrow$  Phonebook from the left pane, followed by the Add Wizard icon located at the upper left corner of the screen.

<u>File E</u> dit <u>W</u> indow <u>H</u> elp							
🔀 🔟 🛒 🐚 🗙 📃 Language	: English	~					
🦞 Voice Messaging	Filter	1.					
S Console	Look for:	Co	mpany:	(ALL COMPANIES) 👻	Owner: 💽 <a< td=""><td>ull Contacts&gt; 🗸 🗸</td><td>Directory: <all contact<="" td=""></all></td></a<>	ull Contacts> 🗸 🗸	Directory: <all contact<="" td=""></all>
	First Name	Last Name	Ext	Office	Mobile	Home	Company
🇌 Queuing	DevConnect	System					DevConnect
Announce	System 🥥	Admin					DevConnect
📎 General							
M Companies							
🗙 Holidays							
<table-of-contents> Licenses</table-of-contents>							
🔒 Security							
Lines							

Follow the **Adding Phonebook Contact** pop-up screens (not shown) to configure a corresponding entry for each agent and supervisor from **Section 5.3** and **Section 5.5** respectively. In the compliance testing, four agents and two supervisors were created as shown below.

Double click on **Class has no delivery**.

<b>)</b>	Comm	nunications	Center A	dministrator - [P	honebook	]		x
ile <u>E</u> dit <u>W</u> indow <u>H</u> elp								
🗶 📶 🛒 🐚 🗙 📃 Langu	age: English	~						e i
Voice Messaging	Filter					•	Incomplete Tasks	>
	- Look for:	C	Company: 🕢	ALL COMPANIES> 🗸	Owner: 🕥	<all contacts=""></all>	🚯 Class has no delivery	J
Console	- First Name	Last Name	Ext	Office	Mobile	Home		
🖁 Queuing	Agent 1	Primary	21031	Onice	mobile	Tione		
Announce	Agent 1	Expansion Primary	22031 21032					
General	Agent 2	Expansion	22032					
🕍 Companies	Supervisor	Primary Expansion	21035 22035					
💥 Holidays								

The Editing Agent Login	<b>Class</b> screen is displayed.	Select the <b>Delivery</b> tab, an	nd click Add.
-------------------------	-----------------------------------	------------------------------------	---------------

General Name: Department:	agent class	d>	Numt	per: 1		
	very Media		Break Reasons	S Worktime Reas	ons	
Queues:		Delivery	ACW	Override Delay	Seconds Delay-Priority	
Add						

The **Add Queues** screen is displayed next. Select the applicable queues to be handled by the agents, in this case **EICC Support** and **EICC Sales**, as shown below.

	Add Queues X
Select <u>Q</u> ueue	es to add
Number	Name
21777	EICC Support
21775	EICC Fallback
21774	EICC Monitor
21773	Added by System
21995	Added by System
21776	EICC Sales
Select All	Deselect All OK Cancel <u>H</u> elp

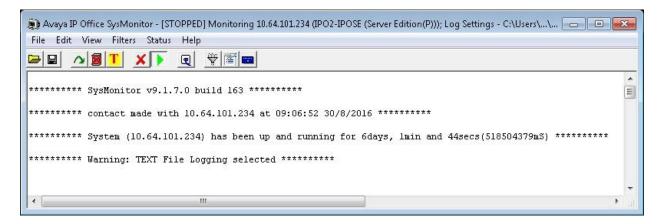
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## 7. Verification Steps

This section provides tests that can be performed to verify proper configuration of IP Office Server Edition and EICC.

## 7.1. Verify Main Site

From a PC running the IP Office Monitor application, select **Start**  $\rightarrow$  **All Programs**  $\rightarrow$  **IP Office**  $\rightarrow$  **Monitor** to launch the application, and connect to the primary IP Office system. The **Avaya IP Office SysMonitor** screen is displayed. Select **Status**  $\rightarrow$  **SIP Phone Status** from the top menu.



The **SIPPhoneStatus** screen is displayed. Verify that there is an entry for each SIP extension from **Section 5.7** and that the **Status** is "SIP: Registered", as shown below.

l otal Config	Configured: 3 Waiting 0 secs for update											
Total Regis	tered: 2		F	Registered Status								
Extn Num	User Num	Security	Behind NAT	IP Address	P	Transport	User Agent	Licensed	SIP Options	SIP	SIP	Status
21041	21041	disable		0.0.0.0			UA?	No Licence				SIP: Unregistere
21441	21441	best effort		10.64.101.207		UDP	ZeacomSIP	3rd Party IP	RU			SIP: Registered
21442	21442	best effort		10.64.101.207		UDP	ZeacomSIP	3rd Party IP	RU			SIP: Registered
(							1					

From the agent desktop, double-click on the **Desktop** shortcut icon shown below, which was created as part of Enghouse Interactive Desktop installation.



The **Desktop** login screen is displayed. Enter the login name associated with an agent on the Main site from **Section 6.7**, and use the generic default PIN value from EICC. Retain the default value in the remaining fields.

bring c	ustomers closer	Desktop	
	Enghouse		
<u>L</u> ogin Name:	Agent 1 Primary          Image: Agent 1 Primary         Image: Agent 1 Primary         Image: Agent 1 Primary	PIN: OK Cancel <u>H</u> elp	

The **Communications Center Desktop** screen is displayed. Click on the **Log into Queues** icon shown below.

jile <u>C</u> all <u>A</u> gent V	pice <u>M</u> essaging <u>V</u> iew <u>H</u> elp					12:08:48
Contact:	1 🔟 🗛	4 4 🗈 🚳				
6 - 0	🗩 🖛 🕷 🕴 🤻 鶅 👻 Presence: 🛛 🎎 In the C	Office 🗸 📝 🐓 🥔				
Phone Calls	Active Calls					8
Call History	Line State Caller Info	Origin	Date	Time	Duration	Queue
Contact Center	<					>
Agents	Phone Calls					8
🧌 Queues	🔊 Idle					
> Chat	🌲 Answer Call 🛛 🚳 Forward All					
Presence	No Active Call					
🏠 Web Browser						
E tall off	Schedule: Off 🛛 🧷 <type here<="" note="" presence="" td=""><td></td><td></td><td></td><td></td><td></td></type>					

The Log into Queues dialog box is displayed next. Retain all default values.

Make	yourself available to take Q	ueue Calls.
<u>C</u> lass:	agent class	~
<u>M</u> ake I	me ready for:	
	Phone calls Chat (no delivery)	
F	OK Cancel	Help

Make an incoming call from PSTN to the EICC Sales group, with available agent "21031" at the Main site. Verify that the agent desktop is populated with a voice call entry, and that the **State** is "Offering", as shown below. Click **Answer Call**.

Communicatio	ons Center Desktop - A	gent 1 Prim	ary				<u>100</u> 1		×
<u>File Call Ag</u> ent Vo	oice <u>M</u> essaging <u>V</u> iew	<u>H</u> elp						12:14:13	3 PM
Contact: +1 (908)	9532103		1 🔟 🧠 🔔 🌾	2 🚳					
🤹 🕑 🗕 🕲 📘	» ۲   <b>۵ - ۵</b>	- Presence	e: 🔍 In the Office	~ 🔏 ! 🧐 🥥					
Phone Calls	Active Calls							8	1
Call History	Line State		Caller Info	Origin	Date	Time	Duration	Queue	
🍻 Contact Center		Offering	+1 (908) 9532103	External	8/30/2016	12:14:11 PM	0:	01 EICC Sale	2
💪 Agents	<							>	-
🎇 Queues	Phone Calls	(908) 953210	3]	_	_			8	5
🦻 Chat	🔔 Answer Call 🚳	Forward All							×
3 Presence	<b>1</b> EICC Sale	es: Quei	ue Call			Duration:		0:01	
襘 Web Browser	Unknown on	n +1 (90	8) 9532103			Wait Time:		0:00	1
🙎 In the Office	e 🔆 Schedule: Off	🤵 <type pr<="" td=""><td>resence note here&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td></type>	resence note here>						

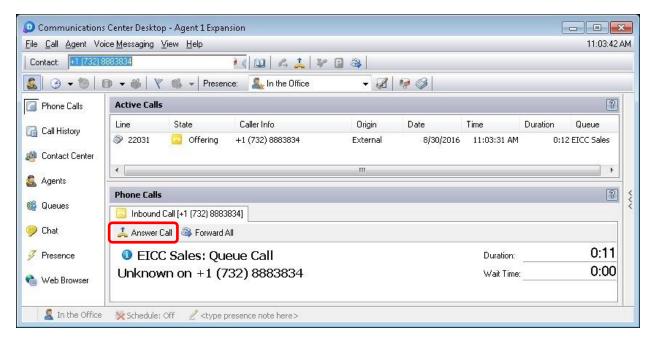
Verify that the agent is connected to the PSTN caller with two-way talk paths, and that the **State** is updated to "Connected", as shown below.

		ktop - Agent 1 Prin	nary				<u>10</u> 1		×
	oice Messaging	<u>V</u> iew <u>H</u> elp		aal				12:14	4:36 PI
			• ( 🔟   🖧   🌳						
🧕 🕑 🗕 🕘 📗		🕅 🕷 👻 Presen	ce: 🤱 In the Office	~ 🛃 🐶	Ø				
Phone Calls	Active Calls	5							8
Call History	Line	State	Caller Info	Origin	Date	Time	Duration	Queue	
Call History	21031	Connected	+1 (908) 9532103	External	8/30/2016	12:14:11 PM	0:1	7 EICC Sale	s
🏙 Contact Center									
S Agents	<								>
Mgenits	Phone Calls								8
🎇 Queues	🛛 🖂 Inbound	Call [+1 (908) 95321	03]						
💛 Chat	🍕 Hangup	💱 Hold 🔋 Pa	rk 💞 Transfer 🛯 🖳 Record	l 🚳 Forward All					ŧ#)
Fresence	<b>O</b> EIC	C Sales: Que	ue Call			Duration:		0:1	17
		3	08) 9532103			Wait Time	ə:	0:0	00
┪ Web Browser			-						
🙎 In the Office	e 🔆 Scheduk	e: Off 🛛 🤵 <type p<="" td=""><td>resence note here&gt;</td><td></td><td></td><td></td><td>1</td><td></td><td></td></type>	resence note here>				1		

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## 7.2. Verify Remote Site

Repeat the procedures in **Section 7.1** to log in an agent on the Remote site into the queues. Make an incoming call from PSTN to the EICC Sales group, with available agent "22031" at the Remote site. Verify that the agent desktop is populated with a voice call entry, and that the **State** is "Offering", as shown below. Click **Answer Call**.



Verify that the agent is connected to the PSTN caller with two-way talk paths, and that the **State** is updated to "Connected", as shown below.

Ocommunications	Center Desktop	- Agent 1 Expan	sion				[	
<u>File Call Agent Vo</u>	ice <u>M</u> essaging <u>V</u>	(iew <u>H</u> elp						11:04:22 AM
Contact: +1 (732) 8	883834		1 ( 🔟   🖧 🍕   🎝	' 🖪 🚳				
🥵 🕑 🗕 🕲 🛛 🛯	7 - 8   V	🀝 👻 Presend	ce: 🛛 🌉 In the Office	- 🔏	🧟 🖉			
Phone Calls	Active Calls							8
Call History	Line	State	Caller Info	Origin	Date	Time	Duration	Queue
Carristory	22031	🥝 Connected	+1 (732) 8883834	External	8/30/2016	11:03:31 AM	0:3	8 EICC Sales
泸 Contact Center								
🕵 Agents				ш				•
	Phone Calls							8
🎇 Queues	🛛 🖂 Inbound C	Call (+1 (732) 88838	334]					
🦻 Chat	🍕 Hangup	😵 Hold 🔋 Pa	ark 🛷 Transfer 🖳 Rec	cord 🚳 Forward A	dl			<b>≵#</b> Ì
🝠 Presence	I EICC	Sales: Que	eue Call			Duration:		0:38
Aver	Unknow	n on +1 (7	32) 8883834			Wait Time:		0:00
👈 Web Browser			»				[1	23
🙎 In the Office	Schedule: 🤇	Off 🛛 🧷 <type pr<="" td=""><td>esence note here&gt;</td><td></td><td></td><td></td><td></td><td></td></type>	esence note here>					

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## 8. Conclusion

These Application Notes describe the configuration steps required for Enghouse Interactive Communications Center 2016 to successfully interoperate with Avaya IP Office Server Edition 9.1 using the TAPI and SIP user interfaces. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

## 9. Additional References

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

- **1.** Administering Avaya IP Office<sup>™</sup> Platform with Manager, Release 9.1.2, Issue 10.38, February 2016, available at <u>http://support.avaya.com</u>.
- **2.** *CC 2016 R2 First-time Installation and Server Setup IP Office*, August 2016, available via IP Office training course provided by Enghouse Interactive.
- **3.** *Installing CC Expander Server for an IP Office Expansion*, August 2016, available via IP Office training course provided by Enghouse Interactive.

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