



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

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# **Application Notes for dvsAnalytics Encore 6.0.5 with Avaya Contact Center Select 7.0 and Avaya IP Office Server Edition 10.0 – Issue 1.1**

### **Abstract**

These Application Notes describe the configuration steps required for dvsAnalytics Encore 6.0.5 to interoperate with Avaya Contact Center Select 7.0 and Avaya IP Office Server Edition 10.0. dvsAnalytics Encore is a call recording solution.

In the compliance testing, dvsAnalytics Encore used the Communication Control Toolkit Interface from Avaya Contact Center Select and the TAPI interface from Avaya IP Office to monitor Avaya IP Deskphones associated with Avaya Contact Center Select agents, and used the port mirroring method to capture media from the monitored phones for call recording.

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 2.1**, 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 dvsAnalytics Encore 6.0.5 to interoperate with Avaya Contact Center Select 7.0 and Avaya IP Office Server Edition 10.0. dvsAnalytics Encore is a call recording solution.

In the compliance testing, dvsAnalytics Encore used the Communication Control Toolkit (CCT) .Net Interface from Avaya Contact Center Select and the TAPI 2 in third party mode interface from Avaya IP Office to monitor Avaya IP Deskphones associated with Avaya Contact Center Select agents, and used the port mirroring method to capture media from the monitored phones for call recording. The TAPI events were used to determine when to start/stop call recordings, and the CCT events were used to obtain contact center information such as skill and agent ID.

The Avaya IP Office Server Edition configuration consisted of two Avaya IP Office systems, a primary Linux server and an expansion IP500V2 that were connected via Small Community Network trunks. In the compliance testing, one dvsAnalytics Encore server was deployed, with CCT connection to the Avaya Contact Center Select server and with TAPI connection to the primary IP Office system.

## 2. General Test Approach and Test Results

The feature test cases were performed manually. Each call was placed and handled manually with generation of unique audio content for the recording. Necessary agent actions such as hold and reconnect were performed from the agent desktops running the Avaya Agent Desktop application or from the agent phone to test the different call scenarios.

The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet connection to Encore.

The verification of tests included using the Encore logs for proper message exchanges, and using the Encore web interface for proper logging and playback of the calls.

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 Encore:

- Handling of CCT events.
- Handling of TAPI events.
- Proper recording, logging, and playback of calls for scenarios involving inbound, outbound, internal, external, hold, reconnect, transfer, conference, multiple calls, multiple agents, call observe, barge-in, emergency, join calls, and outbound campaign.

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

## 2.2. Test Results

All test cases were executed and verified.

## 2.3. Support

Technical support on dvsAnalytics Encore can be obtained through the following:

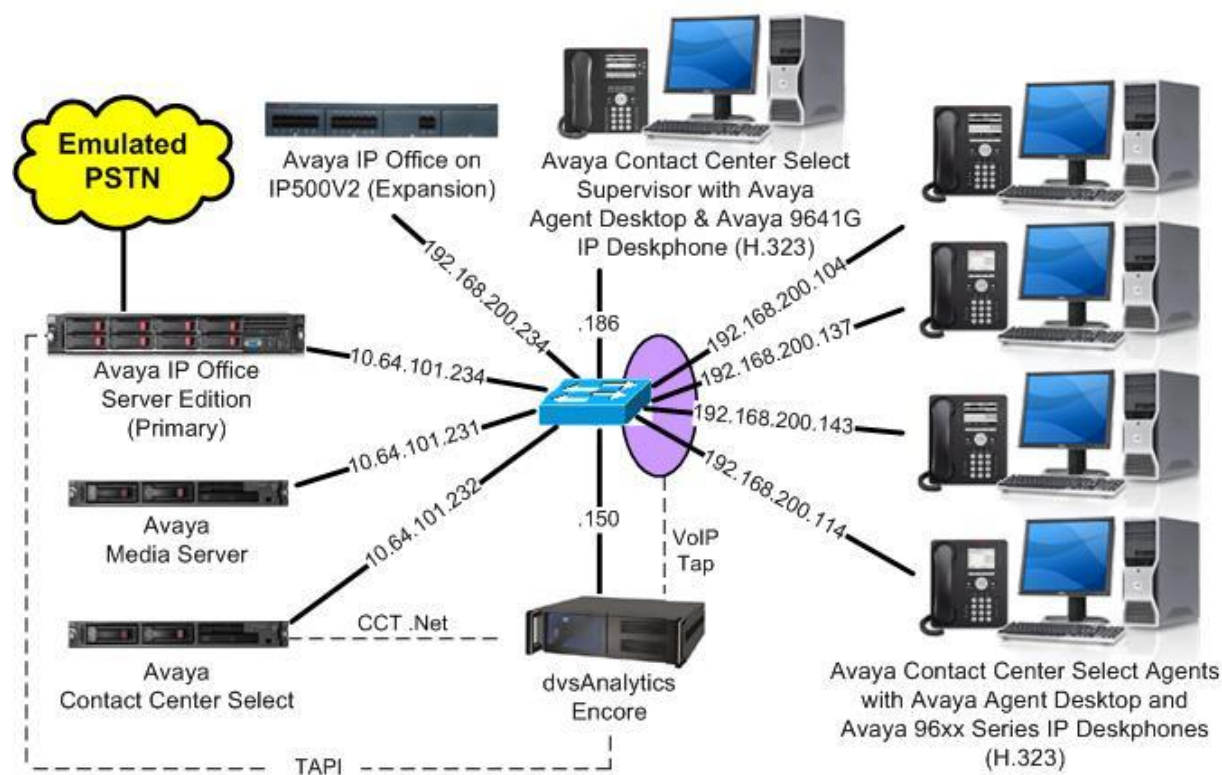
- **Phone:** (800) 910-4564
- **Email:** [Support@dvsAnalytics.com](mailto:Support@dvsAnalytics.com)

### 3. Reference Configuration

The detailed administration of basic connectivity between Contact Center Select, IP Office, and of contact center devices is not the focus of these Application Notes and will not be described. In addition, the port mirroring of the layer 2 switch is also outside the scope of these Application Notes and will not be described.

As shown in **Figure 1**, the RTP stream for Contact Center Select agents with Avaya IP Deskphones were mirrored and replicated over to Encore. Two of the phone extensions were on the primary IP Office and two on the expansion IP Office, as shown below.

Device Type	Device Number/Extension
Primary IP Office	
Phone Extensions	31881, 31882
Contact Center Select Agent Users	31881, 31882
Expansion IP Office	
Phone Extensions	22031, 22033
Contact Center Select Agent Users	32882 (hot desking), 32882 (hot desking)



**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 Contact Center Select	7.0.0.1
Avaya Aura® Media Server	7.7.0.269
Avaya IP Office Server Edition (Primary) in Virtual Environment	10.0.0.1.0
Avaya IP Office on IP500V2 (Expansion)	10.0.0.1.0
Avaya Agent Desktop on Windows 10 Pro	7.0
Avaya 9620C IP Deskphone (H.323)	3.270B
Avaya 9608, 9611G & 9641G IP Deskphone (H.323)	6.6302
dvsAnalytics Encore on Windows 2008 Server R2 Standard <ul style="list-style-type: none"><li>• Encore Web Interface</li><li>• Database</li><li>• Avaya IP Office TAPI2 Driver (tspi2w_64.tsp)</li><li>• Avaya CCT SDK (Nortel.CCT.dll &amp; Nortel.CCT.WCF.dll)</li></ul>	6.0.5 SP1  1.0.0.43 7.0

*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 in all configurations.*

## 5. Configure Avaya Contact Center Select

This section provides the procedures for configuring Contact Center Select. The procedures include the following areas:

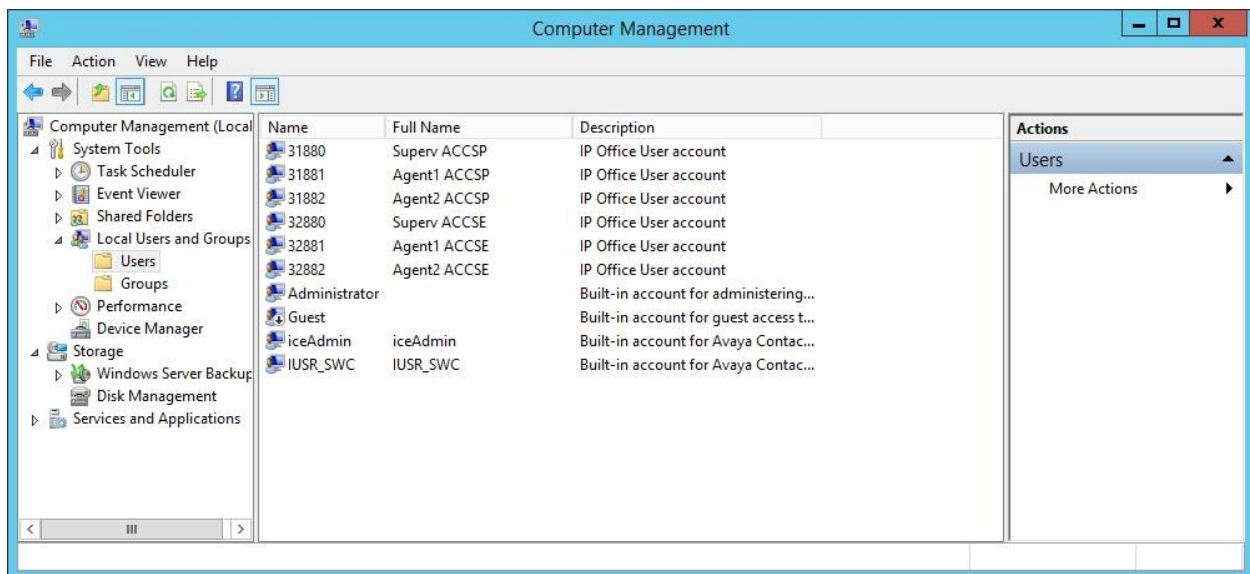
- Administer windows account
- Launch CCT Administration
- Administer CCT user

### 5.1. Administer Windows Account

From the Contact Center Select server, right click on **Start** and select **Computer Management** (not shown), to display the **Computer Management** screen.

Select **Computer Management** → **System Tools** → **Local Users and Groups** → **Users** from the left pane, to display a list of users in the middle pane.

Right click in the middle pane and select **New User** (not shown).



The **New User** screen is displayed. Enter desired values for **User name**, **Full name**, **Description**, **Password**, and **Confirm password**.

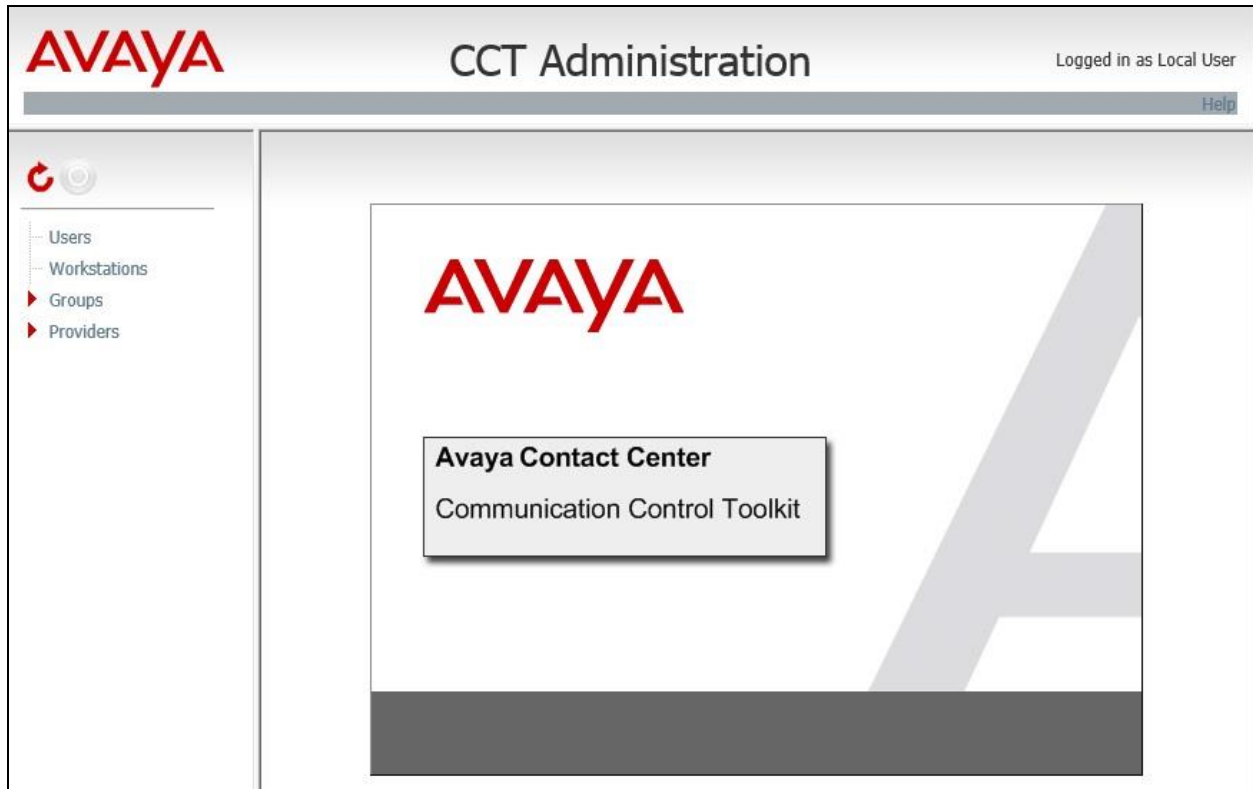
Uncheck **User must change password at next logon**, and check **Password never expires**, as shown below.

The screenshot shows a 'New User' dialog box with the following fields and options:

- User name:** EncoreUser
- Full name:** (empty)
- Description:** (empty)
- Password:** (masked with dots)
- Confirm password:** (masked with dots)
- ☐ User must change password at next logon
- ☐ User cannot change password
- ☒ Password never expires
- ☐ Account is disabled
- Buttons:** Help, Create, Close

## 5.2. Launch CCT Administration

From the Contact Center Select server, access the CCT Administration web interface by using the pertinent URL in an Internet browser window, in this case “https://accs-ccs:8445/WebAdmin”. The screen below is displayed.





### 5.3. Administer CCT User

Right click on **Users** in the left pane, and select **Add new User** (not shown). The **Update CCT User** screen is displayed in the right pane.

For **Login User Name**, enter a user name in the format “x\y”, where “x” is the hostname of the Contact Center Select server, and “y” is the newly created windows account from **Section 5.1**. Enter desired values for **First Name** and **Last Name**.

In the **Agent Assignments** sub-section, check the relevant agent users from **Section 3** in the left column, and use the arrow icon to move selected agents to the right. In the compliance testing, four agents were assigned, as shown below.

The screenshot displays the AVAYA CCT Administration interface. The top header includes the AVAYA logo, the title 'CCT Administration', and the user status 'Logged in as Local User'. A left-hand navigation pane contains links for 'Users', 'Workstations', 'Groups', and 'Providers'. The main content area is titled 'Update CCT User' and contains several sections:

- User Details:** Includes input fields for 'Login User Name' (containing 'accs-ccs\EncoreUser'), 'First Name' (containing 'Recorder'), and 'Last Name' (containing 'Encore').
- Assignment Sections:** A list of sections with expandable icons: 'Address Assignments', 'Terminal Assignments', 'Terminal Group Assignments', 'Address Group Assignments', and 'Agent Assignments'.
- Agent Assignments:** This section is divided into two columns: 'Agents available' and 'Agents mapped'.
  - Agents available:** A table with a search bar and a list of agents. The table has a header 'Agents' and two rows of agent IDs: 31880 and 32880. Each row has a checkbox to its left.
  - Agents mapped:** A table with a search bar and a list of agents. The table has a header 'Agents' and four rows of agent IDs: 31881, 31882, 32881, and 32882. Each row has a checkbox to its left.

At the bottom of the 'Agent Assignments' section, there are navigation icons (back, forward, etc.) and status text: '2 Agents found. Page 1 / 1' for the available agents and '4 Agents found. Page 1 / 1' for the mapped agents. A 'Save' button is located at the bottom left of the main content area.

## 6. Configure Avaya IP Office

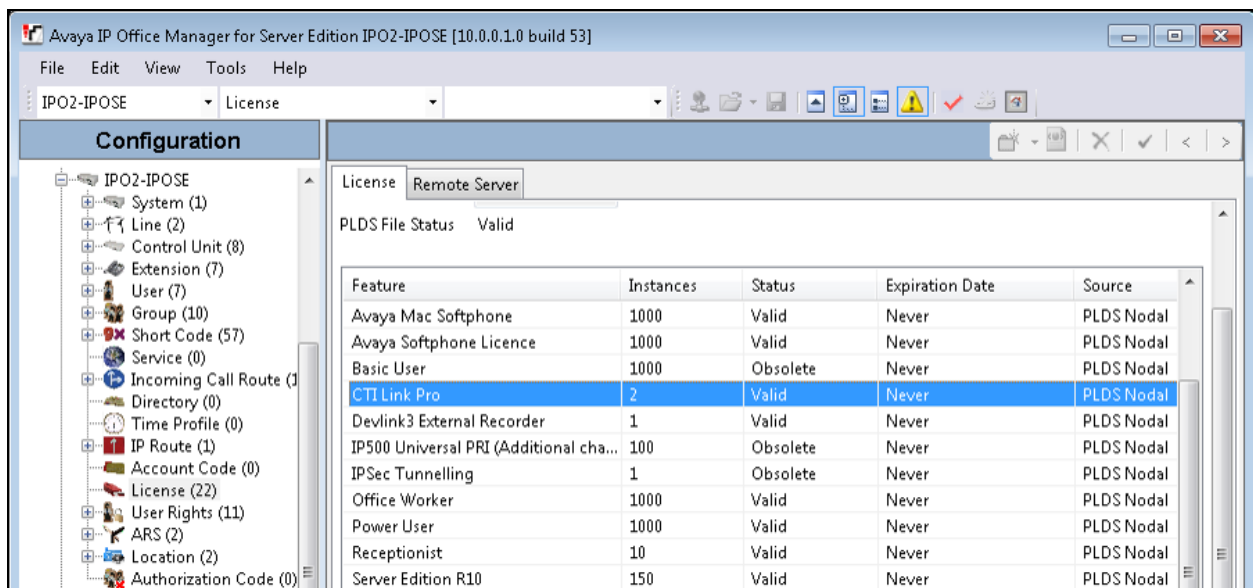
This section provides the procedures for configuring IP Office. The procedures include the following areas:

- Verify license
- Administer security settings
- Obtain phone IP address

### 6.1. Verify License

From a PC running the IP Office Manager application, select **Start → All Programs → IP Office → Manager** to launch the application. Select the 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, followed by **License** to display licenses in the right pane. Verify that there is a license for **CTI Link Pro**, and with license **Status** being “Valid”, as shown below.

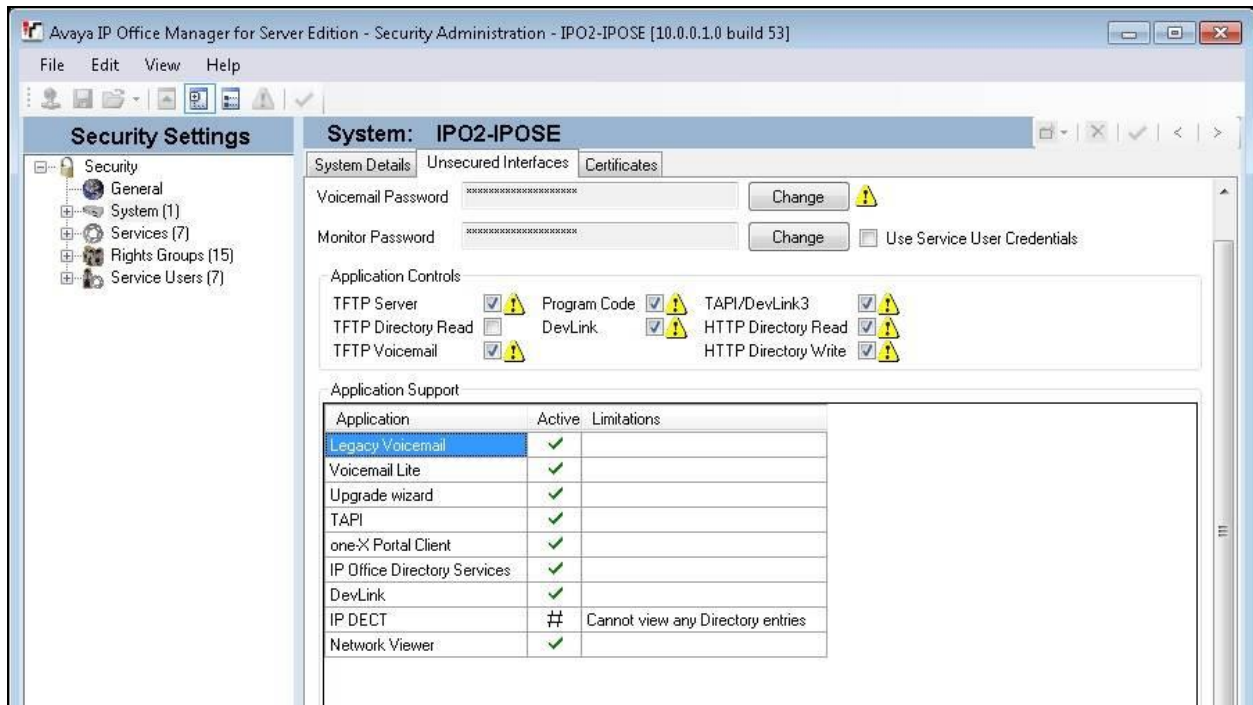


Feature	Instances	Status	Expiration Date	Source
Avaya Mac Softphone	1000	Valid	Never	PLDS Nodal
Avaya Softphone Licence	1000	Valid	Never	PLDS Nodal
Basic User	1000	Obsolete	Never	PLDS Nodal
<b>CTI Link Pro</b>	<b>2</b>	<b>Valid</b>	<b>Never</b>	<b>PLDS Nodal</b>
Devlink3 External Recorder	1	Valid	Never	PLDS Nodal
IP500 Universal PRI (Additional cha...	100	Obsolete	Never	PLDS Nodal
IPSec Tunnelling	1	Obsolete	Never	PLDS Nodal
Office Worker	1000	Valid	Never	PLDS Nodal
Power User	1000	Valid	Never	PLDS Nodal
Receptionist	10	Valid	Never	PLDS Nodal
Server Edition R10	150	Valid	Never	PLDS Nodal

## 6.2. Administer Security Settings

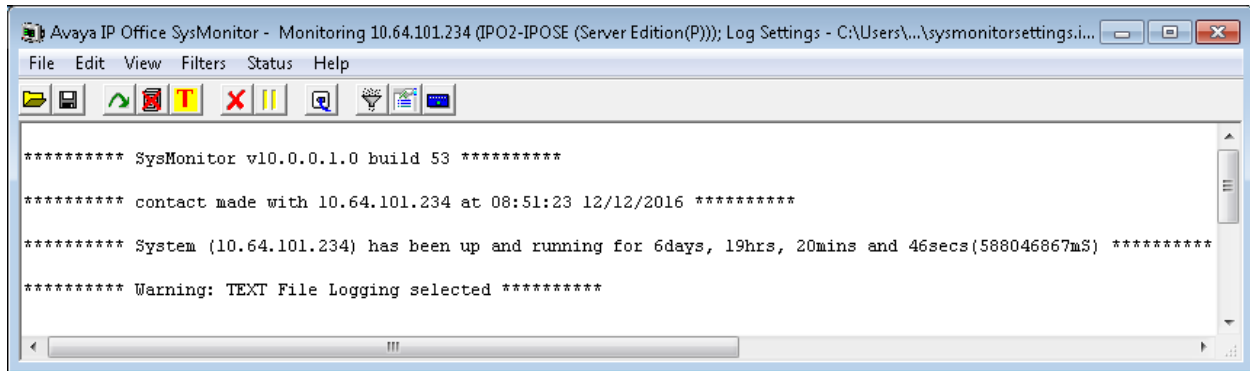
From the configuration tree in the left pane, select the primary IP Office system, followed by **File → Advanced → Security Settings** from the top menu.

The **Avaya IP Office Manager for Server Edition – Security Administration - IPO2-IPOSE** screen is displayed, where **IPO2-IPOSE** is the name of the primary IP Office system. Select **Security → System** to display the **System** screen in the right pane. Select the **Unsecured Interfaces** tab, and check **TAPI/DevLink3** as shown below.



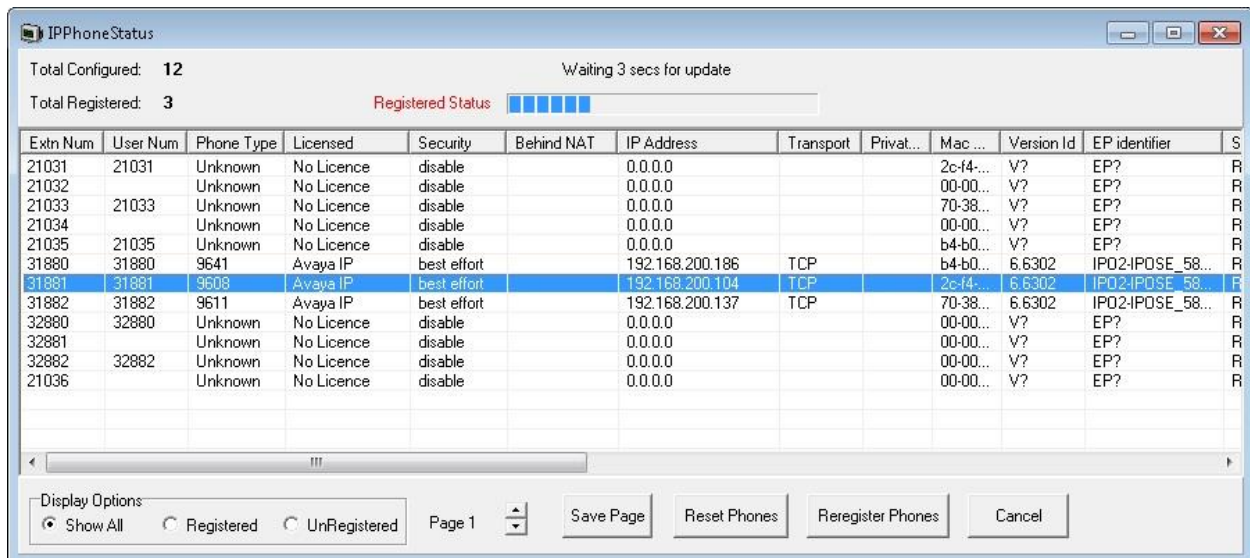
### 6.3. Obtain Phone IP Address

From a PC running the IP Office Monitor application, select **Start → Programs → IP Office → Monitor** to launch the application and connect to the primary IP Office. The **Avaya IP Office SysMonitor** screen is displayed, as shown below. Select **Status → H323 Phone Status** from the top menu.



The **IPPhoneStatus** screen is displayed. Make a note of the IP address associated with each phone extension used by Contact Center Select agents on the primary IP Office from **Section 3**, which will be used later to configure Encore.

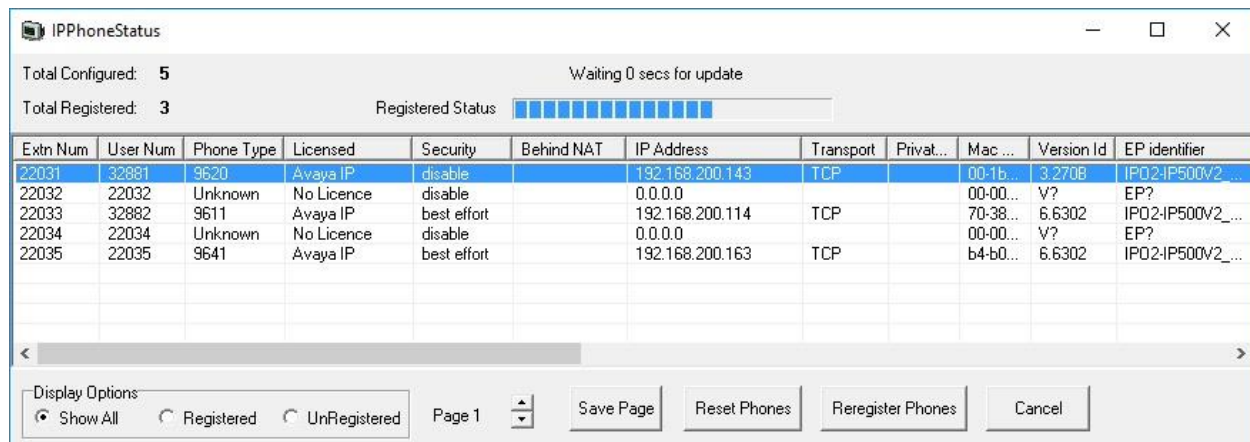
In the compliance testing, the two phone extensions on the primary IP Office used by Contact Center Select agents were “31881” and “31882”, with IP addresses “192.168.200.104” and “192.168.200.137” respectively.



Repeat this section to obtain IP address associated with each phone extension used by Contact Center Select agents on the expansion IP Office from **Section 3**.

In the compliance testing, the two phone extensions on the expansion IP Office used by Contact Center Select agents were “22031” and “22033”, with IP addresses “192.168.200.143” and “192.168.200.114” respectively.

Note that Contact Center Select requires all agent users to be configured on the primary IP Office system, and for agents using physical phone extensions on the expansion IP Office system to log into agent users on the primary IP Office via hot desking.



The screenshot shows the IPPhoneStatus application window. At the top, it displays 'Total Configured: 5' and 'Total Registered: 3'. Below this is a 'Registered Status' bar with 10 blue segments. The main table lists phone details with columns: Extn Num, User Num, Phone Type, Licensed, Security, Behind NAT, IP Address, Transport, Privat..., Mac ..., Version Id, and EP identifier. The table contains 5 rows of data. At the bottom, there are 'Display Options' (Show All, Registered, UnRegistered), 'Page 1', and buttons for 'Save Page', 'Reset Phones', 'Reregister Phones', and 'Cancel'.

Extn Num	User Num	Phone Type	Licensed	Security	Behind NAT	IP Address	Transport	Privat...	Mac ...	Version Id	EP identifier
22031	32881	9620	Avaya IP	disable		192.168.200.143	TCP		00-1b...	3.2708	IP02-IP500V2_...
22032	22032	Unknown	No Licence	disable		0.0.0.0			00-00...	V?	EP?
22033	32882	9611	Avaya IP	best effort		192.168.200.114	TCP		70-38...	6.6302	IP02-IP500V2_...
22034	22034	Unknown	No Licence	disable		0.0.0.0			00-00...	V?	EP?
22035	22035	9641	Avaya IP	best effort		192.168.200.163	TCP		b4-b0...	6.6302	IP02-IP500V2_...

## 7. Configure dvsAnalytics Encore

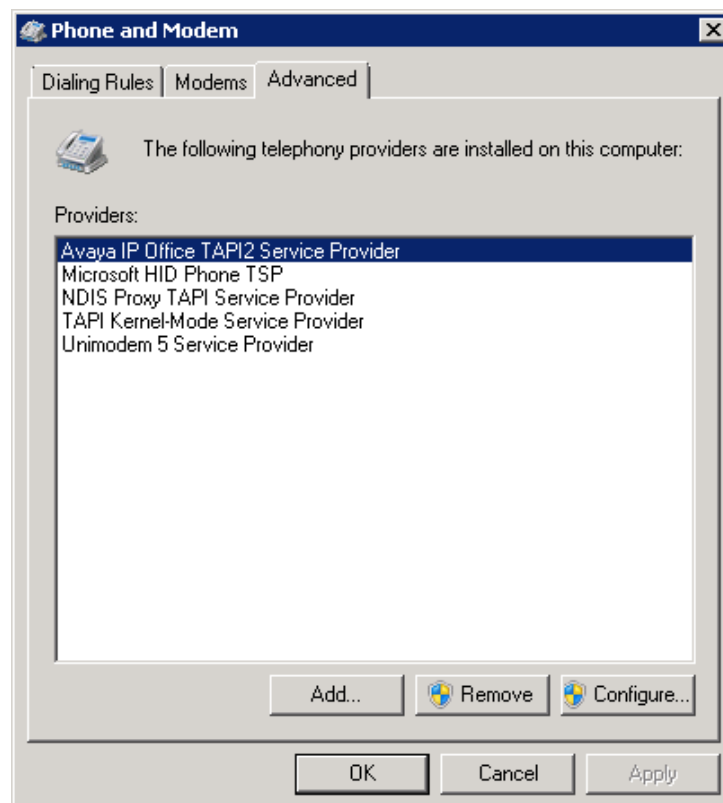
This section provides the procedures for configuring Encore. The procedures include the following areas:

- Administer TAPI driver
- Administer agent stations
- Administer CTISetup
- Administer CT Gateway

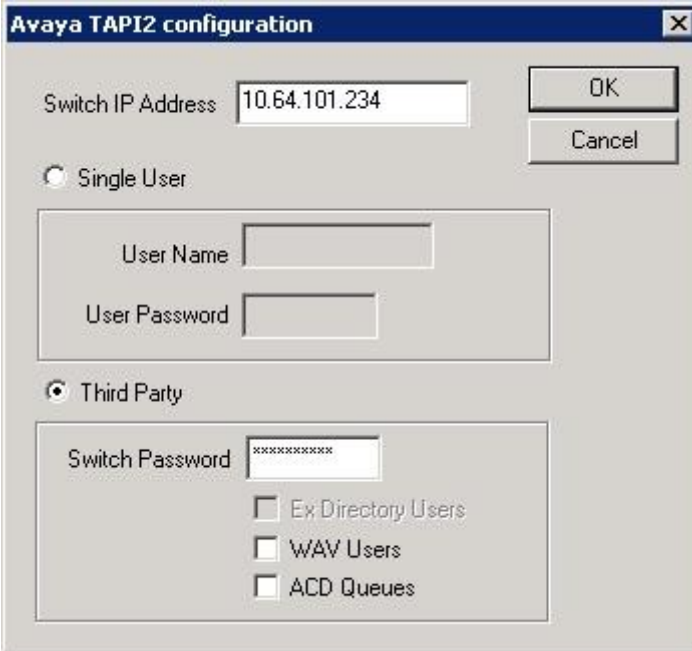
The configuration of Encore is performed by dvsAnalytics installers and dealers. The procedural steps are presented in these Application Notes for informational purposes.

### 7.1. Administer TAPI Driver

From the Encore server, select **Start → Control Panel**, and click on the **Phone and Modem** icon (not shown below). In the displayed **Phone and Modem Options** screen, select the **Advanced** tab. Select the **Avaya IP Office TAPI2 Service Provider** entry, and click **Configure**.



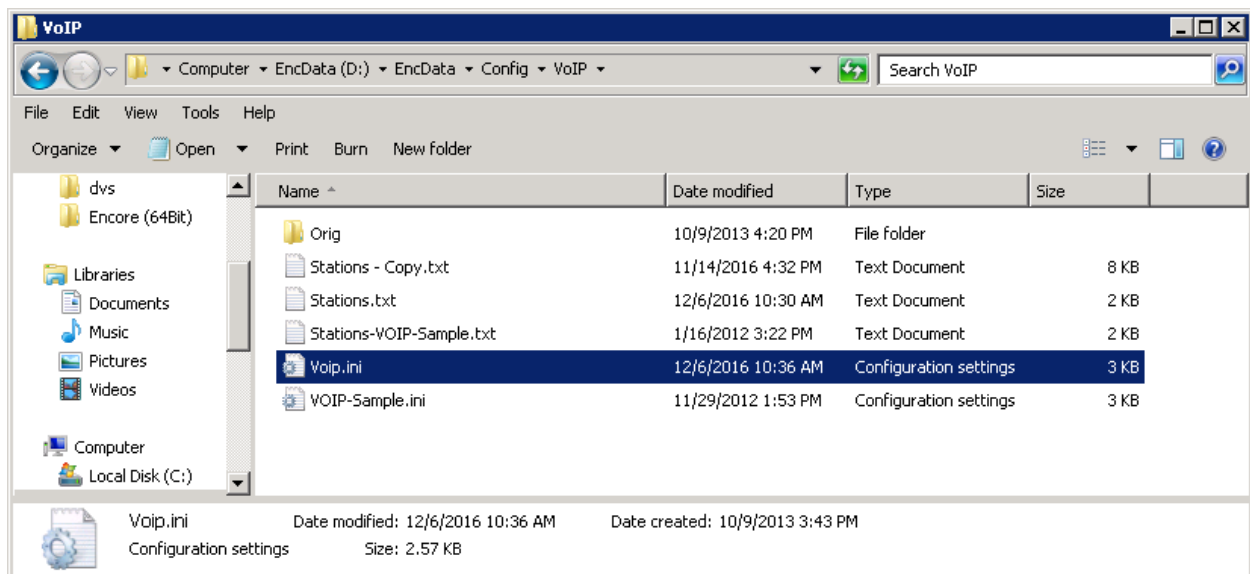
The **Avaya TAPI2 configuration** screen is displayed. For **Switch IP Address**, enter the IP address of the primary IP Office system. Select the radio button for **Third Party**, and enter the password of the primary IP Office system into the **Switch Password** field. Reboot the Encore server.



The image shows the 'Avaya TAPI2 configuration' dialog box. It has a title bar with a close button. Inside, there's a 'Switch IP Address' text box containing '10.64.101.234'. To the right are 'OK' and 'Cancel' buttons. Below this, there are two radio buttons: 'Single User' (unselected) and 'Third Party' (selected). Under 'Single User' are 'User Name' and 'User Password' text boxes. Under 'Third Party' is a 'Switch Password' text box filled with asterisks. Below the password box are three checkboxes: 'Ex Directory Users', 'WAV Users', and 'ACD Queues', all of which are unchecked.

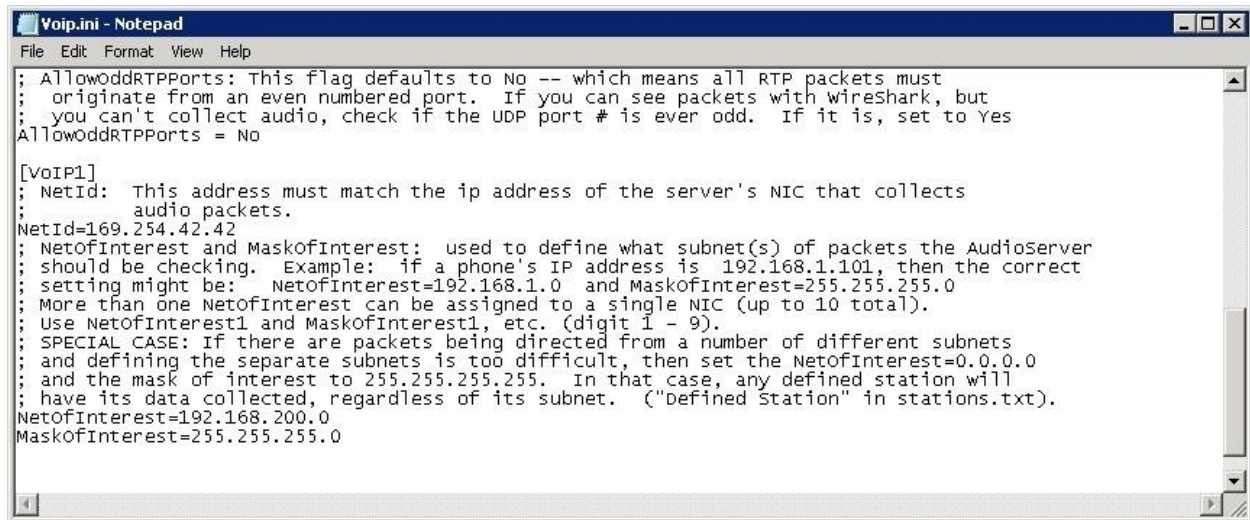
## 7.2. Administer Agent Stations

From the Encore server, navigate to the **D:\EncData\Config\VoIP** directory to edit the **Voip.ini** file shown below.





Scroll down to the **VoIP1** sub-section. For **NetOfInterest** and **MaskOfInterest**, enter the applicable subnet used by the Contact Center Select agent phones from **Section 6.3**.

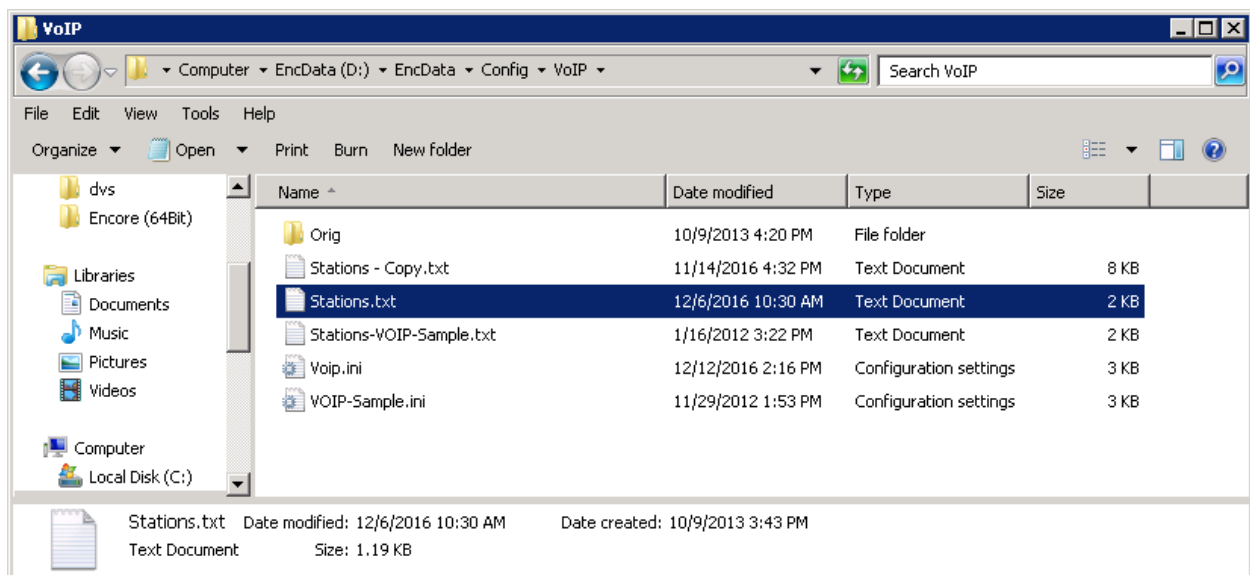


The screenshot shows a Notepad window titled "Voip.ini - Notepad". The text inside the window is as follows:

```
; AllowOddRTPPorts: This flag defaults to No -- which means all RTP packets must
; originate from an even numbered port. If you can see packets with WireShark, but
; you can't collect audio, check if the UDP port # is ever odd. If it is, set to Yes
AllowOddRTPPorts = No

[VoIP1]
; NetId: This address must match the ip address of the server's NIC that collects
; audio packets.
NetId=169.254.42.42
; NetOfInterest and MaskOfInterest: used to define what subnet(s) of packets the AudioServer
; should be checking. Example: if a phone's IP address is 192.168.1.101, then the correct
; setting might be: NetOfInterest=192.168.1.0 and MaskOfInterest=255.255.255.0
; More than one NetOfInterest can be assigned to a single NIC (up to 10 total).
; Use NetOfInterest1 and MaskOfInterest1, etc. (digit 1 - 9).
; SPECIAL CASE: If there are packets being directed from a number of different subnets
; and defining the separate subnets is too difficult, then set the NetOfInterest=0.0.0.0
; and the mask of interest to 255.255.255.255. In that case, any defined station will
; have its data collected, regardless of its subnet. ("Defined Station" in stations.txt).
NetOfInterest=192.168.200.0
MaskOfInterest=255.255.255.0
```

From the same directory, edit the **Stations.txt** file shown below.





Enter a line for each phone extension used by Contact Center Select agents from **Section 6.3**. Use the format “x,y,z”, where “x” is the phone extension, “y” is the phone IP address, and “z” is “True”. This will enable monitoring for the phone extensions used by the agents.

```

; DO NOT REMOVE THESE COMMENTS ! (the records that start with a semicolon).
; This file is used by Cisco_AudioServer or VoIP_AudioServer
; to determine the "stations of interest",
; that is, the stations to be recorded. Because stations can be moved from one
; network segment to another (with different subnet addresses), it can be
; somewhat problematic to keep track of where a station is. Part of the
; technique we will now use is to map a station to its MAC or IP address. Each
; Audio Server will need to know which LAN subnet(s) it is recording.

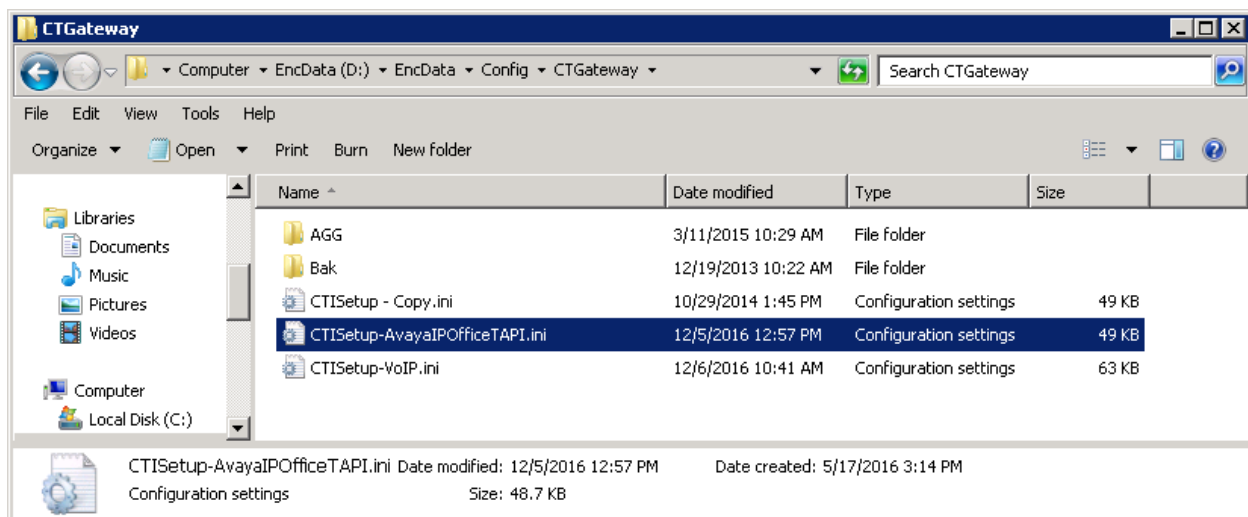
; Since ports can move around, there will NOT be a permanent Station-to-Port
; relationship. A "logical port" will not be assigned until we have actual
; data for a desired station.
; For station to MAC address map, set AddressType = MAC
; For station to IP address map, set AddressType = IP4

; sample entries
; StationID, MAC Address,      Recording Enabled
; AddressType = MAC
; 5201,      00.0d.29.0b.cd.34, True
; 5202,      00.0d.29.0b.d9.30, True
; StationID, IP Address,      Recording Enabled
; AddressType = IP4
; 31881,192.168.200.104,True
; 31882,192.168.200.137,True
; 22031,192.168.200.143,True
; 22033,192.168.200.114,True

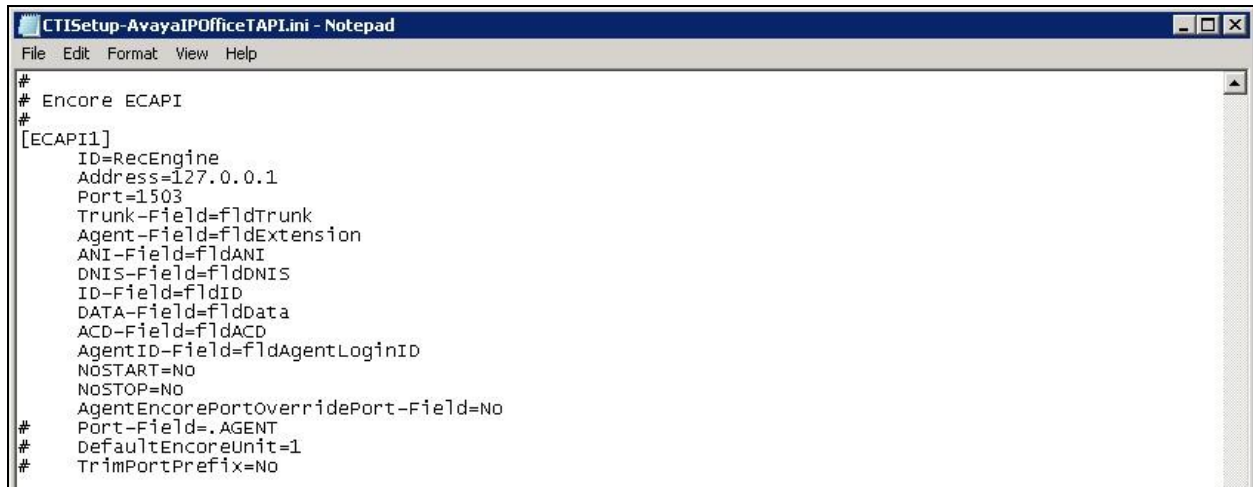
```

## 7.3. Administer CTISetup

Navigate to the **D:\EncData\Config\CTGateway** directory to edit the **CTISetup-AvayaIPOfficeTAPI.ini** file.

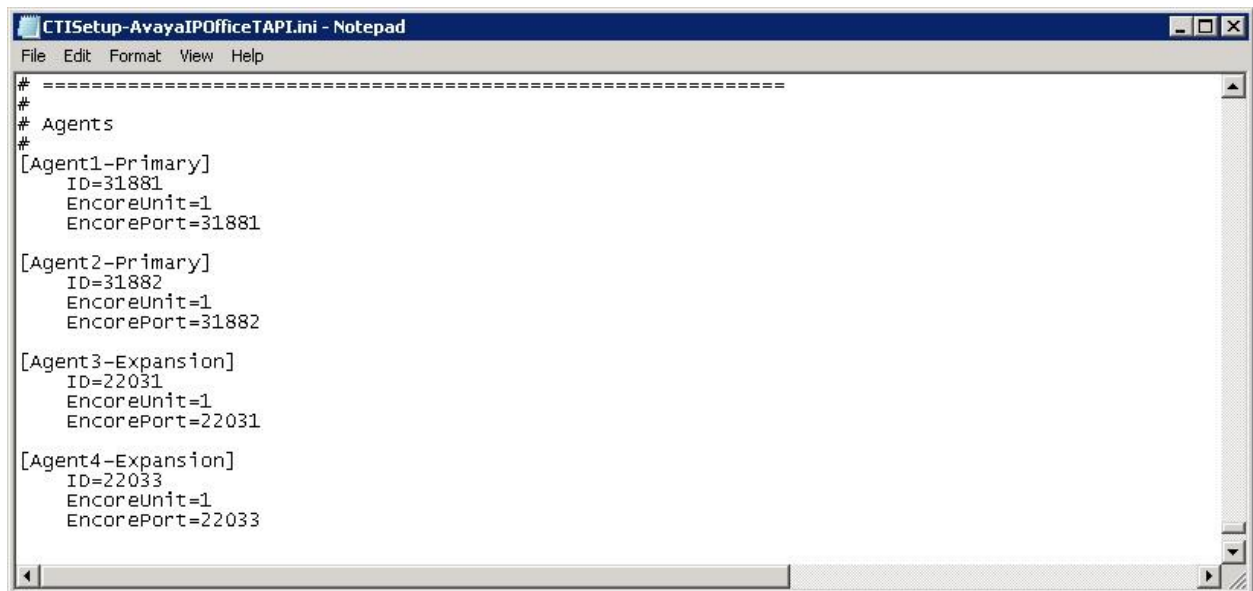


Scroll down to the **Encore ECAPI** sub-section. Under **ECAPI1**, make certain all parameters are set to the default values shown below.



```
#
# Encore ECAPI
#
[ECAP11]
  ID=RecEngine
  Address=127.0.0.1
  Port=1503
  Trunk-Field=fldTrunk
  Agent-Field=fldExtension
  ANI-Field=fldANI
  DNIS-Field=fldDNIS
  ID-Field=fldID
  DATA-Field=fldData
  ACD-Field=fldACD
  AgentID-Field=fldAgentLoginID
  NOSTART=NO
  NOSTOP=NO
  AgentEncorePortOverridePort-Field=No
#
# Port-Field=.AGENT
#
# DefaultEncoreUnit=1
#
# TrimPortPrefix=No
```

Scroll to the **Agents** sub-section. For each phone extension from **Section 7.2**, create a set of entries shown below. In this case, **ID** “31881” and “31882” corresponded to the two phone extensions on the primary IP Office, and “22031” and “22033” corresponded to the two phone extensions on the expansion IP Office. Set **EncoreUnit** to “1”, and set **EncorePort** to the same phone extension value.



```
#
# =====
#
# Agents
#
[Agent1-Primary]
  ID=31881
  EncoreUnit=1
  EncorePort=31881

[Agent2-Primary]
  ID=31882
  EncoreUnit=1
  EncorePort=31882

[Agent3-Expansion]
  ID=22031
  EncoreUnit=1
  EncorePort=22031

[Agent4-Expansion]
  ID=22033
  EncoreUnit=1
  EncorePort=22033
```

## 7.4. Administer CT Gateway

Click on the **CT Gateway** icon from the system tray, as shown below.

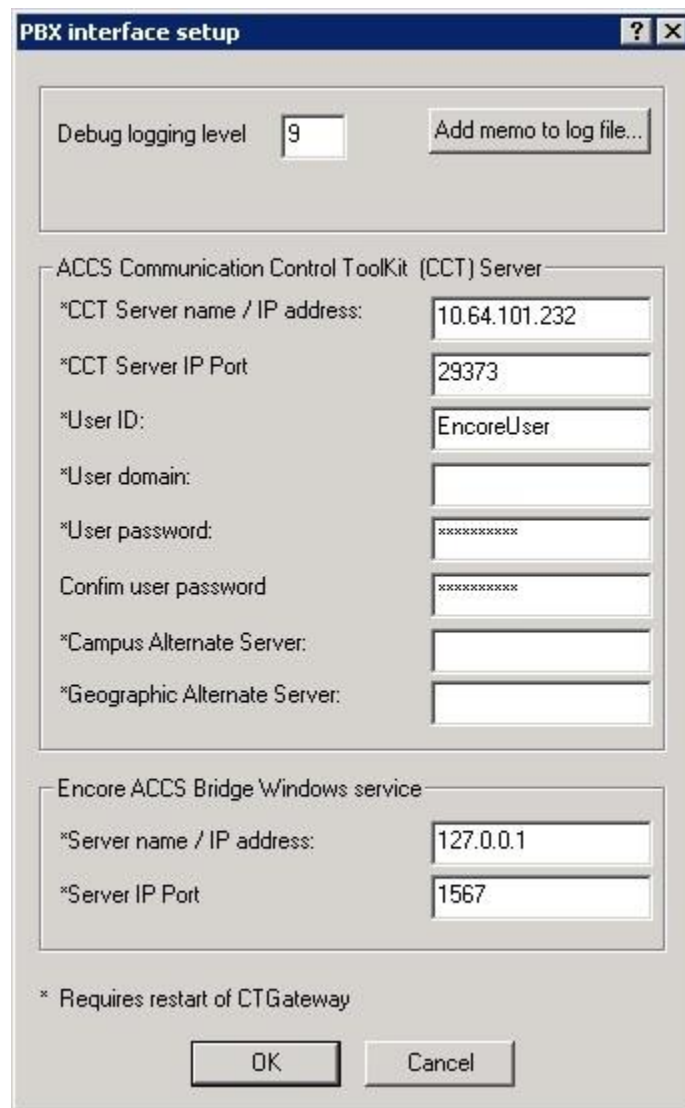


The **CTISetup-AvayaIPOfficeTAPI.ini** screen is displayed. Select **PBX → Configure** from the top menu.

```
CTISetup-AvayaIPOfficeTAPI.ini - CT Gateway (IPOfficeTAPI)
File Edit View Diagnostics PBX Help
DLL: RefreshAddressStatus for line 12, TotalSize=4096, NeededSize=64, UsedSize=64, sizeof(LINEADDRESSSTATUS)=64
DLL: ID=12: DevStatus=CONNECTED+INSERVICE
DLL: Opened 31881, LineID=12, Phone ext=31881, User ext=31881
DLL:@==Evt=HOTDESK_STATUS:20;Dev=31881:5;PermID=0x4e432ae3;PExt=31881;UExt=31881;PrevPhoneExt=
User:31881, Phone=31881, Hotdesk login
PBX:31881: HotDesk Log-in
TAPI LINE 13:Addr=31882;Name=IP Office Phone: 31882;PermanentID=0x4e432ae4;Switch=:Provider=Avaya
DLL: lineOpen ID=13
DLL: lineSetStatusMessages ID=13
DLL: RefreshDevStatus for line 13, TotalSize=4096, NeededSize=292, UsedSize=292, sizeof(LINEDEVSTATUS)=88
DLL: RefreshAddressStatus for line 13, TotalSize=4096, NeededSize=64, UsedSize=64, sizeof(LINEADDRESSSTATUS)=64
DLL: ID=13: DevStatus=CONNECTED+INSERVICE
DLL: Opened 31882, LineID=13, Phone ext=31882, User ext=31882
DLL:@==Evt=HOTDESK_STATUS:20;Dev=31882:5;PermID=0x4e432ae4;PExt=31882;UExt=31882;PrevPhoneExt=
User:31882, Phone=31882, Hotdesk login
PBX:31882: HotDesk Log-in
TAPI LINE 14:Addr=32881;Name=IP Office Phone: 32881;PermanentID=0x4e432ecb;Switch=:Provider=Avaya
DLL: lineOpen ID=14
SIS: Snd STATIONINFO: EncorePort="1:31881", Extension="31881", AppID="CTGateway_IPOfficeTAPI"
SIS: Snd STATIONINFO: EncorePort="1:31882", Extension="31882", AppID="CTGateway_IPOfficeTAPI"
DLL: lineSetStatusMessages ID=14
DLL: RefreshDevStatus for line 14, TotalSize=4096, NeededSize=287, UsedSize=287, sizeof(LINEDEVSTATUS)=88
DLL: RefreshAddressStatus for line 14, TotalSize=4096, NeededSize=64, UsedSize=64, sizeof(LINEADDRESSSTATUS)=64
DLL: ID=14: DevStatus=CONNECTED
DLL: Opened 32881, LineID=14, Phone ext=, User ext=32881
TAPI LINE 15:Addr=32882;Name=IP Office Phone: 32882;PermanentID=0x4e432ecc;Switch=:Provider=Avaya
DLL: lineOpen ID=15
DLL: lineSetStatusMessages ID=15
DLL: RefreshDevStatus for line 15, TotalSize=4096, NeededSize=292, UsedSize=292, sizeof(LINEDEVSTATUS)=88
DLL: RefreshAddressStatus for line 15, TotalSize=4096, NeededSize=64, UsedSize=64, sizeof(LINEADDRESSSTATUS)=64
DLL: ID=15: DevStatus=CONNECTED+INSERVICE
DLL: Opened 32882, LineID=15, Phone ext=32882, User ext=32882
DLL:@==Evt=HOTDESK_STATUS:20;Dev=32882:5;PermID=0x4e432ecc;PExt=32882;UExt=32882;PrevPhoneExt=
TAPI LINE 16:Addr=31880;Name=IP Office Phone: 31880;PermanentID=0x4e432ae2;Switch=:Provider=Avaya
DLL: lineOpen ID=16
DLL: lineSetStatusMessages ID=16
DLL: RefreshDevStatus for line 16, TotalSize=4096, NeededSize=292, UsedSize=292, sizeof(LINEDEVSTATUS)=88
DLL: RefreshAddressStatus for line 16, TotalSize=4096, NeededSize=64, UsedSize=64, sizeof(LINEADDRESSSTATUS)=64
DLL: ID=16: DevStatus=CONNECTED+INSERVICE
DLL: Opened 31880, LineID=16, Phone ext=31880, User ext=31880
DLL:@==Evt=HOTDESK_STATUS:20;Dev=31880:5;PermID=0x4e432ae2;PExt=31880;UExt=31880;PrevPhoneExt=
TAPI LINE 17:Addr=32880;Name=IP Office Phone: 32880;PermanentID=0x4e432eca;Switch=:Provider=Avaya
DLL: lineOpen ID=17
DLL: lineSetStatusMessages ID=17
DLL: RefreshDevStatus for line 17, TotalSize=4096, NeededSize=292, UsedSize=292, sizeof(LINEDEVSTATUS)=88
DLL: RefreshAddressStatus for line 17, TotalSize=4096, NeededSize=64, UsedSize=64, sizeof(LINEADDRESSSTATUS)=64
DLL: ID=17: DevStatus=CONNECTED+INSERVICE
DLL: Opened 32880, LineID=17, Phone ext=32880, User ext=32880
DLL:@==Evt=HOTDESK_STATUS:20;Dev=32880:5;PermID=0x4e432eca;PExt=32880;UExt=32880;PrevPhoneExt=
Ready NUM
```

The **PBX interface setup** screen is displayed. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **CCT Server name / IP address:** IP address of Contact Center Select server.
- **User ID:** The Encore user credential from **Section 5.3**.
- **User password:** The Encore user credential from **Section 5.3**.
- **Confirm user password:** The Encore user credential from **Section 5.3**.



The image shows a Windows-style dialog box titled "PBX interface setup". It contains several input fields and buttons. At the top, there is a "Debug logging level" field with the value "9" and an "Add memo to log file..." button. Below this is a section titled "ACCS Communication Control ToolKit (CCT) Server" which contains fields for "\*CCT Server name / IP address:" (10.64.101.232), "\*CCT Server IP Port" (29373), "\*User ID:" (EncoreUser), "\*User domain:" (empty), "\*User password:" (masked with asterisks), "Confirm user password" (masked with asterisks), "\*Campus Alternate Server:" (empty), and "\*Geographic Alternate Server:" (empty). Below this is a section titled "Encore ACCS Bridge Windows service" with fields for "\*Server name / IP address:" (127.0.0.1) and "\*Server IP Port" (1567). At the bottom, there is a note "\* Requires restart of CTGateway" and two buttons: "OK" and "Cancel".

Field	Value
Debug logging level	9
*CCT Server name / IP address:	10.64.101.232
*CCT Server IP Port	29373
*User ID:	EncoreUser
*User domain:	
*User password:	*****
Confirm user password	*****
*Campus Alternate Server:	
*Geographic Alternate Server:	
*Server name / IP address:	127.0.0.1
*Server IP Port	1567

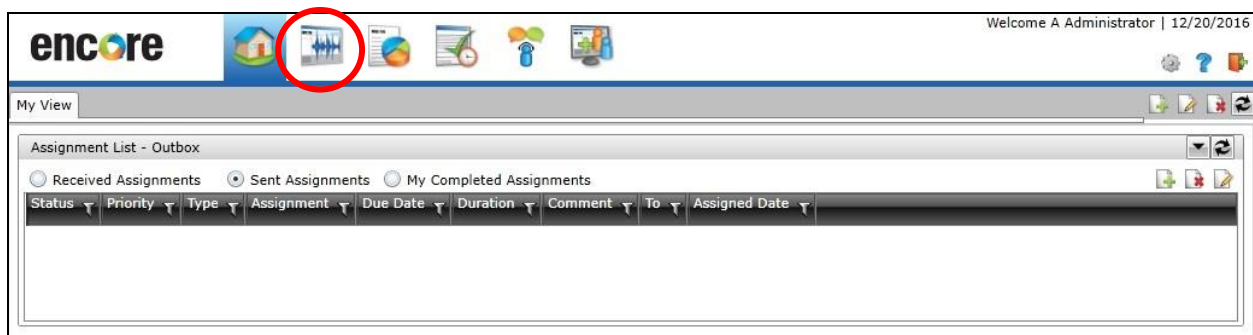
## 8. Verification Steps

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

Log an agent in to handle and complete a Contact Center Select voice call using a phone extension on the primary IP Office. Access the Encore web interface by using the URL “http://ip-address/encore” in an Internet Explorer browser window, where “ip-address” is the IP address of the Encore server. The **encore** screen is displayed. Click **Login** and log in using the appropriate credentials.



The **encore** screen below is displayed. Select the **Recorded Contacts** icon from the top menu, as shown below.



The **encore** screen is updated with a list of call recordings. Verify that there is an entry in the right pane reflecting the last call, with proper values in the relevant fields. In this case, **Device Name** contained the phone extension “31881” used by the answering Contact Center Select agent on the primary IP Office. **ACD Number**, **Skillset**, **Agent Login ID**, and **Recorded Party Name** are parameters with values obtained from the Contact Center Select CCT events.

Right click on the entry and select **Play** to listen to the playback. Verify that the call recording is played back.

The screenshot shows the encore interface with the following data in the call recording table:

Date	Duration	Device Name	ANI	Call Direction	ACD Number	Skillset	Agent Login ID	Recorded Party Name
12/20/2016 10:33:29 AM	00:01:17	31881	9089532103	Incoming	33001	Skill1	31881	Agent1 ACCSP

The interface also shows a sidebar with Libraries (System, Public, Group) and Shared Playlists. The bottom section displays a streaming player with a waveform and playback controls.

Repeat the verification with a Contact Center Select voice call answered by an agent using a phone extension on the expansion IP Office.

The screenshot shows the encore interface with the following data in the call recording table:

Date	Duration	Device Name	ANI	Call Direction	ACD Number	Skillset	Agent Login ID	Recorded Party Name
12/20/2016 10:42:16 AM	00:01:17	22031	7328883834	Incoming	33001	Skill1	32881	Agent1 ACCSE
12/20/2016 10:33:29 AM	00:01:17	31881	9089532103	Incoming	33001	Skill1	31881	Agent1 ACCSP

The interface also shows a sidebar with Libraries (System, Public, Group, My Library) and Shared Playlists. The bottom section displays a streaming player with a waveform and playback controls.



## 9. Conclusion

These Application Notes describe the configuration steps required for dvsAnalytics Encore 6.0.5 to successfully interoperate with Avaya Contact Center Select 7.0 and Avaya IP Office Server Edition 10.0. All feature and serviceability test cases were completed.

## 10. Additional References

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

1. *Administering Avaya IP Office™ Platform with Manager*, Release 10.0, September 2016, available at <http://support.avaya.com>.
2. *Avaya IP Office TAPI and ACCS Installation Addendum*, Version 6.0.4, June 30, 2016, available from dvsAnalytics Support.
3. *Avaya IP Office TAPI and ACCS Integration Guide*, Version 6.0.4, June 30, 2016, available from dvsAnalytics Support.

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