



Avaya Solution & Interoperability Test Lab

Application Notes for BBX Technologies Vuesion Multimedia Contact Center Networking Module with Avaya IP Office 8.0 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for BBX Technologies Vuesion Multimedia Contact Center Networking module to interoperate with Avaya IP Office. In the compliance testing, BBX Technologies Vuesion Multimedia Contact Center provided skill based routing and announcements using the SIP User, TAPI, and DevLink interfaces from Avaya IP Office 8.0. The Networking module facilitates routing of Automatic Call Distribution calls between multiple Avaya IP Offices.

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 BBX Technologies Vuesion Multimedia Contact Center Networking module to interoperate with Avaya IP Office. In the compliance testing, BBX Technologies Vuesion Multimedia Contact Center provided skill based routing and announcements by using the SIP User, TAPI, and DevLink interfaces from Avaya IP Office. The Networking module facilitates routing of Automatic Call Distribution (ACD) calls between multiple Avaya IP Office systems.

The SIP User interface was used by Vuesion to register virtual SIP users and to route incoming calls via an available SIP user in a hunt group to the Vuesion server. The TAPI interface was used by Vuesion to monitor and control the virtual SIP and physical agent and supervisor users, and to provide call control via the agent and supervisor desktops. The Networking module routes ACD calls to agents on either the Main or Remote IP Office based on the routing method configured on the Vuesion server.

The BBX Technologies Vuesion Multimedia Contact Center consisted of the Vuesion Server and Vuesion Client software.

2. General Test Approach and Test Results

The feature test cases were performed manually. Upon start of the BBX Technologies Vuesion Multimedia Contact Center application, the application automatically registers the virtual SIP users to Avaya IP Office.

For the manual part of the testing, incoming calls were made to the main hunt group. The Vuesion server used the TAPI event messages to track agent states, and specified calls to be redirected to available agents. Since the testing concentrated on the Networking module, agents were logged in at both the Main and Remote IP Office. A call was then made into the main hunt group and call was routed to one of the Avaya IP Offices based on the routing method configured on the Vuesion server.

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 BBX Technologies Vuesion Multimedia Contact Center Networking module:

- Proper registration of virtual SIP users.
- Verify if call is being presented to an available agent on Main or Remote site based on Routing method defined in the Vuesion Server.
- Verify the above with Distributed, Best Effort and On Busy routing method.
- Verify agents call controls at both site are functioning correctly.

The serviceability testing focused on verifying the ability of BBX Technologies Vuesion Multimedia Contact Center to recover from adverse conditions, such as disconnecting and reconnecting the Ethernet cables to the Vuesion server and to the Vuesion client.

2.2. Test Results

All test cases were executed and passed. The following observations were made on BBX Technologies Vuesion Multimedia Contact Center Networking module from the compliance testing:

- If the Ethernet connection is lost before a customer calls in, then the call is presented to the failover group. This call is missing in the reports.
- If the Ethernet connection is lost before a customer selects a skill set, this call is lost.

2.3. Support

Technical support on BBX Technologies Vuesion Multimedia Contact Center can be obtained through the following:

- **Phone:** (800) 930-4229, option 4
- **Email:** bbxservice@bbxtech.com
- **Web:** www.bbxtech.com

3. Reference Configuration

The configuration used for the compliance testing is as shown in **Figure 1** below.

In the compliance testing, the Vuesion Manager, Vuesion Reports and Vuesion Client software were running on the one Vuesion server and another copy of the same was running on the same server using VMWare. One was connected to the main site Avaya IP Office and the other was connected to the remote site Avaya IP Office. The two Avaya IP Offices were connected to each other using H.323 Line (Trunk).

Avaya IP Office Manager was hosted on another server. During compliance testing two Vuesion clients were logged in on the same server where one was connected to the Desktop agent and the other to the Desktop Supervisor agent. The same was repeated on the VMWare. Emulated PSTN was used to make inbound/outbound calls to the main site Avaya IP Office.

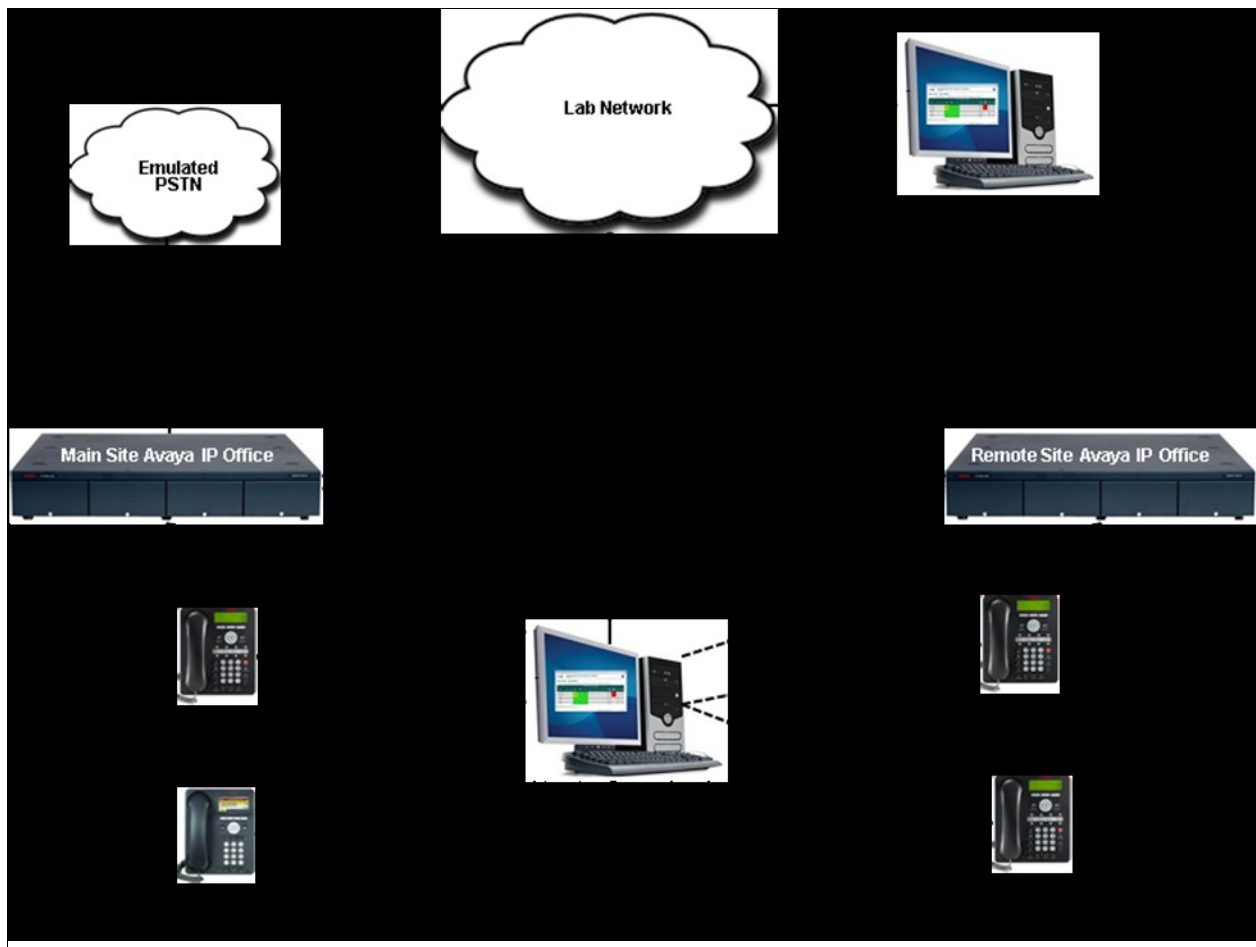


Figure 1: Compliance Test Lab Configuration

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 (18)
Avaya IP Office Manager	10.0 (18)
Avaya 9650 IP Telephone (H.323)	3.186a
Avaya 1608 IP Telephone (H.323)	1.300B
BBX Technologies Vuesion Server on Windows 2008 Server R2 Standard <ul style="list-style-type: none">• Avaya TAPI (tspi2w.tsp)• Avaya DevLink (devlink.dll)	V7.03 1.0.0.35 1.0.0.5
BBX Technologies Vuesion Client	V7.03

5. Configure Avaya IP Office

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

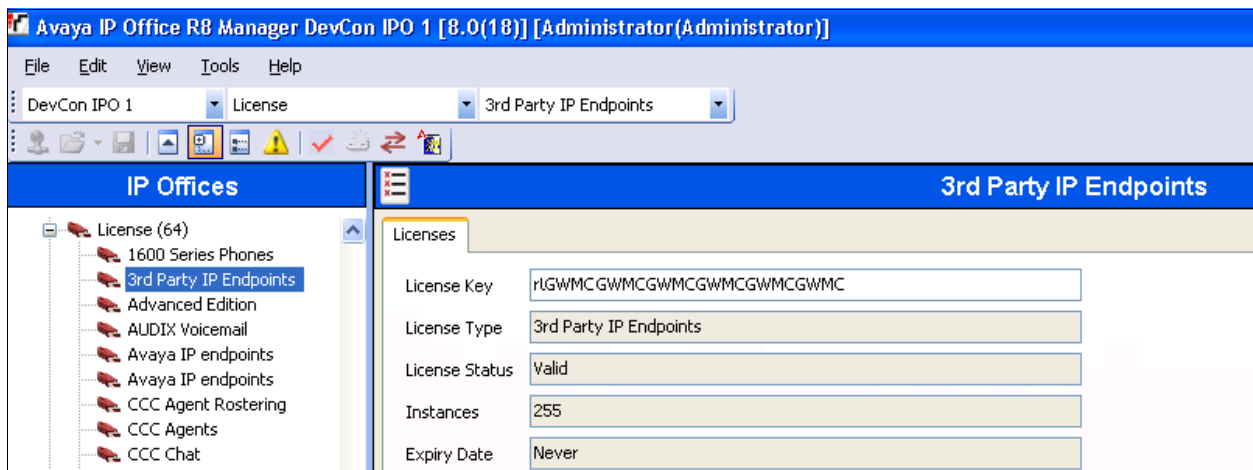
- Verify IP Office license.
- Obtain LAN IP address.
- Administer SIP Registrar.
- Administer SIP extensions.
- Administer SIP users.
- Administer hunt groups.
- Administer agents.
- Administer supervisors.
- Administer incoming call route.
- Administer short code.
- Administer H323 Line.

Most of the above procedures have to be repeated for the remote site Avaya IP Office.

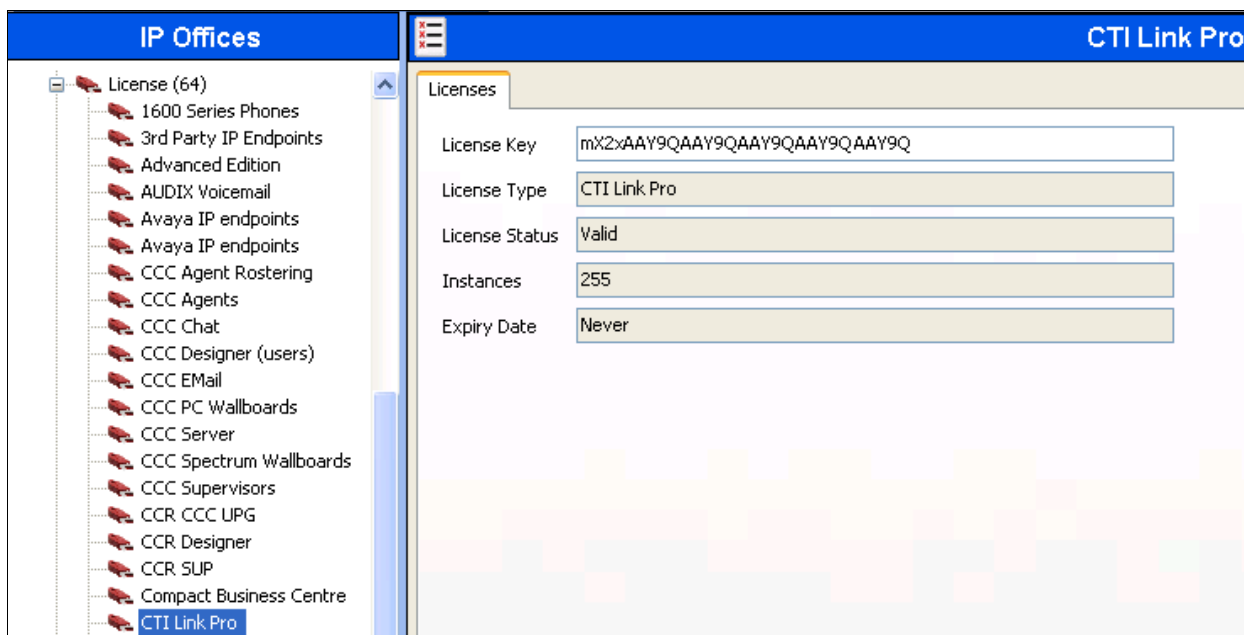
5.1. Verify IP Office License

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 R8 Office Manager** screen is displayed. From the configuration tree in the left pane, select **License → 3rd Party IP End-points** to display the **3rd Party IP End-points** screen in the right pane. Verify that the **License Status** is “Valid”.

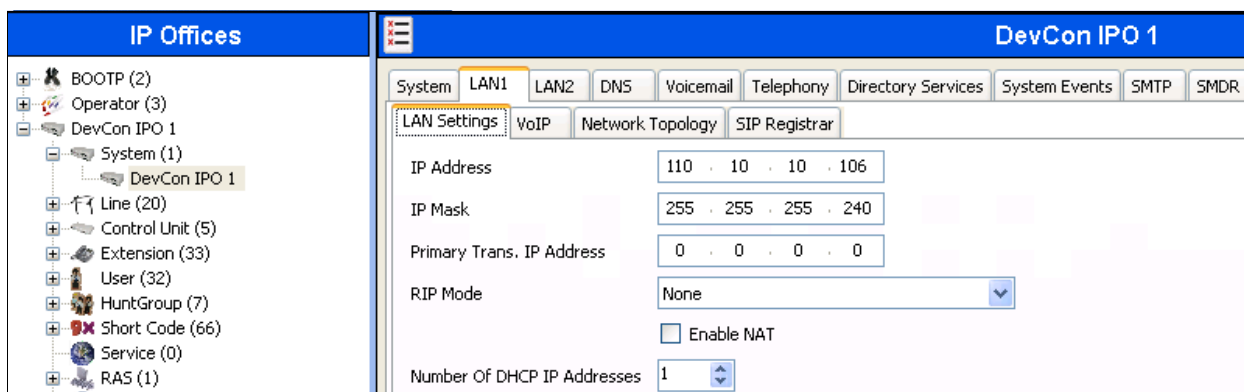


Scroll down the left pane and select **License** → **CTI Link Pro**, to display the **CTI Link Pro** screen in the right pane. Verify that the **License Status** is “Valid”.



5.2. Obtain LAN IP Address

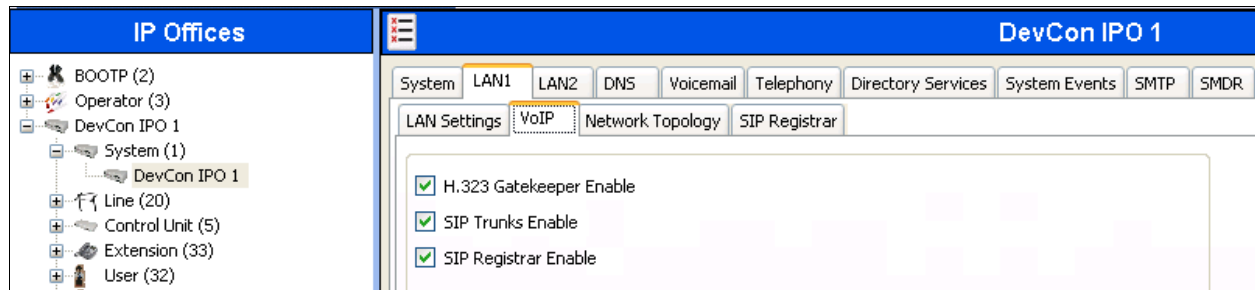
From the configuration tree in the left pane, select **System** to display the **DevCon IPO 1** screen in the right pane. Select the **LAN1** tab, followed by the **LAN Settings** sub-tab in the right pane. Make a note of the **IP Address**, which will be used later to configure Vuesion. Note that IP Office can support SIP on the LAN1 and/or LAN2 interfaces, and the compliance testing used the LAN1 interface.



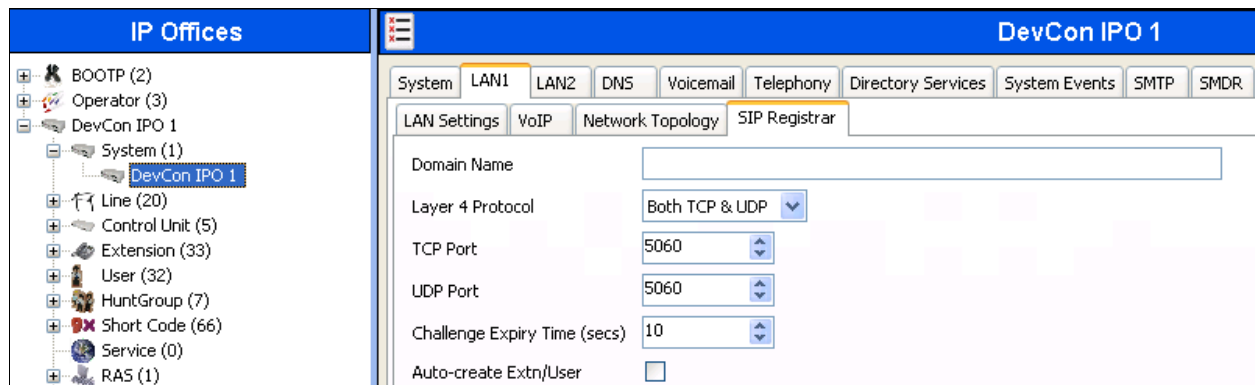
IP address of the remote site IP Office is 110.10.10.109 which will be used later to configure remote site Vuesion server.

5.3. Administer SIP Registrar

Select the **VoIP** sub-tab. Make certain that **SIP Registrar Enable** is checked, as shown below. Retain default values for the remaining fields.



Select the **SIP Registrar** sub-tab, and enter a valid **Domain Name** for SIP endpoints to use for registration with IP Office. In the compliance testing, the **Domain Name** was left blank, so the LAN IP address was used for registration.



5.4. Administer SIP Extensions

From the configuration tree in the left pane, right-click on **Extension**, and select **New → SIP Extension** from the pop-up list to add a new SIP extension. Enter the desired digits for **Base Extension**, and retain the default values in the remaining fields. The screen below shows the added SIP extension.

The screenshot displays the 'IP Offices' configuration window. On the left, a tree view shows the hierarchy: BOOTP (2), Operator (3), DevCon IPO 1, System (1), DevCon IPO 1, Line (20), Control Unit (5), and Extension (33). The 'Extension (33)' folder is expanded, showing a list of extensions from 101 28201 to 8000 28235. The '8000 28235' extension is selected. The right pane shows the configuration for this extension. The 'VoIP' tab is active. Fields include: Extension Id (8000), Base Extension (28235), Caller Display Type (On), Reset Volume After Calls (unchecked), Device type (Unknown SIP device), Module (0), Port (0), and Force Authorization (checked).

Select the **VoIP** tab. Check **Re-invite Supported**, and **Reserve 3rd party IP endpoint license**, as shown below. Uncheck **Allow Direct Media Path**. Select “Custom” from **Codec Selection** drop down box and move “G.729 (a) 8K CS-ACELP” to the **Selected** column. Retain the default values in the remaining fields.

Repeat this section to add the desired number of SIP extensions. In the compliance testing, five SIP extensions with base extensions of 28235-28239 were created. On the remote site base extensions of 29228-29232 were created.

IP Offices

- BOOTP (2)
- Operator (3)
- DevCon IPO 1
 - System (1)
 - DevCon IPO 1
 - Line (20)
 - Control Unit (5)
 - Extension (33)
 - 101 28201
 - 102 28202
 - 103 28203
 - 104 28204
 - 105 28205
 - 106 28206
 - 107 28207
 - 108 28208
 - 109 28209
 - 110 28210
 - 111 28211
 - 112 28212
 - 113 28213
 - 114 28214
 - 115 28215
 - 116 28216

SIP Extension: 8000 28235*

Extn

VoIP

T38 Fax

IP Address

0 - 0 - 0 - 0

Codec Selection

Custom

Unused

G.711 ULAW 64K
G.711 ALAW 64K
G.722 64K
G.723.1 6K3 MP-MLQ

>>

<<

↑

↓

>>

Selected

G.729(a) 8K CS-ACELP

Fax Transport Support

None

TDM->IP Gain

Default

IP->TDM Gain

Default

DTMF Support

RFC2833

☐ VoIP Silence Suppression

☐ Local Hold Music

☐ Allow Direct Media Path

☒ Re-invoke Supported

☐ Use Offerer's Preferred Codec

☐ Reserve Avaya IP endpoint license

☒ Reserve 3rd party IP endpoint license

5.5. Administer SIP Users

From the configuration tree in the left pane, right-click on **User**, and select **New** from the pop-up list. For **Name** and **Full Name**, enter the same desired value prefixed with “IVR”, as required by Vuesion. For **Extension**, enter the first SIP base extension from **Section 5.4**. Retain the default values in the remaining fields. The screen below shows the added SIP user.

IP Offices

- BOOTP (2)
- Operator (3)
- DevCon IPO 1
 - System (1)
 - DevCon IPO 1
 - Line (20)
 - Control Unit (5)
 - Extension (33)
 - User (32)

IVR 28235: 28235

User | Voicemail | DND | ShortCodes | Source Numbers | Telephony | Forwarding | Dial In | Voice Recording | Button Programming

Name: IVR 28235
Password:
Confirm Password:
Full Name: IVR 28235
Extension: 28235
Locale:
Priority: 5
System Phone Rights: None
Profile: Basic User

☐ Receptionist
☐ Enable Softphone
☐ Enable one-X Portal Services
☐ Enable one-X TeleCommuter
☐ Enable Remote Worker
☐ Ex Directory

Device Type: Unknown SIP device

User Rights

User Rights view: User data
Working hours time profile: <None>
Working hours User Rights:
Out of hours User Rights:

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

IP Offices

- BOOTP (2)
- Operator (3)
- DevCon IPO 1
 - System (1)
 - DevCon IPO 1
 - Line (20)
 - Control Unit (5)
 - Extension (33)
 - User (32)

IVR 28235: 28235

User | **Voicemail** | DND | ShortCodes | Source Numbers | Telephony | Forwarding | Dial In | Voice Recording

Voicemail Code:
Confirm Voicemail Code:
Voicemail Email:
☐ Voicemail On
☐ Voicemail Help
☐ Voicemail Ringback
☐ Voicemail Email Reading
☐ UMS Web Services

Voicemail Email:
☐ Off ☐ Copy ☐ Forward ☐ Alert

DTMF Breakout

Reception / Breakout (DTMF *0): System Default ()
Breakout (DTMF *2): System Default ()
Breakout (DTMF *3): System Default ()

Select the **Telephony** tab, followed by the **Supervisor Settings** sub-tab. Enter a desired **Login Code**.

Repeat this section to add a new user for each SIP extension from **Section 5.4**. In the compliance testing, five users with extensions of 28235-28239 were created. In the remote site five users with extensions of 29228-29232 were created.

The screenshot displays the Avaya IP Office configuration interface. On the left, the 'IP Offices' tree shows a hierarchy: BOOTP (2) > Operator (3) > DevCon IPO 1 > System (1) > DevCon IPO 1 > Line (20) > Control Unit (5) > Extension (33) > User (32). Under 'User (32)', a list of users is shown, including 'NoUser' and extensions 28201 through 28211. The main panel is titled 'IVR 28235: 28235' and contains several tabs: 'User', 'Voicemail', 'DND', 'ShortCodes', 'Source Numbers', 'Telephony' (selected), 'Forwarding', 'Dial In', 'Voice Recording', and 'Button Programming'. Within the 'Telephony' tab, there are sub-tabs: 'Call Settings', 'Supervisor Settings' (selected), 'Multi-line Options', and 'Call Log'. The 'Supervisor Settings' sub-tab contains the following fields and options:

- Login Code:** A text field containing '****'.
- Login Idle Period (secs):** A text field.
- Monitor Group:** A dropdown menu showing '<None>'.
- Coverage Group:** A dropdown menu showing '<None>'.
- Status on No-Answer:** A dropdown menu showing 'Logged On (No change)'.
- Reset Longest Idle Time:** A section with two radio buttons: 'All Calls' (selected) and 'External Incoming'.
- After Call Work Time (secs):** A dropdown menu showing 'System Default (10)'.
- Force Login:** An unchecked checkbox.
- Force Account Code:** An unchecked checkbox.
- Outgoing Call Bar:** An unchecked checkbox.
- Inhibit Off-Switch Forward/Transfer:** An unchecked checkbox.
- Can Intrude:** An unchecked checkbox.
- Cannot be Intruded:** A checked checkbox.
- Can Trace Calls:** An unchecked checkbox.
- CCR Agent:** An unchecked checkbox.
- Automatic After Call Work:** An unchecked checkbox.

5.6. Administer Hunt Groups

Administer five hunt groups for the following purposes:

- Main hunt group for delivering of incoming trunk calls to Vuesion.
- Monitor hunt group for supervisor monitoring of agents.
- Transfer hunt group for use by Vuesion for internal transfers.
- Network hunt group for use by main site Vuesion server to add members from remote site.
- Failover hunt group for use by Vuesion to redirect calls during network disruption.

5.6.1. Administer Main Hunt Group

From the configuration tree in the left pane, right-click on **HuntGroup** and select **New** from the pop-up list to add a new hunt group. This hunt group will be used to deliver incoming trunk calls to Vuesion.

Enter desired values for **Name** and **Extension**. For **Ring Mode**, select “Rotary” from the drop-down list. Retain the default values in the remaining fields

In the **User List** section, add the desired number of virtual SIP users from **Section 5.5** as members. In the compliance testing, 28235 to 28237 were added as members as shown below. In the remote site 29228 to 29230 were added as members.

IP Offices

- BOOTP (2)
- Operator (3)
- DevCon IPO 1
 - System (1)
 - DevCon IPO 1
 - Line (20)
 - Control Unit (5)
 - Extension (33)
 - User (32)
 - HuntGroup (7)
 - 77200 BBX CSR
 - 77600 BBX Failover
 - 77100 BBX Main**
 - 77500 BBX Monitor
 - 77700 BBX NetCSR
 - 77300 BBX Outdial
 - 77199 IVR Pilot
 - Short Code (66)
 - Service (0)
 - RAS (1)
 - Incoming Call Route (4)
 - WanPort (0)
 - Directory (0)
 - Time Profile (0)
 - Firewall Profile (1)
 - IP Route (2)
 - Account Code (1)
 - License (64)
 - Tunnel (0)

Rotary Group BBX Main: 77100

Hunt Group Queuing Overflow Fallback Voicemail Voice Recording Announcements SIP

Name: BBX Main ☐ CCR Agent Group

Extension: 77100

Ring Mode: Rotary No Answer Time (secs): System Default (15)

Hold Music Source: No Change

Agent's Status on No-Answer Applies To: None

Central System: DevCon IPO 1 ☐ Advertize Group

User List

Extension	Name	System
<input checked="" type="checkbox"/> 28235	IVR 28235	DevCon IPO 1
<input checked="" type="checkbox"/> 28236	IVR 28236	DevCon IPO 1
<input checked="" type="checkbox"/> 28237	IVR 28237	DevCon IPO 1

Edit... Remove

Select the **Voicemail** tab, and uncheck **Voicemail On**.

IP Offices

- BOOTP (2)
- Operator (3)
- DevCon IPO 1
 - System (1)
 - DevCon IPO 1
 - Line (20)
 - Control Unit (5)
 - Extension (33)
 - User (32)
 - HuntGroup (7)
 - 77200 BBX CSR
 - 77600 BBX Failover
 - 77100 BBX Main

Rotary Group BBX Main: 77100

Hunt Group | **Queuing** | Overflow | Fallback | **Voicemail** | Voice Recording | Announcements | SIP

Voicemail Code:
Confirm Voicemail Code:
Voicemail Email:
Voicemail Email: ☐ Off ☐ Copy ☐ Forward ☐ Alert

☐ **Voicemail On**
Voicemail Answer Time (secs): 45
☐ Voicemail Help
☐ Broadcast
☐ UMS Web Services

Select the **Queuing** tab, and uncheck **Queuing On**.

IP Offices

- BOOTP (2)
- Operator (3)
- DevCon IPO 1
 - System (1)
 - DevCon IPO 1
 - Line (20)
 - Control Unit (5)
 - Extension (33)
 - User (32)
 - HuntGroup (7)
 - 77200 BBX CSR
 - 77600 BBX Failover
 - 77100 BBX Main

Rotary Group BBX Main: 77100

Hunt Group | **Queuing** | Overflow | Fallback | Voicemail | Voice Recording | Announcements | SIP

☐ **Queuing On**
Queue Length: No Limit ☒ Normalize Queue Length
Queue Type: Assign Call On Agent Answer
Calls In Queue Alarm:
Analog Extension to Notify: <None>

5.6.2. Administer Monitor Hunt Group

From the configuration tree in the left pane, right-click on **HuntGroup** and select **New** from the pop-up list to add a new hunt group. This hunt group will be used for supervisor monitoring of agents.

Enter desired values for **Name** and **Extension**, and retain the default values in the remaining fields.

Follow the procedures in **Section 5.6.1** to uncheck **Voicemail On**.

In the **User List** section, add the agent users as members. In the compliance testing, 28233 and 28234 were added as members as shown below. In the remote site 29225 and 29226 were added as members.

IP Offices

- BOOTP (2)
- Operator (3)
- DevCon IPO 1
 - System (1)
 - DevCon IPO 1
 - Line (20)
 - Control Unit (5)
 - Extension (33)
 - User (32)
 - HuntGroup (7)
 - 77200 BBX CSR
 - 77600 BBX Failover
 - 77100 BBX Main
 - 77500 BBX Monitor
 - 77700 BBX NetCSR
 - 77300 BBX Outdial
 - 77199 IVR Pilot
 - Short Code (66)
 - Service (0)
 - RAS (1)
 - Incoming Call Route (4)
 - WanPort (0)
 - Directory (0)
 - Time Profile (0)
 - Firewall Profile (1)
 - IP Route (2)
 - Account Code (1)
 - License (64)
 - Tunnel (0)

Sequential Group BBX Monitor: 77500

Hunt Group | Queuing | Overflow | Fallback | Voicemail | Voice Recording | Announcements | SIP

Name: BBX Monitor ☐ CCR Agent Group

Extension: 77500

Ring Mode: Sequential No Answer Time (secs): System Default (15)

Hold Music Source: No Change

Agent's Status on No-Answer Applies To: None

Central System: DevCon IPO 1 ☐ Advertize Group

User List

Extension	Name	System
<input checked="" type="checkbox"/> 28233	Extn28233	DevCon IPO 1
<input checked="" type="checkbox"/> 28234	Extn28234	DevCon IPO 1

Edit... Remove

From the configuration tree in the left pane, right-click on **HuntGroup** and select **New** from the pop-up list to add a new hunt group. This hunt group will be used by Vuesion for internal transfers.

In the **User List** section, add the desired number of virtual SIP users from **Section 5.5** as members. In the compliance testing, 28235 to 28237 were added as members as shown below. In the remote site 29228 to 29230 were added as members.

IP Offices

- BOOTP (2)
- Operator (3)
- DevCon IPO 1
 - System (1)
 - DevCon IPO 1
- Line (20)
 - Control Unit (5)
 - Extension (33)
 - User (32)
 - HuntGroup (7)
 - 77200 BBX CSR**
 - 77600 BBX Fallover
 - 77100 BBX Main
 - 77500 BBX Monitor
 - 77700 BBX NetCSR
 - 77300 BBX Outdial
 - 77199 IVR Pilot
- Short Code (66)
- Service (0)
- RAS (1)
- Incoming Call Route (4)
- WanPort (0)
- Directory (0)
- Time Profile (0)
- Firewall Profile (1)
- IP Route (2)
- Account Code (1)
- License (64)
- Tunnel (0)

Rotary Group BBX CSR: 77200

Hunt Group | Queuing | Overflow | Fallback | Voicemail | Voice Recording | Announcements | SIP

Name: BBX CSR ☐ CCR Agent Group

Extension: 77200

Ring Mode: Rotary No Answer Time (secs): System Default (15)

Hold Music Source: No Change

Agent's Status on No-Answer Applies To: None

Central System: DevCon IPO 1 ☐ Advertize Group

User List

Extension	Name	System
<input checked="" type="checkbox"/> 28235	IVR 28235	DevCon IPO 1
<input checked="" type="checkbox"/> 28236	IVR 28236	DevCon IPO 1
<input checked="" type="checkbox"/> 28237	IVR 28237	DevCon IPO 1

5.6.4. Administer Network Hunt Group

From the configuration tree in the left pane, right-click on **HuntGroup** and select **New** from the pop-up list to add a new hunt group. This hunt group will be used by main to make transfers to remote site Vuesion.

Enter desired values for **Name** and **Extension**. For **Ring Mode**, select “Rotary” from the drop-down list. Retain the default values in the remaining fields.

In the **User List** section, add the desired number of virtual SIP users from **Section 5.5** as members from remote site. In the compliance testing, 29228 to 29230 were added as members from the remote site as shown below.

IP Offices

- BOOTP (2)
- Operator (3)
- DevCon IPO 1
 - System (1)
 - Line (20)
 - 1
 - 2
 - 17
 - 19
 - 201
 - 202
 - 203
 - 204
 - 205
 - 206
 - 207
 - 208
 - 209
 - 210
 - 211
 - 212
 - 213
 - 214
 - 215
 - 216
- Control Unit (5)
- Extension (35)
- User (35)
- HuntGroup (7)
 - 77200 BBX CSR
 - 77600 BBX Failover
 - 77100 BBX Main
 - 77500 BBX Monitor
 - 77700 BBX NetCSR**
 - 77300 BBX Outdial
 - 77199 IVR Pilot

Rotary Group BBX NetCSR: 77700

Hunt Group Queuing Overflow Fallback Voicemail Voice Recording Announcements SIP

Name: BBX NetCSR

Extension: 77700

Ring Mode: Rotary

Hold Music Source: No Change

Agent's Status on No-Answer Applies To: None

Central System: DevCon IPO 1

☐ CCR Agent Group

No Answer Time (secs): System Default (15)

☒ Advertize Group

User List

Extension	Name	System
<input checked="" type="checkbox"/>	29228	IVR 29228
<input checked="" type="checkbox"/>	29229	IVR 29229
<input checked="" type="checkbox"/>	29230	IVR 29230

Edit... Remove

5.6.5. Administer Failover Hunt Group

From the configuration tree in the left pane, right-click on **HuntGroup** and select **New** from the pop-up list to add a new hunt group. This hunt group will be used by Vuesion to route calls during any network failures.

Enter desired values for **Name** and **Extension**. For **Ring Mode**, select “Collective Call Waiting” from the drop-down list. Retain the default values in the remaining fields.

In the **User List** section, add the agent users as members. In the compliance testing, 28201 and 28234 were added as members as shown below. In the remote site 29210 and 29226 were added as members.

Follow the procedures in **Section 5.6.1** to uncheck **Voicemail On** and **Queuing On**.

The screenshot shows the Avaya Vuesion configuration interface. On the left is a tree view of the system configuration, with '77600 BBX Failover' selected under the 'HuntGroup' category. The main pane displays the configuration for 'Collective Group BBX Failover: 77600'. The 'Hunt Group' tab is active, showing fields for Name (BBX Failover), Extension (77600), Ring Mode (Collective Call Waiting), Hold Music Source (No Change), Agent's Status on No-Answer Applies To (None), and Central System (DevCon IPO 1). There are checkboxes for 'CCR Agent Group' and 'Advertise Group'. Below these fields is a 'User List' table with columns for Extension, Name, and System. Two users are listed: 28201 (Extn28201, DevCon IPO 1) and 28234 (Extn28234, DevCon IPO 1), both with checkmarks in the first column. At the bottom right of the User List are 'Edit...' and 'Remove' buttons.

Extension	Name	System
28201	Extn28201	DevCon IPO 1
28234	Extn28234	DevCon IPO 1

5.7. Administer Agents

From the configuration tree in the left pane, select the first agent user, in this case “28233”. In the remote site agent user is 29226.

Select the **Telephony** tab, followed by the **Supervisor Settings** sub-tab. Uncheck **Cannot be Intruded**, as shown below. If this agent needs to be monitored then select the required monitoring group from the **Monitor Group** drop down menu.

Repeat this section for all agent users.

The screenshot displays the Avaya configuration interface. On the left, the 'IP Offices' tree shows a hierarchy: BOOTP (2), Operator (3), DevCon IPO 1, System (1), DevCon IPO 1, Line (20), Control Unit (5), Extension (33), and User (32). Under 'User (32)', a list of users is shown, with '28233 Extn28233' selected at the bottom. The main panel is titled 'Extn28233: 28233' and contains several tabs: User, Voicemail, DND, ShortCodes, Source Numbers, Telephony (selected), Forwarding, Dial In, Voice Recording, and Button Programming. Within the 'Telephony' tab, the 'Supervisor Settings' sub-tab is active. It contains the following settings: 'Login Code' (text field), 'Login Idle Period (secs)' (text field), 'Monitor Group' (dropdown menu set to 'BBX Monitor'), 'Coverage Group' (dropdown menu set to '<None>'), 'Status on No-Answer' (dropdown menu set to 'Logged On (No change)'), 'Reset Longest Idle Time' (radio buttons for 'All Calls' (selected) and 'External Incoming'), 'After Call Work Time (secs)' (dropdown menu set to 'System Default (10)'), 'Force Login' (checkbox), 'Force Account Code' (checkbox), 'Outgoing Call Bar' (checkbox), 'Inhibit Off-Switch Forward/Transfer' (checkbox), 'Can Intrude' (checkbox), 'Cannot be Intruded' (checkbox, which is unchecked), 'Can Trace Calls' (checkbox), 'CCR Agent' (checkbox), and 'Automatic After Call Work' (checkbox).

5.8. Administer Supervisors

From the configuration tree in the left pane, select the first supervisor user that will be monitoring agents, in this case “28234”. In the remote site the supervisor user is 29225.

Select the **Telephony** tab, followed by the **Supervisor Settings** sub-tab. For **Monitor Group**, select the Monitor hunt group from **Section 5.6.2**. Check **Can Intrude** and **Cannot be Intruded**.

Repeat this section for all supervisors that will be monitoring agents. In the compliance testing, one supervisor user with extension 28234 was configured, as shown below.

The screenshot displays the Avaya configuration interface. On the left, the 'IP Offices' tree shows a hierarchy: BOOTP (2), Operator (3), DevCon IPO 1, System (1), DevCon IPO 1, Line (20), Control Unit (5), Extension (33), and User (32). Under 'User (32)', a list of users is shown, with '28234 Extn28234' selected at the bottom. The main panel is titled 'Extn28234: 28234*' and contains several tabs: User, Voicemail, DND, ShortCodes, Source Numbers, Telephony (selected), Forwarding, Dial In, Voice Recording, and Button Programming. The 'Telephony' tab has sub-tabs: Call Settings, Supervisor Settings (selected), Multi-line Options, and Call Log. The 'Supervisor Settings' sub-tab contains the following configuration options:

- Login Code: [Text Field]
- Login Idle Period (secs): [Text Field]
- Monitor Group: BBX Monitor (dropdown)
- Coverage Group: <None> (dropdown)
- Status on No-Answer: Logged On (No change) (dropdown)
- Reset Longest Idle Time: All Calls (radio button selected), External Incoming (radio button)
- After Call Work Time (secs): System Default (10) (dropdown)
- Force Login: [checkbox]
- Force Account Code: [checkbox]
- Outgoing Call Bar: [checkbox]
- Inhibit Off-Switch Forward/Transfer: [checkbox]
- Can Intrude: [checkbox checked]
- Cannot be Intruded: [checkbox checked]
- Can Trace Calls: [checkbox]
- CCR Agent: [checkbox]
- Automatic After Call Work: [checkbox]

5.9. Administer Incoming Call Route

If necessary, create an incoming call route to route incoming calls to the Main hunt group. In the compliance testing, a SIP line “17” was created for incoming route

As shown in the screen below, the **Line Group ID** of “17” is selected.

The screenshot displays the 'IP Offices' configuration window. On the left, a tree view shows the hierarchy: BOOTP (2), Operator (3), DevCon IPO 1, System (1), DevCon IPO 1, Line (20), Control Unit (5), Extension (33), User (32), HuntGroup (7), Short Code (66), Service (0), RAS (1), and Incoming Call Route (4). Under 'Incoming Call Route (4)', three items are listed: 2, 17 (highlighted in blue), and 1. The main panel on the right is titled '17' and contains several tabs: 'Standard', 'Voice Recording', and 'Destinations'. The 'Standard' tab is active, showing fields for: Bearer Capability (Any Voice), Line Group ID (17), Incoming Number, Incoming Sub Address, Incoming CLI, Locale, Priority (1 - Low), Tag, and Hold Music Source (System Source).

In the **Destinations** tab, the use of “.” in the **Destination** field enables the routing to reach all extensions in the IP Office.

If desired, the Main hunt group can be selected from the **Destination** drop-down to route all incoming trunk calls to Vuesion.

The screenshot displays the 'IP Offices' configuration window, specifically the 'Destinations' tab for Line Group ID 17. The left tree view is identical to the previous screenshot, with '17' highlighted under 'Incoming Call Route (4)'. The main panel on the right shows the 'Destinations' tab with a table containing one row: 'Default Value' in the 'TimeProfile' column, '.' in the 'Destination' column, and a dropdown arrow in the 'Fallback Extension' column.

5.10. Administer Short Code

From the configuration tree in the left pane, right-click on **Short Code** and select **New** from the pop-up list to add a new short code for Outbound dialing. Configure the fields as shown below in the right pane.

Note that the short code **9N;** was used during compliance testing for making outbound calls. Outbound calls were routed using **Line Group ID “17”**, which is a SIP Line created on IP Office.

The screenshot displays the IP Office configuration interface. On the left, the 'IP Offices' pane lists various short codes, with '9N;' selected at the bottom. The right pane, titled '9N;; Dial', shows the configuration for this short code. The 'Short Code' tab is active, and the following fields are configured:

Field	Value
Code	9N;
Feature	Dial
Telephone Number	N"@110.10.10.108"
Line Group ID	17
Locale	United States (US English)
Force Account Code	<input type="checkbox"/>

5.11. Administer H323 Line

From the configuration tree in the left pane, right-click on **Line** and select **New** from the pop-up list to add a new H323 Line for connection between the main and remote site Avaya IP Offices. Configure the fields as shown below in the right pane. During compliance testing **Line Number** was selected to be “19”. Retain default values for the rest of the fields.

The screenshot shows the Avaya configuration interface. On the left, the 'IP Offices' tree is expanded to 'Line (20)', with line 19 selected. The right pane is titled 'H323 Line - Line 19' and has three tabs: 'VoIP Line', 'Short Codes', and 'VoIP Settings'. The 'VoIP Line' tab is active, showing the following fields:

Field	Value	Field	Value
Line Number	19	TEI	0
Telephone Number			
Incoming Group ID	0	Outgoing Group ID	0
Prefix		Number of Channels	20
National Prefix		Outgoing Channels	20
International Prefix		Voice Channels	20

In the **VoIP Settings** tab enter the IP address of the remote Avaya IP Office for the **Gateway IP Address** field. Select “IP Office SCN” from the drop down list for the **Supplementary Services** field as shown on screen below. Retain default values for all remaining fields.

The screenshot shows the 'VoIP Settings' tab for 'H323 Line - Line 19'. The 'Gateway IP Address' is set to 110.10.10.109. The 'Codec Selection' is set to 'System Default'. The 'Supplementary Services' dropdown is set to 'IP Office SCN'. The 'SCN Backup Options' are all unchecked. The 'Call Initiation Timeout (s)' is set to 4. The 'LRQ Subnet' is set to 0.0.0.0. The 'Support LRQs' checkbox is unchecked. The 'Unused' and 'Selected' codec lists are shown, with the 'Selected' list containing: G.711 ULAW 64K, G.711 ALAW 64K, G.723.1 6K3 MP-MLQ, G.729(a) 8K CS-ACELP, and G.722 64K.

On the remote site Line Number 17 was configured as H323 Line with Gateway IP Address of the main site IP Office of 110.10.10.106.

6. Configure BBX Technologies Vuesion Multimedia Contact Center

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

- Administer TAPI driver.
- Administer Switch.txt.
- Stop service.
- Launch Vuesion Manager.
- Administer communication settings.
- Administer local extensions.
- Administer tenants.
- Administer VMAIL extensions.
- Administer queues sizing.
- Administer ACD members.
- Administer ACD groups.
- Administer ACD network.
- Start service.

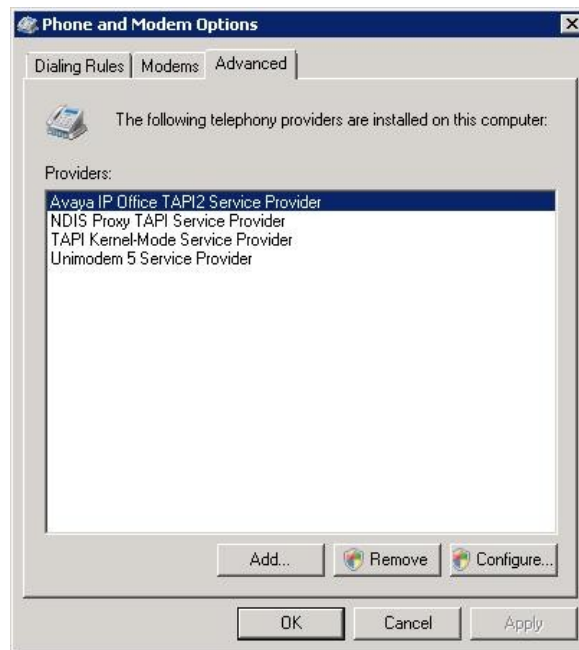
All the above procedures have to be repeated for the remote Vuesion Server running on VMWare which will be communicating with the remote site Avaya IP Office.

The configuration of the Vuesion server is typically performed by BBX Technologies technicians. The procedural steps are presented in these Application Notes for informational purposes.

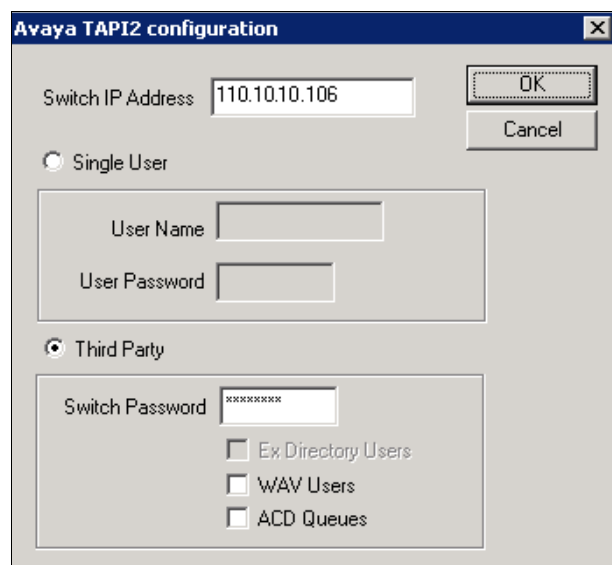
In addition to the shown procedural steps, the application also requires the auto attendant, and the class of service for the agents and supervisors be configured by following reference in **Section 9 [2]**.

6.1. Administer TAPI Driver

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

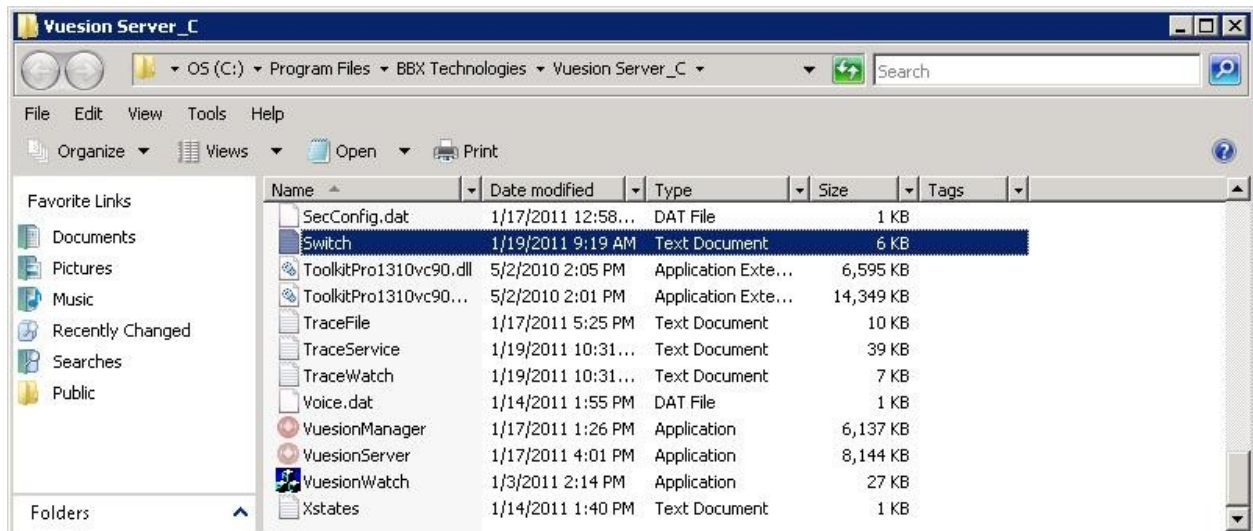


The **Avaya TAPI2 configuration** screen is displayed. For **Switch IP Address**, enter the IP address of Avaya IP Office. Select the radio button for **Third Party**, and enter the IP Office password into the **Switch Password** field. Reboot the Vuesion server.

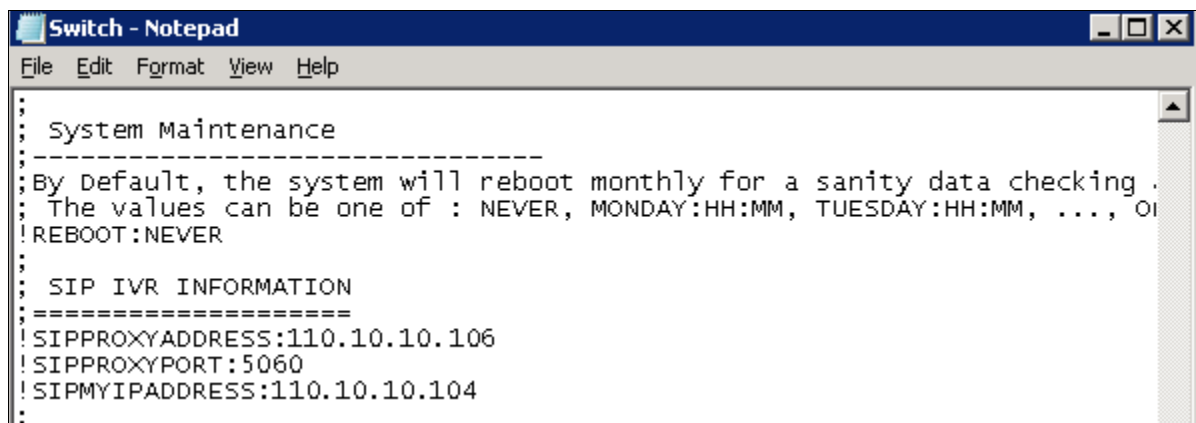


6.2. Administer Switch.txt

Navigate to the **C:\Program Files\BBX Technologies\Vuesion Server_C** directory to locate the **Switch** text file shown below.



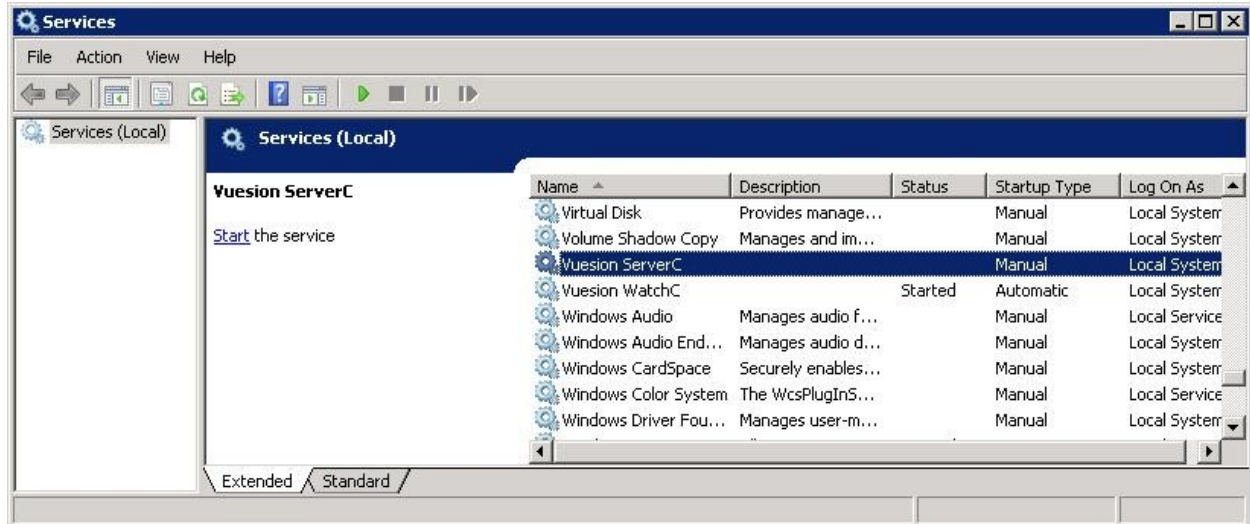
Open the **Switch** text file with the NotePad application. For **SIPPROXYADDRESS**, enter the IP address of IP Office from **Section 5.2**. For **SIPPROXYPORT**, enter the UDP port number from **Section 5.3**. For **SIPMYIPADDRESS**, enter the IP address of the local Ethernet interface used for connectivity with IP Office, in this case "110.10.10.104".



On the remote site Vuesion, the **SIPPROXYADDRESS** is 110.10.10.109 and **SIPMYIPADDRESS** is 110.10.10.107.

6.3. Stop Service

Select **Start → Control Panel → Administrative Tools → Services**, to display the **Services** screen. Navigate to the **Vuesion ServerC** entry, right-click on the entry and select **Stop**.



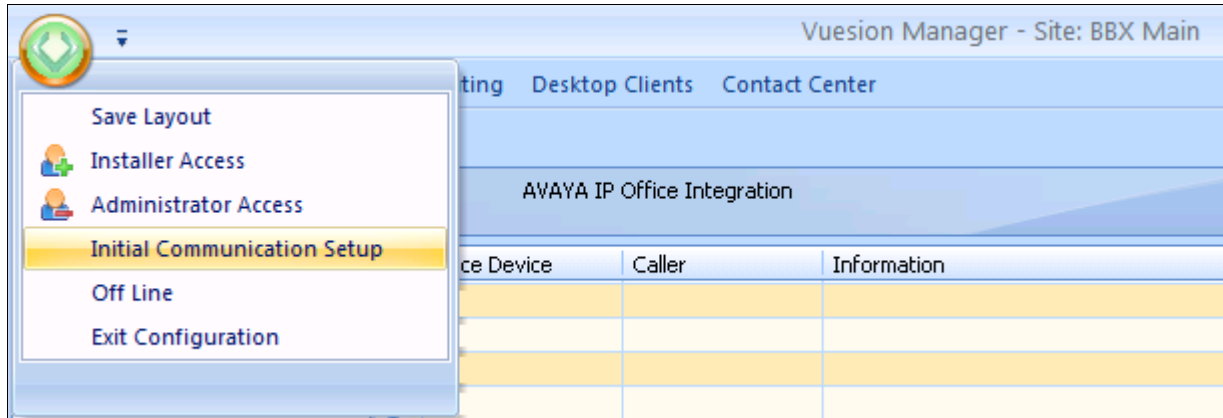
6.4. Launch Vuesion Manager

From the Vuesion server, double-click the **VuesionManager** icon shown on the desktop, which was created as part of installation.



6.5. Administer Communication Settings

The **Vuesion Manager** screen is displayed. Click on the icon in the top left corner, and select **Initial Communication Setup** from the drop-down list.



The **VuesionServer** dialog box is displayed, click **OK**



The **COMMUNICATION SETTINGS** screen is displayed next. Check **IP Enabled**. Enter the IP address and password for IP Office in **PBX IP Addr** and **PBX Password**. Enter the **NetServer IP address**, **IP Port** and **Node Index** of the Master Server. This IP address is the IP address of the main server which communicates with the main site Avaya IP Office. **IVR Pilot Number** should be a unique number and therefore use available extension numbers on IP Office. Retain the default values in the remaining fields.

COMMUNICATION SETTINGS

SWITCH COMMUNICATION

RS232 Port #: COM1 BaudRate: 9600

☒ IP Enabled

PBX IP Addr: 110.10.10.106

PBX Password: xxxxxxxx

PBX SMDR IP Address:

PBX SMDR TCP Port: 0

NETWORKING SETUP: MASTER SERVER

NetServer IP address: 110.10.10.104

NetServer IP Port: 65000

Node Index: 0

THIS SERVER DEFINITION

Customer Location Name: BBX Main

This Server IP address: 110.10.10.104

This Server IP Port: 62029

IVR Location: BBX Main

IVR Pilot Number: 77199

OK

Similarly **COMMUNICATION SETTINGS** screen for the remote site Vuesion server is shown below. Check **IP Enabled**. Enter the IP address and password for the remote site IP Office in **PBX IP Addr** and **PBX Password**. Enter the **NetServer IP address**, **IP Port** and **Node Index** of the Master Server. This IP address is the IP address of the main server which communicates with the main site Avaya IP Office. **IVR Pilot Number** should be a unique number and therefore use available extension numbers on remote site IP Office. Retain the default values in the remaining fields.

COMMUNICATION SETTINGS

SWITCH COMMUNICATION

RS232 Port #: COM1 BaudRate: 9600

☒ IP Enabled

PBX IP Addr: 110.10.10.109

PBX Password: xxxxxxxx

PBX SMDR IP Address:

PBX SMDR TCP Port: 0

NETWORKING SETUP: MASTER SERVER

NetServer IP address: 110.10.10.104

NetServer IP Port: 65000

Node Index: 1

THIS SERVER DEFINITION

Customer Location Name: BBX Node

This Server IP address: 110.10.10.107

This Server IP Port: 62027

IVR Location: BBX Node

IVR Pilot Number: 79199

OK

6.6. Administer Local Extensions

The **Vuesion Manager** screen is displayed again. Select **Switch Setup** → **Local Extensions** from the left pane.

The screenshot shows the Vuesion Manager interface for 'Site: BBX Main'. The top navigation bar includes 'Switch Setup', 'Messaging', 'Routing', 'Desktop Clients', and 'Contact Center'. The left sidebar under 'Switch Setup' lists several options: Communication, Local Extensions (selected), Off Premise Extensions, Phantom Extensions, Park Orbits, Hold Extensions, Area Paging, Trunks, and Reload Switch Info. The main content area is titled 'AVAYA IP Office Integration' and contains two tables. The first table, 'Voice Device', has columns for 'Voice Device', 'Caller', and 'Information', with five empty rows. The second table, 'Record Device', has columns for 'Record Device', 'Recording', and 'Information', with three empty rows. Each row in both tables has a blue circular icon with a white arrow pointing down on the left side.

	Voice Device	Caller	Information
↓			
↓			
↓			
↓			
↓			

	Record Device	Recording	Information
↓			
↓			
↓			

The **DIRECTORY CONFIGURATION** screen is displayed as shown below. Click on **Add** to start adding required agents, supervisors and hunt groups.

The **Extension Range Selection** screen is shown below where Local User Extensions can be added and if required a range can be provided too.

The screen below shows an entry for each agent user from **Section 5.7**, each supervisor user from **Section 5.8**, and for the Transfer hunt group from **Section 5.6.5**.

Update the **Full Name** field as desired, and retain the default values in the remaining fields. **Class of Service** can be set from the drop down menu depending on each user's requirement. Note that the port numbers are automatically assigned by the system subsequently.

The screenshot shows a window titled "DIRECTORY CONFIGURATION" with two main sections: "LOCAL USER EXTENSIONS" and "DIRECTORY ASSIGNMENT".

LOCAL USER EXTENSIONS is a table with the following data:

Full Name	DN #	Port#
Extn28233	28233	8
Extn28234	28234	9
BBX CSR	77200	0

DIRECTORY ASSIGNMENT section includes the following fields and options:

- Directory #: 28233
- FullName: Extn28233
- Title: (empty)
- PBX: Extn28233
- Account: (empty)
- Password: (empty)
- Tenant Name: (empty)
- Class of Service: 1 (dropdown)
- Options (checkboxes):
 - Shared Station
 - Virtual/Single Line
 - Disable SMDR
 - SIP Client
 - Network Advertise
 - Guest Telephone
 - Music On Hold
 - Nurse/CareGiver
 - Reserved
 - Recorder
 - Disabled

FOLLOW ME OPTIONS section includes the following fields:

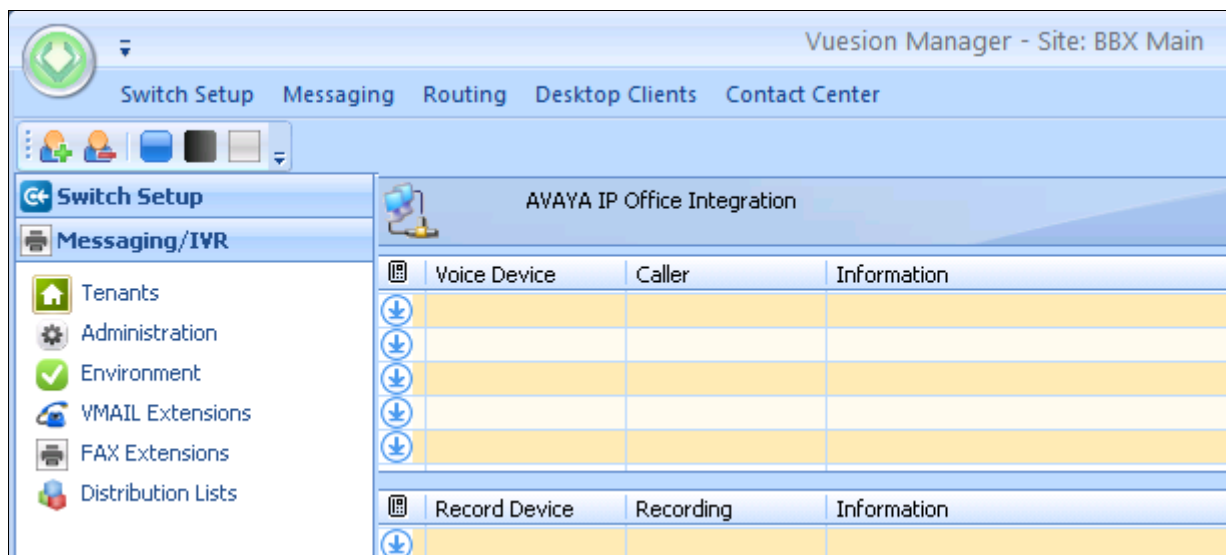
- Cellular #: (empty)
- Home #: (empty)
- Alternate #: (empty)
- Active Forward: (empty)

At the bottom of the window are buttons: Add, Delete, Save, Refresh All, and Exit.

Extn 29225, Extn 29226 and BBX NodeCSR are configured on the remote site Vuesion.

6.7. Administer Tenants

From the **Vuesion Manager** screen, select **Messaging/IVR** → **Tenants** from the left pane.



The **TENANTS/GROUPS** screen is displayed as shown below. Click on **Add Tenant**.

[illegible]

For **Name**, enter the Main hunt group name from **Section 5.6.1**. For **ID** and **Password**, enter the Main hunt group extension from **Section 5.6.1**. Retain the default values in the remaining fields, and click **Edit Members**.

BBX Node 79100 is created on the remote site Vuesion server.

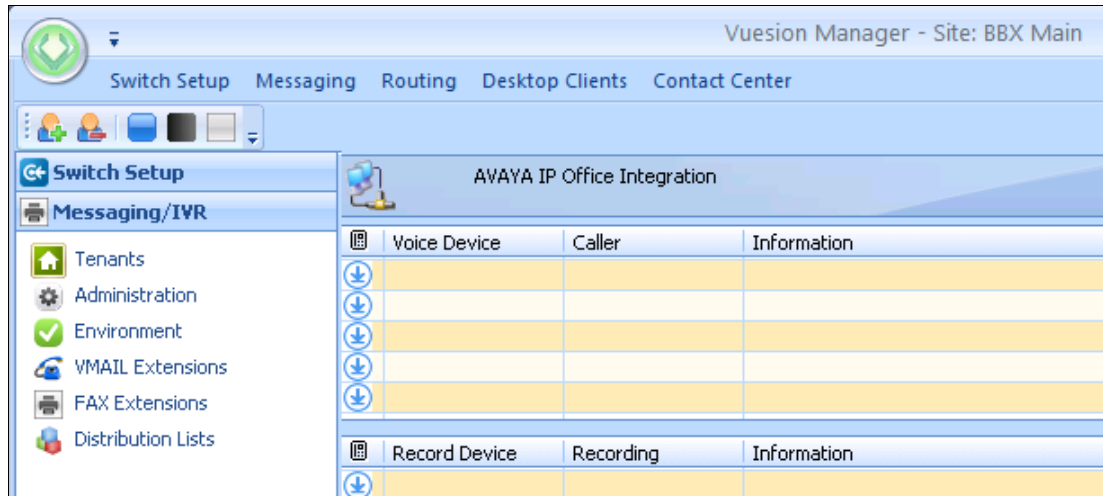
The **Selected Tenant** screen is displayed. Select the applicable entries in the **Available User List** section, and click the double-left-arrow to move the entries to the **Tenant/Group Members List** section, as shown in screen below. Click on **Save** to complete the selection.

[illegible]

BBX NodeCSR, Extn 29225 and Extn29226 are selected in the remote site Vuesion server.

6.8. Administer VMAIL Extensions

From the **Vuesion Manager** screen, select **Messaging/IVR → VMAIL Extensions** from the left pane.



The **DIRECTORY CONFIGURATION** screen is displayed as shown below. Click on **Add** to start adding IVR Extensions.

The screenshot shows the 'DIRECTORY CONFIGURATION' window. It has a tabbed interface with 'IVR EXTENSIONS' selected. On the left is a table with columns 'Full Name', 'DN #', and 'Port#'. On the right is the 'DIRECTORY ASSIGNMENT' section with fields for 'Directory #', 'FullName', 'Title', 'PBX', 'Account', 'Password', 'Tenant Name', and 'Class of Service'. Below these are two columns of checkboxes: 'Shared Station', 'Virtual/Single Line', 'Disable SMDR', 'Live Record', 'Announce/Notify', 'Reserved', 'Recorder', and 'Disabled' on the left; and 'SIP IVR', 'Network Advertise', 'Guest Telephone', 'Music On Hold', and 'Nurse/CareGiver' on the right. At the bottom right is the 'FOLLOW ME OPTIONS' section with fields for 'Cellular #', 'Home #', 'Alternate #', and 'Active Forward'. At the bottom are buttons for 'Add', 'Delete', 'Save', 'Refresh All', and 'Exit'.

The **Extension Range Selection** screen is shown below where IVR Extensions can be added and if required a range can be provided too.

The **DIRECTORY CONFIGURATION** screen is displayed with entry for each virtual SIP user from **Section 5.5**.

For **Full Name**, enter the SIP user name from **Section 5.5**. For **Password**, enter the SIP user login code from **Section 5.5**. Check **SIP IVR**. Retain the default values in the remaining fields. Note that the port numbers are automatically assigned by the system subsequently.

Full Name	DN #	Port#
IVR 28235	28235	11
IVR 28236	28236	12
IVR 28237	28237	13
IVR 28238	28238	14
IVR 28239	28239	15

DIRECTORY ASSIGNMENT

Directory #: 28235
 FullName: IVR 28235
 Title:
 PBX:
 Account:
 Password:
 Tenant Name:
 Class of Service: 0

☐ Shared Station
☐ Virtual/Single Line
☐ Disable SMDR
☐ Live Record
☐ Announce/Notify
☐ Reserved
☐ Recorder
☐ Disabled

☒ SIP IVR
☐ Network Advertise
☐ Guest Telephone
☐ Music On Hold
☐ Nurse/CareGiver

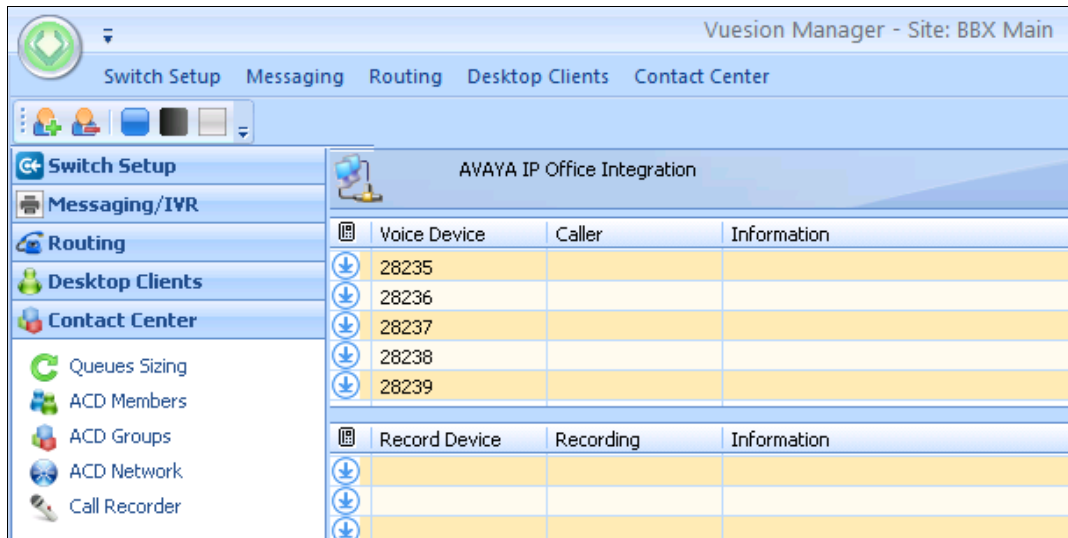
FOLLOW ME OPTIONS

Cellular #:
 Home #:
 Alternate #:
 Active Forward:
 Add Delete Save Refresh All Exit

IVR 29228 to IVR 29232 are added in the remote site Vuesion server.

6.9. Administer Queues Sizing

From the **Vuesion Manager** screen, select **Contact Center** → **Queues Sizing** from the left pane.



Vuesion Manager - Site: BBX Main

Switch Setup Messaging Routing Desktop Clients Contact Center

Switch Setup

Messaging/IVR

Routing

Desktop Clients

Contact Center

- Queues Sizing
- ACD Members
- ACD Groups
- ACD Network
- Call Recorder

AVAYA IP Office Integration

	Voice Device	Caller	Information
↓	28235		
↓	28236		
↓	28237		
↓	28238		
↓	28239		

	Record Device	Recording	Information
↓			
↓			
↓			

The **DIRECTORY CONFIGURATION** screen is displayed. Click on **Add** to start adding Call Center Queue.

The **Extension Range Selection** screen is shown below where Call Center Queue numbers can be added and if required a range can be provided too.

Screen below shows the desired number of entries for queuing of incoming ACD calls used for compliance testing.

The screenshot shows the 'ACD Members' window. On the left is a table with columns: Name, ID, Passw, COS, Type, and Def. The table is currently empty. On the right is a form with the following sections:

- Member Definition:** Fields for Member (dropdown), FullName (text), and Password (text).
- Setup:** Fields for Type (dropdown, currently 'ACD Agent'), Primary (dropdown), and Class (dropdown, currently '0').
- Allow Agents Screen Capture:** Five Supervisor ID text fields.
- Auto Login:** An Extension text field.
- Buttons:** Add, Delete, Save, and Exit.

Create an entry for each agent user from **Section 5.7**, and for each supervisor user from **Section 5.8**, as shown in screen below. Enter the desired **FullName**. For **Member ID**, enter a unique value for each agent and supervisor. The recommendation is to use available extension numbers on IP Office. For **Password**, enter desired values. In the compliance testing, the same values are used for member ID and password for simplicity. For **Type**, select “ACD Agent” for agents and “ACD Supervisor” for supervisors. For **Primary Group**, select the Transfer hunt group name from **Section 5.6.3**. For **Class**, select the appropriate class of service.

The screenshot shows the 'ACD Members' window with the table populated with three entries:

Name	ID	Passw	COS	Type	Def.
Agent 1	78100	7810	1	ACD Agent	
Agent 2	78101	7811	1	ACD Agent	
Supervisor 1	78102	7812	1	ACD Supervisor	

The form on the right is now for editing a member. The **Member** dropdown is set to '78100'. The **FullName** field contains 'Agent 1' and the **Password** field contains '7810'. The **Setup** section shows **Type** as 'ACD Agent', **Primary** as 'BBX CSR', and **Class** as '1'. The **Buttons** remain the same.

Similarly ACD Members are added to the remote Vuesion.

6.11. Administer ACD Groups

From the **Vuesion Manager** screen shown in **Section 6.9**, select **Contact Center → ACD Groups** from the left pane, to display the **SkillSets Administration** screen. Create an entry for the Transfer hunt group from **Section 5.6.3**, as shown below.

The **Voice Routing Options** section defines the parameters used for routing of ACD calls. The **Multimedia Contact Center Members Assignment** section defines the members and their skills level. The **Announcements** section defines the announcement treatments.

The screenshot below shows the values used in the compliance testing.

SkillSets Administration

Group ID: 77200 Group Name: BBX CSR Routing Method: Least Productive

Group Name	ID
BBX CSR	77200

Voice Routing Options

Enable: ☒ Priority: 09

Overflow Time: 10 Min

Overfl. Destination: 77200

Signed-Out OVF: 77200

All Busy Overflow:

Longest InQ Thr: 10 Sec

Force Priority: 00

Calls Queued Thr.: 01

☒ Auto WrapUp @ 15 Sec

☐ Ringback on Queue

Email Routing Options

Enable: ☐ Priority: 00

Subject Filter:

Overflow Time: 00

OVF Destination:

Signed-Out OVF:

EmailQ Threshold: 2

Longest InQ Thr: 300

Force Priority: 9

Fax Routing Options

Enable: ☐ Priority: 00

Overflow Time: 00

OVF Destination:

Signed-Out OVF:

FaxQ Threshold: 10

Longest InQ Thr: 300

Force Priority: 0

Miscellaneous

☐ Auto Logout @ 11:50:00 PM

Advance Time: 10 Sec

☐ Follow Me (Non Call Center)

Multimedia Contact Center Members Assignment

VoiceSkill: 00 EmailSkill: 00 FaxSkill: 00 OutdialSkill: 00

HandleVoice: ☐ HandleEmails: ☐ HandleFax: ☐ HandleOutdial: ☐

Name	ID	Type
Agent 1	78100	ACD Agent
Agent 2	78101	ACD Agent
Supervisor 1	78102	ACD Supervisor

Outbound Campaign

☐ Enable Campaign Campaign Priority: 00

ODBC - DSN:

Table: Password:

Login:

Name Field:

Phone Field:

Contact:

Priority Field:

Comment Field:

Resolution Field:

Restricted Hours During Schedule (Format: 12:00-13:00,...)

☐ Enable Schedule Timezone: (CST)

Start Datetime: 4/ 3/2012 8:00:00 AM

Stop Datetime: 4/ 3/2012 5:00:00 PM

M T W T F S S

Import Records Restart Campaign

Announcements

	AA	QPosition	~ Hold	AA	Repeat	Frequency
1:	AA		<input type="checkbox"/>	AA	Repeat	Never
2:	AA		<input type="checkbox"/>	AA	Repeat	Never
3:	AA		<input type="checkbox"/>	AA	Repeat	Never

Add Remove Refresh Scripts Save Exit

Similarly BBX NodeCSR 79200 is configured on the remote Vuesion.

6.12. Administer ACD Network

From the **Vuesion Manager** screen shown in **Section 6.9**, select **Contact Center → ACD Network** from the left pane, to display the **Networked ACD Routing** screen. Enter a **Route ID** number which should be a unique number and therefore select available extension from the IP Office. Select a **Routing Method** from the drop down list. Enter the Transfer Hunt group number configured from **Section 5.6.3** in the **Group 1** and **Group 2** fields where **Group 1** is the Transfer Hunt group created on the main site IP Office and **Group 2** is the Transfer Hunt group created on the remote site IP Office.

Networked ACD Routing

ACD Route Definition

Route ID: 77700 Route Name: From Dallas to NY Routing Method: On Busy

Network ACD Groups Relationship

Group 1: 77200 Group 2: 79200 Group 3: Group 4:

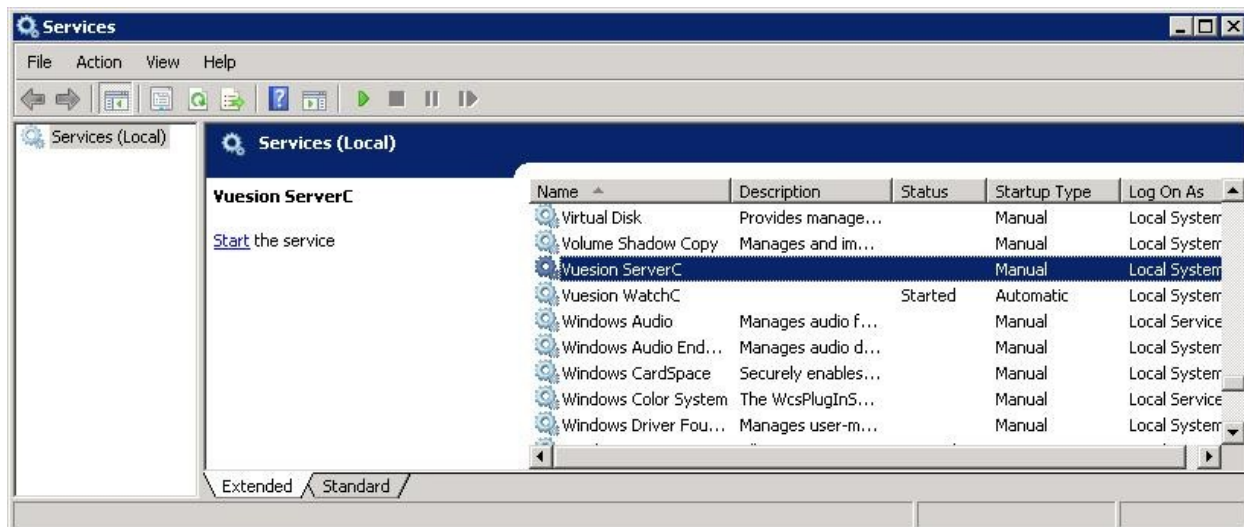
ID	Name	Method	Grp1	Grp2	Grp3	Grp4	State
77700	From Dallas to NY	On Busy	77200	79200			

Delete Route Add Route Save Exit

The above needs to be configured only on the main site Vuesion server.

6.13. Start Service

Select **Start** → **Control Panel** → **Administrative Tools** → **Services**, to display the **Services** screen. Navigate to the **Vuesion ServerC** entry, right-click on the entry and select **Start**.



7. Verification Steps

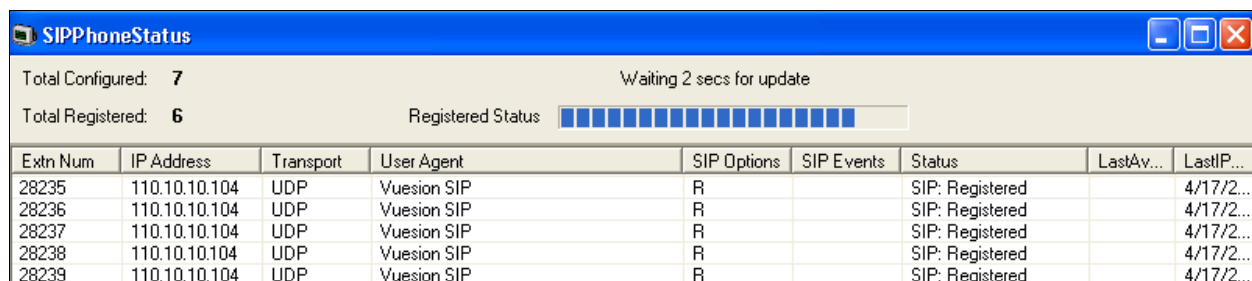
This section provides the tests that can be performed to verify proper configuration of Avaya IP Office and BBX Technologies Vuesion Multimedia Contact Center Networking module.

7.1. Verify Avaya IP Office

From a PC running the Avaya IP Office Monitor application, select **Start → Programs → IP Office → Monitor** to launch the application. The **Avaya IP Office R8 SysMonitor** screen is displayed, as shown below. Select **Status → SIP Phone Status** from the top menu.



The **SIPPhoneStatus** screen is displayed. Verify that there is an entry for each virtual SIP user from **Section 5.5**, that the **User Agent** contains “Vuesion SIP”, and that the **Status** is “SIP: Registered”, as shown below.



Extn Num	IP Address	Transport	User Agent	SIP Options	SIP Events	Status	LastAv...	LastIP...
28235	110.10.10.104	UDP	Vuesion SIP	R		SIP: Registered		4/17/2...
28236	110.10.10.104	UDP	Vuesion SIP	R		SIP: Registered		4/17/2...
28237	110.10.10.104	UDP	Vuesion SIP	R		SIP: Registered		4/17/2...
28238	110.10.10.104	UDP	Vuesion SIP	R		SIP: Registered		4/17/2...
28239	110.10.10.104	UDP	Vuesion SIP	R		SIP: Registered		4/17/2...

From a PC running the Avaya IP Office System Status application, select **Start → Programs → IP Office → System Status** to launch the application.

The **IP Office System Status** screen is displayed, as shown below. Select **Trunks → Line: 19** from the left window pane menu to display the status of the H323 Line connection from the Main site to the Remote site.

IP Office R8 System Status - DevCon IPO 1 (110.10.10.106): IP500 V2 8.0 (18)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

- System
- Alarms (5)
- Extensions (27)
- Trunks (4)
 - Line: 1
 - Line: 2
 - Line: 17
 - Line: 19**
- Active Calls
- Resources
- Voicemail
- IP Networking

Status Utilization Summary Alarms

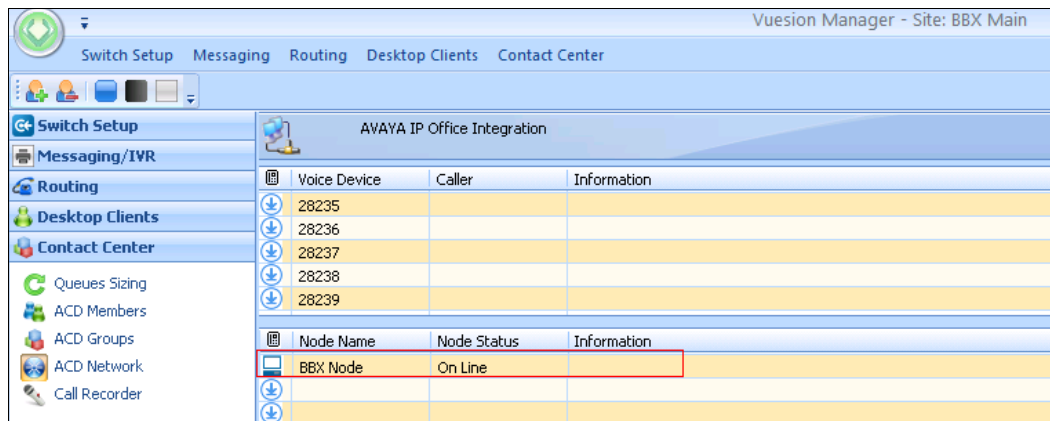
H.323 Trunk Summary

IP Address: 110.10.10.109
 Line Number: 19
 Number of Administered Channels: 20
 Number of Channels in Use: 0
 Administered Compression: G711 Mu, G7231, G729 A, G722
 Small Community Networking: Up
 Direct Media Path: Off
 Enable Faststart: Off
 Silence Suppression: Off

Channel Number	Call Ref	Current State	Time in State	Remote Media Address	Codec	Connection Type	Caller ID or Dialed Digits	Other Party on Call	Direction of Call
1		Idle	19:48:28						
2		Idle	19:48:28						
3		Idle	19:48:28						
4		Idle	19:48:28						
5		Idle	19:48:28						
6		Idle	19:48:28						
7		Idle	19:48:28						
8		Idle	19:48:28						
9		Idle	19:48:28						
10		Idle	19:48:28						
11		Idle	19:48:28						
12		Idle	19:48:28						
13		Idle	19:48:28						
14		Idle	19:48:28						
15		Idle	19:48:28						
16		Idle	19:48:28						
17		Idle	19:48:28						
18		Idle	19:48:28						
19		Idle	19:48:28						
20		Idle	19:48:28						

7.2. Verify BBX Technologies Vuesion Multimedia Contact Center

Verify that the BBX Node status is online as shown in screen below after the **ACD Network** route is configured per **Section 6.12**.

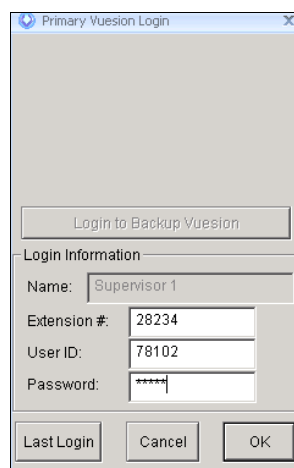


From the agent user PC running Vuesion Client, double-click on the **VuesionClient** icon shown on the desktop, which was created as part of installation.



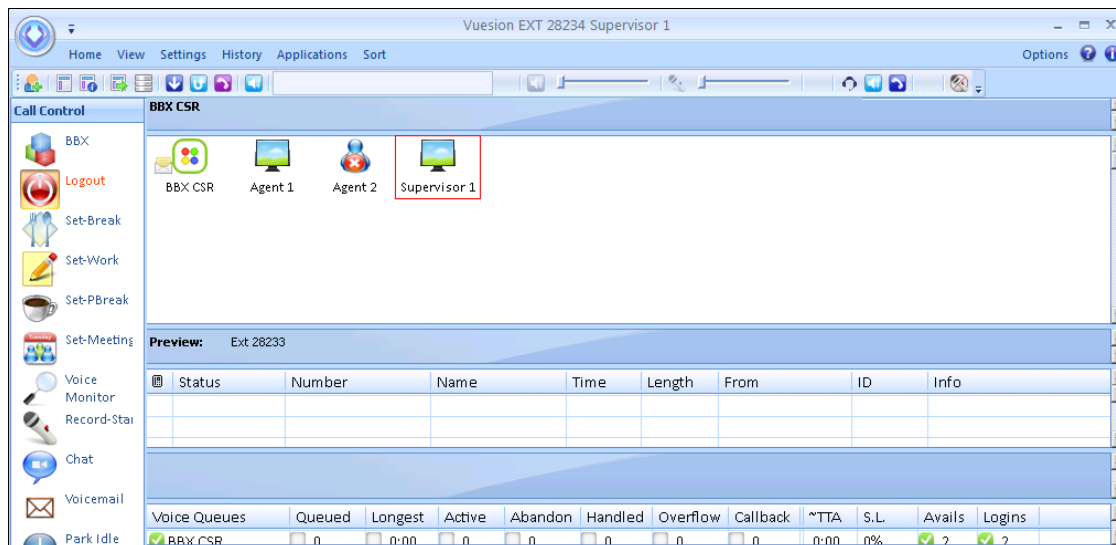
The **Vuesion User Login** screen is displayed. The screen shows the “Supervisor 1” **Login Information**.

For **Extension #**, enter the extension number of the supervisor from **Section 6.6**. For **User ID** and **Password**, enter the corresponding credentials for the supervisor from **Section 6.10**, as shown below. During compliance testing this client was run from the Vuesion server.



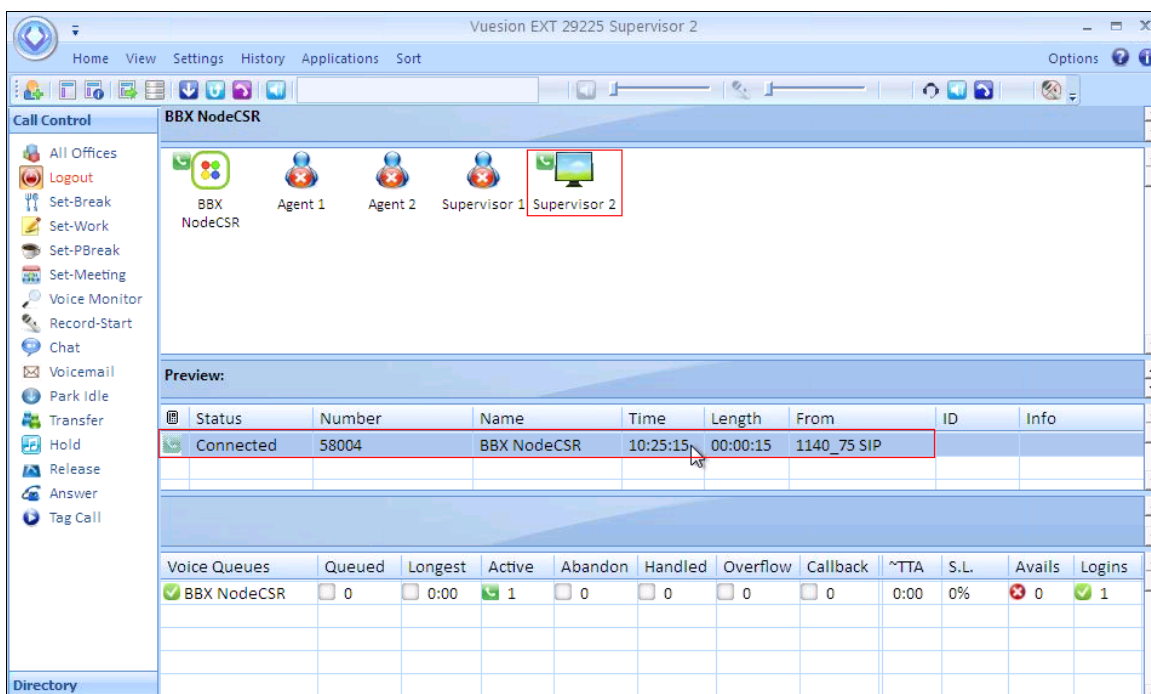
The **Vuesion** screen is displayed. Click on the **Login** icon from the left pane (not shown).

The screen is updated in the right pane, as shown below.



Similarly log in to the agents on the remote site Vuesion.

To verify Networking module, make an incoming trunk call to the Main hunt group while agents are not available to take a call on the main site. Screen below shows that the call is routed to an available agent on the remote site.



8. Conclusion

These Application Notes describe the configuration steps required for BBX Technologies Vuesion Multimedia Contact Center Networking module to successfully interoperate with Avaya IP Office. All test cases were successfully completed. Observations are noted in **Section 2.2**

9. Additional References

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

1. *IP Office KnowledgeBase 8.0 Documentation CD*, December 2011, available at <http://support.avaya.com>.
2. *Vuesion Application Server Contact Center Configuration Guide*, available upon request from BBX Technologies Support.

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