

Avaya Solution & Interoperability Test Lab

Application Notes for TalenTel-HCMS PMSI and Attendant Console with Avaya IP Office 8.0 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for TalenTel-HCMS PMSI and Attendant Console to interoperate with Avaya IP Office 8.0. PMSI works as a bridge between the two entities integrating the PBX with the local Property Management software (TalenTel-HCMS). On one side, it establishes communication with local PMS and on the other side it establishes communication with PBX over an IP link. In the compliance testing, TalenTel-HCMS PMSI and Attendant Console used the TAPI and Configuration Web Service interfaces from Avaya IP Office to provide Check In/Check Out, Do Not Disturb, Name change, controlling external incoming calls using soft console features. There are other features that can be provided with the addition of Voice Mail and Voice System which were not covered in this compliance test.

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 TalenTel-HCMS PMSI and Attendant Console to interoperate with Avaya IP Office 8.0. PMSI works as a bridge between the two entities integrating the PBX with local Property Management software (TalenTel-HCMS). On one side, it establishes communication with local PMS and on the other side it establishes communication with PBX over an IP link. In the compliance testing, TalenTel-HCMS PMSI and Attendant Console used the TAPI and Configuration Web Service interfaces from Avaya IP Office to provide Check In/Check Out, Do Not Disturb, Name change, controlling external incoming calls using soft console features. Incoming calls are placed in call queue and hold queue where operators are assigned in groups to receiving such calls. Operators are able to conference, transfer, listen and intrude into calls, setting and cancelling call forward. Calling and called party information are captured from TAPI as well. There are other features that can be provided with the addition of Voice Mail and Voice System which were not available for this compliance test.

The TalenTel-HCMS PMSI interface integrates with other PBX features as well. However, for this compliance testing, the built-in PMSI interface was used to initiate the room check-in and check-out on TalenTel-HCMS with Avaya IP Office. In the compliance testing, two user rights templates were set up on Avaya IP Office for use with check-in and check-out guests. Through the PMSI, updates are sent to Avaya IP Office on the guest name and user rights template as part of the check-in and check-out process.

2. General Test Approach and Test Results

The feature test cases were performed manually. The TalenTel-HCMS PMS user interface was used to manually initiate check-in and check-out requests, name change, setting the user rights for call barring, and setting Do Not Disturb for room phones. The soft console was used to answer external incoming calls and transfer/conference to internal guest phones. The operator also has the capability to listen, intrude and set call forwarding of guest phones. However, the Voice Mail and Voice system modules were not included in the test and functions like wake-up calls, minibar posting, and message waiting indicator were not tested.

The serviceability test cases were performed manually by disconnecting and reconnecting the Ethernet cable to Avaya IP Office, rebooting the Avaya IP Office and disabling the PMSI link.

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 focused on verifying the following on the TalenTel-HCMS PMSI interface and Attendant Console:

- Setting do not disturb divert parameters using the TAPI interface.
- Use of Configuration Web Services to update guest name and user rights template associated with check-in and check-out requests from the TalenTel-HCMS user interface.
- Handling of external incoming calls by the attendant soft console
- Attendant console transfer, conference, listen and intrude calls and setup of call forwarding

2.2. Test Results

All test cases were executed and passed.

2.3. Support

Technical support for TalenTel-HCMS can be obtained by contacting Beijing Ultra Support Hotline at 400-700-8003 (China only), or sending an e-mail to <u>tech@allytel.com.cn</u>.

3. Reference Configuration

The configuration used for the compliance testing is shown below. In the compliance testing, TalenTel-HCMS was installed on a server running Microsoft Windows 2003 Server.

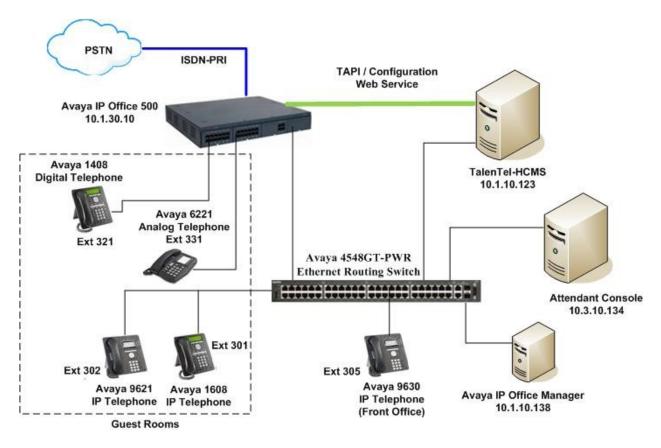


Figure 1: Test Configuration

Table 1 lists the Extensions used for the	his testing.
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Extension	Note
321	Guest room digital phone
301 to 302	Guest room IP phone
305	Front desk IP phone
331	Guest room analog phone

Table	1 –	Extension	Setup

4. Equipment and Software Validated

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

Equipment	Software
Avaya IP Office 500	8.0 (16)
Avaya IP Office Manager	10.0 (16)
Avaya IP Office TAPI2 Service Provider	1.0.0.35
Avaya IP Office Digital Station Module	7.0 (12)
Avaya 9640 IP Telephones	3.1 SP2
Avaya 9621 IP Telephones	6.0 SP 4.1
Avaya 1608 IP Telephones	1.300B
Avaya 1408 Digital Telephones	-
TalenTel-HCMS on	V3.1.3
Microsoft Windows 2003 Server SP2	
• Avaya TAPI2 Service Provider (tspi2w.tsp)	1.0.0.35
PC Operator Console	Windows 7 SP1

5. Configure Avaya IP Office

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

- Verify IP Office license
- Administer User Rights
- Administer Configuration Service
- Administer Security User and Rights
- Administer System Password

5.1. Verify IP Office License

From a PC running the Avaya IP Office Manager application, select **Start > Programs > IP Office > Manager** to launch the Manager application. Select the proper IP Office system, and log in with the appropriate credentials.

The Avaya IP Office Manager screen is displayed. From the configuration tree in the left pane, select License > CTI Link Pro, to display the CTI Link Pro screen in the right pane. Verify that the License Status is "Valid". This license is required for TalenTel-HCMS PMSI to use third-party TAPI control mode on IP Office.

IP Offices	XXX III	CTI Link Pro
Eucense (49)	Licenses	
	License Key	1KTBZWg95jpKDtxDXExN5y_MjB8KpoE1
🛶 👡 Avaya IP endpoints	License Type	CTI Link Pro
	License Status	Valid
	Instances	255
CCC PC Wallboards	Expiry Date	Never
CTI Link Pro		
eBLF 👡 Integrated Messaging		
- Northead IP Office Dealer Support -		

5.2. Administer User Rights

From the configuration tree in the left pane, right-click on User **Rights** and select **New** to create a new user rights template. Enter a desired **Name** to designate user rights for guests in the check-in state. In the compliance testing, the name was set to "2" as shown below.

IP Offices	2
SGIP500 System (1) SGIP500 Grad Control Unit (5) Stression (28) Grad User (30) Stression (28) Service (0)	Image: ShortCodes Button Programming Phone Manager Telephony User Rights Membership Voicemail Name 2 Image: ShortCodes Image: ShortCodes
B - C Freval Profile (1) B - M Proute (2) Account Code (0) C - License (49) - W Tunnel (0) B - M User Rights (17) 2 3 - M 2 4 - M 5 - M 4 - M 5 - M 4 - M 5 - M 6 49 - M 7 -	

Select the **Telephony** tab and then the **Supervisor Settings** sub-tab. Uncheck **Enable outgoing** call bar field towards the bottom, and select Apply User Rights Value from the corresponding drop-down box, as shown below.

IP Offices	1	2*	
É- ≪ SGIP500	User ShortCodes Button Programming Phone M	tanager Telephony User Rights Membership Voicemail	
System (1)	Call Settings Supervisor Settings Multi-line Option	s Calling	
± 17 Line (6)			1
E Control Unit (5)	Intrusion		
Extension (28)	Can intrude	Not part of User Rights	<u> </u>
🗄 🧯 User (30)	Cannot be intruded	Not part of User Rights	
🕀 🎆 HuntGroup (7)		Interpart of each highes	
	Force login		
	Enable force login	Not part of User Rights	_
Incoming Call Route (9)		,	
- 🧐 WanPort (0)	Force account code		
Directory (2)	Enable force account code	Not part of User Rights	_
·····································	Inhibit Off-Switch Forward/Transfer		
Account Code (0)	Enable Inhibit Off-Switch Forward/Transfer	Not part of User Rights	
🕀 💊 License (49)	CCR Agent		
		and the second sec	
🖃 🏰 User Rights (17)	Enable CCR Agent	Not part of User Rights	
1	After Call Work Time (seconds)		
2 10 3	System Default (10)	Not part of User Rights	
1 4			
- 5	Enable Automatic After Call Work	Not part of User Rights	Y
Agent	Outgoing call bar		
Boss	Enable outgoing call bar	Not part of User Rights	
📲 💁 callbar			

Repeat this section to create the desired number of user rights templates for guests in various states. In the compliance testing, two user rights templates with names of "2" and "1" were created. The **Enable outgoing call bar** field was checked for the user right "checkout" to prevent the guest room phone from making calls to the PSTN when this user right is applied.

In the Manager window, select File \rightarrow Save Configuration to push the configuration to IP Office and wait for the system to update.

5.3. Administer Configuration Service

From the Avaya IP Office R8 Manager screen, select File > Advanced > Security Settings from the top menu. Select the proper IP Office system, and log in with the appropriate security user credentials (not shown).

From the configuration tree in the left pane, select **Security > Services > Configuration** to display the **Services: Configuration** screen in the right pane. For **Service Security Level**, select **Unsecure + Secure** as shown below. In this compliance testing, TalenTel-HCMS PMSI used the **secure** level for the Configuration Web Service interface.

Security Settings	Service : Configu	ıration
Security Security System (1) SGIP500 Security Administration Security Administration System Status Interface System Status Interface Web Services HTTP Web Services Brights Groups (16) Brights Groups (12)	Service Details Name Host System Service Port Service Security Level Under SMGR Administration	Configuration SGIP500 50804, 50805 Unsecure + Secure

5.4. Administer Security User and Rights

From the configuration tree in the left pane, right-click **Security > Service Users** and select **New** in the pop-up menu that appears. Specify the **New User Name**, e.g. Ultra, and appropriate password as shown below and click **OK**. This user will be used to configured TalenTel-HCMS PMSI in **Section 6.3.1.2**

New Service User Details		
New User Name	Ultra	8
New User Password	•••••	
Re-enter New User Password	•••••	
QK	<u>C</u> ancel	

From the configuration tree in the left pane, under the Rights Groups, select the **Manager Group**. In the right pane, select the **Configuration** tab. Confirm the **Manager Operators Rights** is as shown below.

Security Settings	Rights Group: Manager Group
Security General System (1) SGIP500 Configuration Security Administration System Status Interface Configuration System Status Interface Configuration System Status Interface Configuration System Status Interface Configuration System Status Group Configuration System Status Group Configuration System Status Group System Status Group Configuration Configuration System Status Group System Status Group Configuration System Status Group Configuration System Status Group Configuration Configuration System Status Group Configuration Configurat	Group Details Configuration Security Administration System Status Enhanced TSPI HTTP Web Services IP Office Service Rights
IPDECT Group SMGR Admin Security Admin Upgrade Admin System Admin Maint Admin Ususiness Partner Ustomer Admin Maintainer Service Users (12) Administrator	Manager Operator Rights Read Only Administrator Operator Ø Manager User & Group Edit User & Group Admin Dir & Account Admin Time & Attend Admin ICR & User Rights Admin

From the configuration tree in the left pane, select the new Service User created above. In the right pane, under **Rights Group Membership**, select the **Manager Group** above.

5.5. Administer System Password

Select Security > System from the configuration tree in the left pane to display the System: SGIP500 screen in the right pane, where SGIP500 is the name of the IP Office. In the Unsecured Interfaces tab, click the Change button next to the System Password to configure the IP Office System Password. The System Password is used in Section 6.1 to configure the IP Office TAPI Driver.

Security Settings	System : SGIP500
🖃 🔒 Security	System Details Unsecured Interfaces Certificates
General	System Password Change
⊡	VM Pro Password NORMANNAMANNAMANNAMANNAMANNAMANNAMANNAMA
⊡…© Services (6) …© Configuration	Monitor Password Kater Change
	Application Controls
Enhanced TSPI	TFTP Configuration Read 🔽 EConf 🔽 TAPI
💮 НТТР	TFTP Configuration Write 🔲 Program Code 🔽 HTTP Directory Read 🗹
💭 Web Services	Voicemail 🔽 Real Time Interface 🔽 HTTP Directory Write 🔽
🗄 🎆 Rights Groups (15)	Application Support
E Service Users (12)	
Administrator	Application Active Limitations
Operator	
- SchtropaService	Soft Console
	Analogue DECT 🗸
SMGRB5800Admin	TAPI
	Multi Media Module 🖌
Maintainer	Call Status 🖌
	Conference Centre
ServiceUser1	ABG Directory Services 🗸
ServiceUser2	

Click **OK**. In the Manager window, select **File** \rightarrow **Save Security Settings** to push the settings to IP Office and wait for the system to update. This completes the configuration of the Avaya IP Office.

6. Configure TalenTel-HCMS PMSI

This section provides the procedures for configuring TalenTel-HCMS PMSI. The procedures include the following areas:

- Administer TAPI driver
- Obtaining IP Office Configuration Web Service SDK
- Configure TalenTel-HCMS PMSI Settings

6.1. Administer TAPI Driver

Avaya provides the Tapi Driver from <u>http://support.avaya.com</u>. The latest TAPI driver is used which in this case is "tapiQ4Maint2011.exe". From the TalenTel-HCMS PMSI Server as shown in **Figure 1**, select **Start > Control Panel**, and click on the **Phone and Modem Options** icon (not shown below). In the **Phone and Modem Options** window, select the **Advanced** tab. Select the **Avaya IP Office TAPI2 Service Provider** entry, and click **Configure (**配置).

电话和调制解调器选项	? ×
拔号规则 调制解调器 高级	
下面的电话服务提供程序已安装到此计算机上:	
提供程序 (E):	
Avaya IP Office TAPI2 Service Provider Microsoft H.323 Telephony Service Provider Microsoft HID Phone TSP Microsoft Multicast Conference TAPI Service Provider NDIS Proxy TAPI Service Provider TAPI Kernel-Mode Service Provider Unimodem 5 Service Provider	
添加 (D) 開除 (B) 配置 (C)	
	<u>k</u>)

The Avaya TAPI2 configuration screen is displayed. For Switch IP Address, enter the IP address of Avaya IP Office. Select the radio button for Third Party, and enter the IP Office System Password configured in Section 5.5 into the Switch Password field. Reboot the server.

电话和调制解调器选项	? ×
Avaya TAPI2 configuration	×
Switch IP Address 10.1.30.10	OK Cancel
User Name	
User Password	
 Third Party 	
Switch Password	
Ex Directory Users	
🔽 WAV Users	
🔽 ACD Queues	
	···]
确定	(消) 应用(な)

6.2. Obtaining Avaya IP Office Configuration Web Service SDK

Avaya provides the IP Office Configuration Web Service SDK for DevConnect members to incorporate IP Office configuration changes in their solutions. The Configuration Web Service SDK must match the release of the IP Office that is deployed, in this case Release 8.0. To obtain the IP Office Configuration Web Service SDK, browse to https://devconnect.avaya.com/ using a web browser and login using a valid DevConnect member account. Then click **Products & SDKs > IP Office > IP Office Release 8.0 Contents** to locate and download the Configuration Web Service SDK. Beijing Ultra implementation engineer will then deploy the files from the Configuration Web Service SDK onto the TalenTel-HCMS PMSI server.

6.3. Configure TalenTel-HCMS PMSI Settings

CTILink and PMSI_Gate are the modules that provide inter-connection between IPO and PMSI/CTI modules. In the test environment, these are setup together with the TalenTel-HCMS server and the database which is not shown in subsequent steps. Details can be referred from the *TalenTel-HCMS Property Management System Configuration manual* [3].

6.3.1. CTILink and PMSI_GATE

6.3.1.1 CTILink setup

In the Ultra CTILink **window** below, select **System Parameters Settings > Setup** (系统参数设置 > 设置系统参数) and the next screen will pop up as shown on the next page.

外线屑	5号 夕	外线端口号	「呼叫状态	「呼叫方向	主叫号码		被叫号码	
↑机状态	8显示—							
序号 1	<u>分机号</u> 301		态 呼叫方向	占用外线 -1	主叫号码	被叫号码	分机状态	AGENT ID
2 3	302 303	空闲		-1 -1				
4 5	304 305	空闲		-1 -1				
6 7	321 331	空空空空空空空空空空空空空空空空空空空空空空空空空空空空空空空空空空空空		-1 -1 -1				
清防	状态			写分机号或外	Ւ线号码)			
		ь. Г						
交换	机连接状	(态:						
户端记	生接列表-							

Configure the **PBX IP address** (交换机 **IP** 地址) which in the setup is IP Office address. The **PBX port** (交换机服务端口) is not required. The rest is left at default.

▶ 定时检查与CIIServer 的通信连接	PBX采用第一方CTILink驱动方式,设定
□ 定时检查与交换机通信连接	□ CTILink 采用从机方式
☑ 记录 CTILink 通信数据	CTILink 主机IP地址
☑ 使用 TCP 通道连接交换机	
交换机 IP 地址 10.1.30.10	
交换机服务端口	
▶ ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	
报警服务器 IP 地址 168.168.168.32	
报警服务器端口 20002	
7330 新参数	
🗖 记录与交换机的通信数据	□ 向客户端发送呼叫状态数据
🔲 记录与客户端的通信数据	☑ 记录发向客户端的呼叫状态数据
调试信息输出级别 0	
74.0 版本的新参数————————————————————————————————————	
✓ 与V40平台的CTI服务器配合使用	

From the Ultra CTILink main window, select System **Parameters Settings > Setup PBX** Interface (系统参数设置 > 设置交换机接口类型). The **TSAPI Password** provided in **Section 5.5** is entered as shown below and click **Save** (保存). The Ultra CTILink program has to be restarted for the changes to take effect.

设置交换机接口	×
○ 交换机类型	
│││ 请选择交换机CTI接口类3	꼬
自动启动服务	- 设定Dialogic CT_Connect 参数
□ 自动启动 TAPI	
□ 自动启动 CSTA	CTC LOGID
□ 自动启动 CTC	CTC Server Name
□ 自动启动 TSAPI	
 ┌设定Avaya TSAPI 参数	
TSAPI UserName	
	100
TSAPI Pas XXXXXX	tral23
TSAPI ServerName	
板卡级PBX/主叫号码接	收网关IP地址
│ / 板卡级PBX/主叫号码接	收网关端口
□ 交换机模	期外线接收主叫号码
	R存 取消

6.3.1.2 PMSI_GATE

Setup of the PMSI_GATE is as shown in the screen shot on the next page. The following parameters are required:

- 1. PMSI_GATE IP address (PMSI_GATE 地址): 10.1.10.123
- 2. PBX port (PBX 服务段口号): 16016
- 3. PBX IP address (PBX IP 地址): 10.1.30.10
- 4. PBX port (PBX 服务段口号): 50805 (Secure Access)
- 5. PBX login (PBX 管理用账号): Ultra
- 6. PBX password (PBX 管理密号): As obtained from Section 5.4

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◆ 参数设定				
-PMSI_GATE 参数设定				
PMSI_GATE地址 PMSI使用端口号	10. 1. 10. 123 16016			
PBX信息参数设定				
PBX IP地址	10. 1. 30. 10	PBX服务端口号	50805	
PBX 管理用账号	Ultra	PBX 管理 XXXX	XX 23	
			保存	关闭

6.3.2. PMSI

6.3.2.1 PMSI interface parameters Settings

Select parameter settings→ internal interface settings (参数设置□内部接口参数设定)

「与语音信箱系统接口参数	┌交换机管理功能接口参数
语音信箱系统 IP 地址 127.0.0.1 语音信箱系统 ICP 端口 18001 缺省留言保留天数 - -语音信箱收发码通信参数 - 语音信箱发码 UDP 发送端口 8000 语音信箱点灯命令 UDP 接收端口 8001 -多个模块同时占用 UDP 收发码端口参数 -	 选择交换设备 交換设备 01 ▼ 交换机 IP 地址 10.1.10.123 交换机端口 16000 辅助管理模块 IP 地址 10.1.10.123 辅助管理模块端口 16016 ☑ 连接交换机使用网络 连接交换机的串口 ▼
转发 UDP 信息到地址 ↓	登入交换机操作员名称 登入交换机操作员密码 交换机免打扰组名
□ 行宿首系统消息中的分码与我换购房间与 □ 打印叫醒失败记录 □ 启动与语音信箱系统的连接 □ 与内置计费系统接口参数	 ✓ 使用交换机内置点灯功能 ✓ 使用交换机内置叫醒功能 □ 检查交换机分机类型 交换机操作失败重试次
内置计费系统 IP 地址 内置计费系统端口 □ 连接内置计费系统使用网络	交換机操作失败重试间隔(秒) ☑ 启动与交换机管理端口的连接 交换机类型 AVAYA_IPO
连接内置计费系统的串口 COM4	交换机语音信箱收发码接口参数 交换机语音信箱接口 IP 地址 交换机语音信箱接口端口 □ 连接交换机语音信箱端口使用网络
RCG 指令序号	 □ 启动与交换机语音信箱端口的连接 设置参数

Here is the setup of PMSI port and PBX connection setup. PBX connection can be setup via the network or serial ports. Here are the main parameters for the PBX connection:

A. PBX setup (交换机设备): Select any
B. PBX IP address (交换机IP地址): 10.1.10.123
C. PBX port (交换机端口): Leave this as default 16000

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D. Secondary Management IP address (辅助管理模块端口): **10.1.10.123** E. Secondary Management port (辅助管理模块端口): 16016 (thru PMSI Gate) Select **Use Network for Connection to PBX** (连接交换机使用网络)。

Select Start PBX port connection ("启动与交换机管理端口的连接") and select Avaya IPO for the PBX Type (交换机类型)

The voice mail server is not setup in this environment for testing as there is no setup required for the Voice Mail portion (交换机语音信箱收发码接口参数). Click on the **Setup (**"设置参数") for the settings to take effect.

Below is the successful startup of the PMSI.

《统操作 参数设置 系统测试 显示操作 帮助	
通信数据显示	
2012-03-24 10:42:18 TEXT_INF0:EXT=301 302 303 304 305 3 2012-03-24 10:42:18 Connect Pbx System 10.1.10.123:160 2012-03-24 10:42:18 Send To Pbx : CONN_DATA 2012-03-24 10:42:18 Start PMSI System with CommandModes 2012-03-24 10:42:18 Connecting Aux 10.1.10.123:16016 2012-03-24 10:42:18 Connecting PBX 10.1.10.123:16016 2012-03-24 10:42:18 Connecting PBX 10.1.10.123:16010 2012-03-24 10:42:18 Start UltraPMSI System ! 2012-03-24 10:42:18 Start UltraPMSI System !	16 OK !

6.3.3. CTI module

6.3.3.1 Module Interface

G UltraCRM 客户服务中心-人工座库程序					_	- 0	X
系统操作(S) 参数设置 操作命令(Q) 关于(A)							
💱 👫 🗐 🛅 👪 📴 显示变量 🖓 调试信息 🗐 人工操作 🛛 清除显示 停止消息显示 停止状	态显示						
状态监控							$\triangleleft \triangleright \mathbf{X}$
中继线(外线)状态:			姓名 工	号 电话号码	座席分机	业务组	登入時
序号,主叫号码 被叫号码 开始时间 通道时间 操作员 Trunk 呼叫方向							
, 野叫队列状态:							
呼叫标识 主叫号码 被叫号码 开始时间 排队时间 排队目标 排队原因	排队类型						
10:49:10 CTI,Start UltraCTI Service To Listening ATClient! 10:49:10 UK/Start Ultra/Lth Client Service To 10:49:10 DK/Start UltraCTI Service To Listening OBMClient! 10:49:10 SOA/Start UltraCOS Service To Listening ATClient!							
10:49:13 LNK1->CTI, Clent Connect to Server(10.1.10.123:16000) OKI[1: 接受请求];接收时间: 20120324 10 10:49:13 LNK1->CTI, Clent Connect to Server(10.1.10.123:16000) OKI[1: 接受请求];接收时间: 20120324 10	1:49:13.8464						
			4				
2012年3月24日 10:49:27 操作员姓名: sa	工号: 8600	登录时间: 2012/3/24 10:49:14					

When the operator is successful in starting up the CTI system, the running program interface is as shown below:

│ UltraCRM 客户服务中心-人工座席程序			le le	- O X
系统操作(S) 参数设置 操作命令(O) 关于(A)				
💱 👫 🖾 📴 🖳 🔄 显示变量 🚳 调试信息 🗐 人工操作 清除显示 停止消息显示 停止状态显示				1
状态监控				4 b x
中继线 (外线) 状态:	姓名	工号	电话号码	座席分机
席号 主叫号码 被叫号码 开始时间 通话时间 操作员 Trunk 呼叫方向	🔽 严佳	8663		305
「 <mark>F叫队列状态:</mark> 「呼叫标识」 主叫号码 被叫号码 开始时间 排队时间 排队目标 排队原因 排队类型				
呼叫标识 主叫号码 被叫号码 开始时间 排队时间 排队目标 排队原因 排队类型				
11:01:39 CTI->8600,DEV INFO;SubKey=GROUP;Name=业务组2;Type=1;Group=2;;发送时间: 20120324 11:01:39.5990 🔹				
11:01:39 CTI->8600,DEV_INFO;SubKey=SYS_INFO;Name=CTI_TIME;Type=10;Info=2012-03-24 11:01:39.602;;发送时间: 20120324 1				
11:01:39 CTI->8600,UID_INFO;Ext=305;Info=10.1.10.123:53554;Uid=8600;Uid_name=坐席00;Uid_group=1;Uid_state=01;Uid_notwork_ 11:01:46 CTI->LNK1,CONN_DATA;Info=UltraCTI;				
11:01:46 LNK1->CTI,CONV_ECHO;KeyCode=;Info=LNK;;接收时间: 20120324 11:01:46.0744 11:01:50 8600->CTI,Client-1 Cause SocketException,Reason:远程主机强迫关闭了一个现有的连接。(10054)[-1: 连接错误];接收时间:				
11:01:50 CTI->8600,UID_INFO;Ext=305;Info=10.1.10.123:53554;Uid=8600;Uid_name=坐席00;Uid_group=1;Uid_state=00;Uid_notwork_ 11:01:50 CTI->8600,客户端断开与CTI连接!				
11:02:07 CRM(2)->CTI,Client-2 10.1.10.123:53573, joined[1: 接受请求];接收时间: 20120324 11:02:07.2846 11:02:07 CRM(2)->CTI,LOGIN;KeyCode=2;Ext=305;Info=COMPRESS=1;REG_GROUP=ALL;;Uid=8663;Uid_group=0;Uid_pwd=MTIzNA==;				
11:02:07 CTI->8663,LOGIN;KeyCode=2;Result=1;Cause=OK;;发送时间: 20120324 11:02:07.3986 11:02:07 CTI->8663,DEV_INFO;SubKey=EXTS;Type=10;Info=拷婚 K 換 撥 镉 間= ?攝繫 綱98秒/?vw~? 俥?9				
11:02:07 CTI->8663,DEV_INFO;SubKey=TRUNKS;Type=10;Info=祆? ?就维麗 ? 湖 [
11:02:07 CTL->8663,DEV_INFO;SubKey=AGENT;Type=10;Info=?{				
11:02:07 CTI->8663,DEV_INFO;SubKey=GROUP;Name=出务组2;Type=1;Group=2; 发送时间: 20120324 11:02:07.4946 11:02:07 CTI->8663,DEV_INFO;SubKey=SYS_INFO;Name=CTI_TTMF;Type=10;Info=2012:03:24 11:02:07.405; 发送时间: 20120324 1				
11:02:07 CTF>8663,UID_INFO;Ext=305;Info=10.1.10.123:53573;Uid=8663;Uid_name=严佳;Uid_group=;Uid_state=01;Uid_notwork_cau				
۲ <u>ااا</u>	•			F
2012年3月24日 11:02:11 操作员姓名: sa 工号: 8600	登录	3012/3/	24 11:01:13	đ

6.3.3.2 CTI Module Parameter Settings (参数设置)

CTI service module IP address (CTI 服务器 IP 地址): 10.1.10.123 CTI service module port (CTI 服务器端口): 18000 (service port for CTI)

In the test environment, the **OEM module** (服务器) is not required as IVR (Interactive Voice Response), MCI (Multi-Media Communication Interface), CDR (Call Detail Recordings) were not setup for testing.

▲ 设置CTI服务器参数	
系统参数	电话ACD控制参数
CTI服务器IP地址 <mark>10.1.10.123</mark> (供CRM客户端、UltreMonitor、bgworker等程序使用)	 通话结束自动进入事后处理 启动定时自动取消事后处理功能 0 秒后自动取消事后处理
CTI服务器端口 18000	限制置忙或事后处理比例(%): 0
(供IVR、MCI、CDR等平台程序连接CTI服务器使用)	座席选中等待时间 10 多媒体通知保留时间 30
OEM服务器端口 18001	对客户端消息传送控制 ☑ 分机间呼入是否弹屏
报警服务器端口 20003	☑ 呼叫外线是否弹屏 □ 只向客户端发送本坐席状态
交换机内置ACD参数	
 通过活机登录到交换机,是否同时登录CTI 座席登录到CTI,是否同时登录到交换机 	定时处理控制参数 □ 定时更新数据库读取数据 定时更新数据库间隔: 0 (分钟)
	保存 取消

6.3.3.3 Database access setup

The database access is setup with the IP address of the database server installed. In this case shown on the screen, the IP address is the TalenTel-HCMS server.

➢ 系统参数设置 □ □ × 设置登录密码 设置数据服务器连接 设置系统标题
服务器名称/地址 10.1.10.123 数据库名称 CALLTHINK 账号 sa 密码 *******
保存 关闭 。

6.3.4. TalenTel_Talk module

This module requires Microsoft .NET 3.5 environment setup on the Operator console running on Microsoft Windows 7.

6.3.4.1 Module interface:

 (I alentel-HCMS)面店通信管理系统 										
、アレビンは、「A A A A A A A A A A A A A A A A A A A										
🕴 空闲 🗸 🗸	外线状态									
E叫号码 被叫号码 时间 呼叫标识	序号 主叫号码	被叫号码	开始时间时间	人员				呼叫方向	客房信息 没有选择信息	
E미号码 被叫号码 时间 呼叫标识										
	301	302	303	304	321	331	8001	8002	8003	8004
■法約制 通话信息:	8005	8006	8007	8008	8009	8010	8011	8012	8013	8014
 	8015	8016	8017	8018	8019	8020	8101	8102	8103	8104
1 2 3 清除 4 5 6 呼叫	8105	8106	8107	8108	8109	8110	8111	8112	8113	8114
7 8 9 会员 い) 取回转接 * 0 # 静音 □ 三方会议	8115	8116	8117	8118	8119	8120	8201	8202	8203	8204
並听 工単 呼叫為打扰分れ 選折 强振 神経急打扰分れ 建席状态 嘉案 -	电话301-8204 电		415-8420							

6.3.4.2 Database setup

The database access is setup with the IP address of the database server installed. In this case shown on the screen, the IP address is the TalenTel-HCMS server.

👪 参数修改	×
登录信息 数据服务器连接参数	程序标题
-CallThink 数据服务器连接	
服务器名称/地址	10. 1. 10. 123
数据库名称(CALLTHINK
账号	Sa
密码,	******
CRM 数据服务器连接参数	
	10. 1. 10. 123
数据库名称(CALLTHINK_CRM
账号	Sa
密码	*****
CDR 数据服务器连接参数一	
服务器名称/地址	10. 1. 10. 123
数据库名称	CALLTHINK_CDR
账号	sa
密码,	****
	保存 关闭

7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya IP Office and TalenTel-HCMS PMSI.

7.1. Verify TAPI Integration

Initiate a call from a guest room to another and verify the call is answered by Voice Mail Lite/Pro if the called guest did not answer the call. The Voice Mail Lite/Pro is being used for testing in the absence of the TalenTel-HCMS without the Voice Mail module.

Using the TalenTel-HCMS simulation test interface, activate Do Not Disturb for a guest room and verify using IP Office System Status application or by calling the guest room.

一分桃	1.状态设定	
一分村	机状态	
	分机号码	321
	分机名称1	Low YM
	分机名称2	
_	分机级别	
	免打扰状态	已设置免打扰 ▼
	设定语言	0-汉语
	留言状态	
	叫醒设定	
	呼转设定	
操	作结果显示	

7.2. Verify Configuration Web Service Integration

Use the TalenTel-HCMS simulation test interface to perform a guest check-in request. Verify that the guest name and user rights template are updated correctly on Avaya IP Office as part of the check-in process.

<i>ê</i>	Jason: 321
User Voicemail DND S	5hortCodes Source Numbers Telephony Forwarding Dial In Voice Recording Bu
Name	Jason
Password	*****
Confirm Password	*****
Full Name	yanjia
Extension	321
Locale	
Priority	5
System Phone Rights	None
Profile	Power User
	Receptionist
	🔽 Enable Softphone
	Enable one-X Portal Services
	Enable one-X TeleCommuter
	Enable Remote Worker

8. Conclusion

These Application Notes describe the configuration steps required for TalenTel-HCMS PMSI to successfully interoperate with Avaya IP Office 8.0. All feature and serviceability test cases were completed.

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9. Additional References

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

IP Office KnowledgeBase 8.0 Documentation CD, Dec 2011, available at http://support.avaya.com.
 TalenTel-HCMS Property Management System Users' Manual, available at http://www.allytel.com.cn/.
 TalenTel-HCMS Property Management System Configuration Manual, available at http://www.allytel.com.cn/.

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