



Avaya Solution & Interoperability Test Lab

Application Notes for BBX Technologies Vuesion Multimedia Contact Center with Avaya IP Office 9.0 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for BBX Technologies Vuesion Multimedia Contact Center to interoperate with Avaya IP Office 9.0. BBX Technologies Vuesion Multimedia Contact Center is a contact center management solution.

In the compliance testing, BBX Technologies Vuesion Multimedia Contact Center provided routing, announcements, screen pop, call control, and call reporting by using the SIP User, TAPI, and DevLink interfaces from Avaya IP Office.

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 to interoperate with Avaya IP Office 9.0. BBX Technologies Vuesion Multimedia Contact Center is a contact center management solution.

In the compliance testing, Vuesion provided routing, announcements, screen pop, call control, and call reporting by using the SIP User, TAPI, and DevLink interfaces from IP Office.

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 group to Vuesion, and to provide announcements where applicable. The TAPI 2 in third party mode was used by Vuesion to monitor and control the virtual SIP and physical agent and supervisor users, and to provide screen pop and call control via the agent and supervisor desktops. The DevLink interface was used by Vuesion to obtain real-time call events for call reporting purposes.

The Vuesion solution consisted of the Vuesion server, Vuesion Client, and the Vuesion Reports client application.

2. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. Upon start of the Vuesion application, the application automatically registered the virtual SIP users to IP Office.

For the manual part of the testing, incoming calls were made to the main routing group. The Vuesion server used the TAPI event messages to track agent states, and redirected calls to available agents. Manual call controls from both the agent desktops and agent telephones were exercised to verify remaining features such as answering and transferring of calls.

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

The verification of tests included use of Vuesion server trace for proper message exchanges, and use of Vuesion Client application for proper call controls. A sanity test of Vuesion Reports was performed to verify proper reporting of basic calls in the Call Detail Activity report.

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 Vuesion:

- Proper registration of virtual SIP users.
- Use of TAPI functions to monitor users and groups, route incoming calls, support call control via agent desktops, and set call forwarding.
- Proper handling of call scenarios including incoming calls to the main group, answer, hold/reconnect, drop, blind/attended transfer, blind/attended conference, queue, park/unpark, call forwarding, supervisor monitor, outgoing call, multiple agents, and simultaneous calls.
- Use of real-time DevLink events for proper reporting of calls.
- Proper reporting of basic call scenarios including incoming calls to the main group, hold/reconnect, blind/attended transfer, blind/attended conference, and outgoing call.

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

2.2. Test Results

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

- This release does not support conference actions from the Vuesion Client application. In the compliance testing, all conference actions were initiated from the agent telephones.
- In the conference scenarios, the conference-from agent desktop showed two call entries, and continued to show the same two entries even after the PSTN has dropped from the conference.
- In a blind conference scenario involving a non-Vuesion user, after the conference-from agent released the call using the desktop, the remaining connection between the PSTN and the conference-to destination was dropped by the application. Blind conference is not a high runner scenario for contact centers, and the workaround is to use attended conference.
- In the outgoing trunk scenario, agent desktop displayed CONNECTED before the call was answered at the PSTN.
- In the case of a client having an active call that stayed up during an Ethernet disruption, upon recovery a dialog box popped up indicating extension in use, and the client application automatically exited after user clicked on Ok in the dialog box.
- Input of DTMF for voicemail and authorization codes is not supported from Vuesion Client, and therefore needs to be entered from the agent telephone.

Below were observations on Vuesion Reports from the compliance testing:

- When agent performed blind transfer by clicking on the icon associated with the transfer-to agent, Call Detail Activity included two identical entries with call type of Start Hold.
- For an attended transfer scenario involving two agents, Call Detail Activity included an entry for the transfer-from agent with call type of Start Hold, and an entry for the transfer-to agent with call type of Unhold.
- For an attended transfer to a non-Vuesion monitored destination, Call Detail Activity did not reflect the transfer-to destination in the reported entries.
- For conference scenarios involving two agents, when the PSTN is the first party to drop from the conference followed by the conference-from agent, none of the reported entries in Call Detail Activity reflected conference-to agent being a party of the conference.
- For outgoing trunk calls involving authorization codes, the Dialed Number parameter in the Call Detail Activity contained blank.

2.3. Support

Technical support on Vuesion 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 shown below.

The detailed administration of general contact center devices such agent and supervisor users are assumed to be in place, and are not covered in these Application Notes.

In the compliance testing, the Vuesion Reports application was running on the supervisor PC, and the Vuesion Client application was running on the supervisor and agent desktops.

Device Type	Extension
Supervisor User	20035
Agent Users	20031, 20032

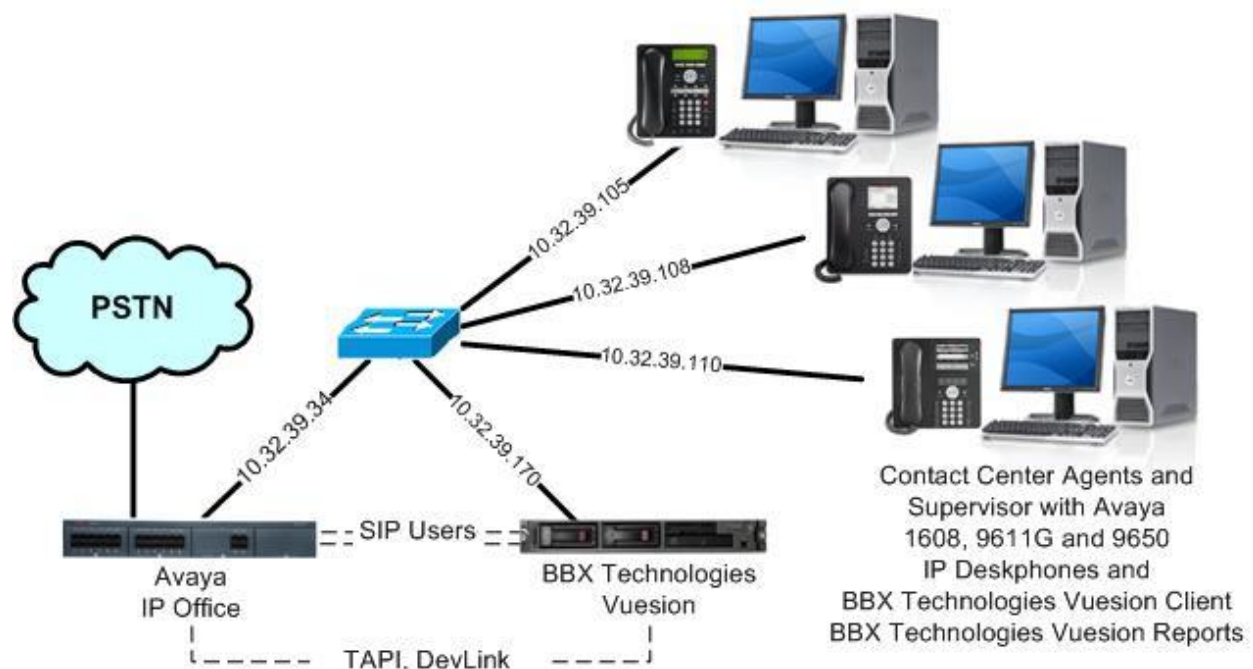


Figure 1: Compliance Testing Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya IP Office on IP500V2	9.0 SP1 (9.0.100.845)
Avaya 1616 IP Deskphone (H.323)	1.343A
Avaya 9611G IP Deskphone (H.323)	6.3037
Avaya 9650 IP Deskphone (H.323)	3.212A
BBX Technologies Vuesion on Windows 2012 R2 Standard <ul style="list-style-type: none">Avaya DevLink (devlink.dll)Avaya IP Office TAPI2 Driver (tspi2w_64)	V9.0 1.0.0.5 3.2.29
BBX Technologies Vuesion Client	V9.0
BBX Technologies Vuesion Reports	V8.3

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

5. Configure Avaya IP Office

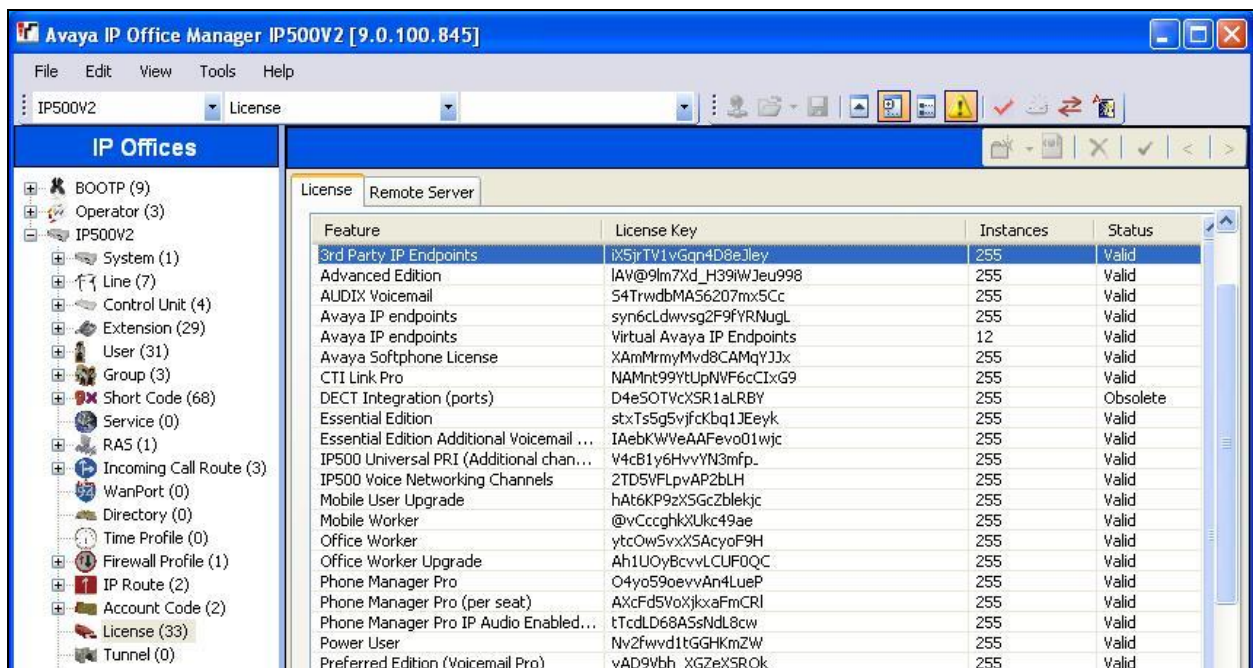
This section provides the procedures for configuring IP Office. The procedures include the following areas:

- Verify license
- Obtain LAN IP address
- Administer SIP Registrar
- Administer SIP extensions
- Administer SIP users
- Administer groups
- Administer agents and supervisors
- Administer incoming call route

5.1. Verify License

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

The **Avaya IP Office Manager** screen is displayed. From the configuration tree in the left pane, select **License** to display the licenses in the right pane. Verify that the **License Status** for **3rd Party IP Endpoints** and **CTI Link Pro** are “Valid”, as shown below.



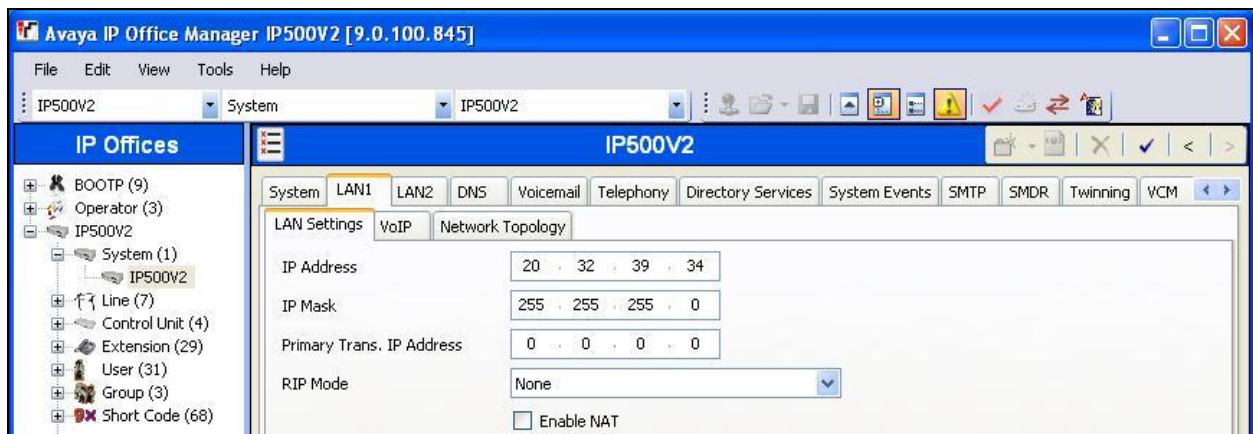
The screenshot shows the Avaya IP Office Manager application window. The left pane displays a configuration tree with 'License' selected under the 'IP500V2' system. The right pane shows a table of licenses with the following data:

Feature	License Key	Instances	Status
3rd Party IP Endpoints	ixSjrTV1vGon4D8eJley	255	Valid
Advanced Edition	IAV@9lm7Xd_H39WJeu998	255	Valid
AUDIX Voicemail	S4TrwdbMA56207mx5Cc	255	Valid
Avaya IP endpoints	syn6cLdwvsq2F9fYRNugL	255	Valid
Avaya IP endpoints	Virtual Avaya IP Endpoints	12	Valid
Avaya Softphone License	XAmMrmYmvd8CAMqYJJx	255	Valid
CTI Link Pro	NAMnt99YtUpNWF6cCIxG9	255	Valid
DECT Integration (ports)	D4eSOTVcXSR1aLRBY	255	Obsolete
Essential Edition	stxTs5g5vfcbq1JEeyk	255	Valid
Essential Edition Additional Voicemail ...	IAebKWVeAAFevo01wjc	255	Valid
IP500 Universal PRI (Additional chan...	V4cB1y6HvvYN3mfp.	255	Valid
IP500 Voice Networking Channels	2TD5VFLpvAP2bLH	255	Valid
Mobile User Upgrade	hAt6KP9zX5Gczblekjc	255	Valid
Mobile Worker	@vCccghkXUkc49ae	255	Valid
Office Worker	ytCOW5vxXSAcyoF9H	255	Valid
Office Worker Upgrade	Ah1UOyBcvvLCUF0QC	255	Valid
Phone Manager Pro	O4yo59oevvAn4LueP	255	Valid
Phone Manager Pro (per seat)	AXcFd5VoXjKxaFmCRI	255	Valid
Phone Manager Pro IP Audio Enabled...	tTcdLD68ASsNdl8cw	255	Valid
Power User	Nv2fwvd1tGGHKmZW	255	Valid
Preferred Edition (Voicemail Pro)	yAD9vbbh_XGZeXSRQk	255	Valid

5.2. Obtain LAN IP Address

From the configuration tree in the left pane, select **System** to display the **IP500V2** screen in the right pane. Select the **LAN1** tab, followed by the **LAN Settings** sub-tab in the right pane.

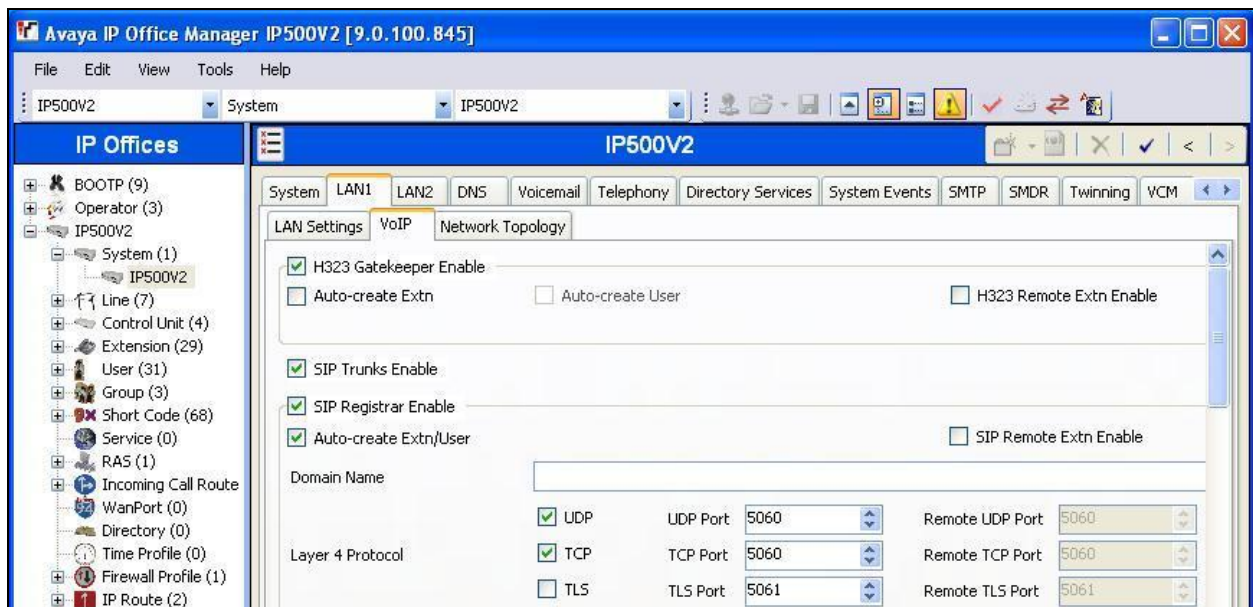
Make a note of the **IP Address**, which will be used later to configure Vuesion. Note that IP Office can support SIP on the LAN1 and/or LAN2 interfaces, and the compliance testing used the LAN1 interface.



5.3. Administer SIP Registrar

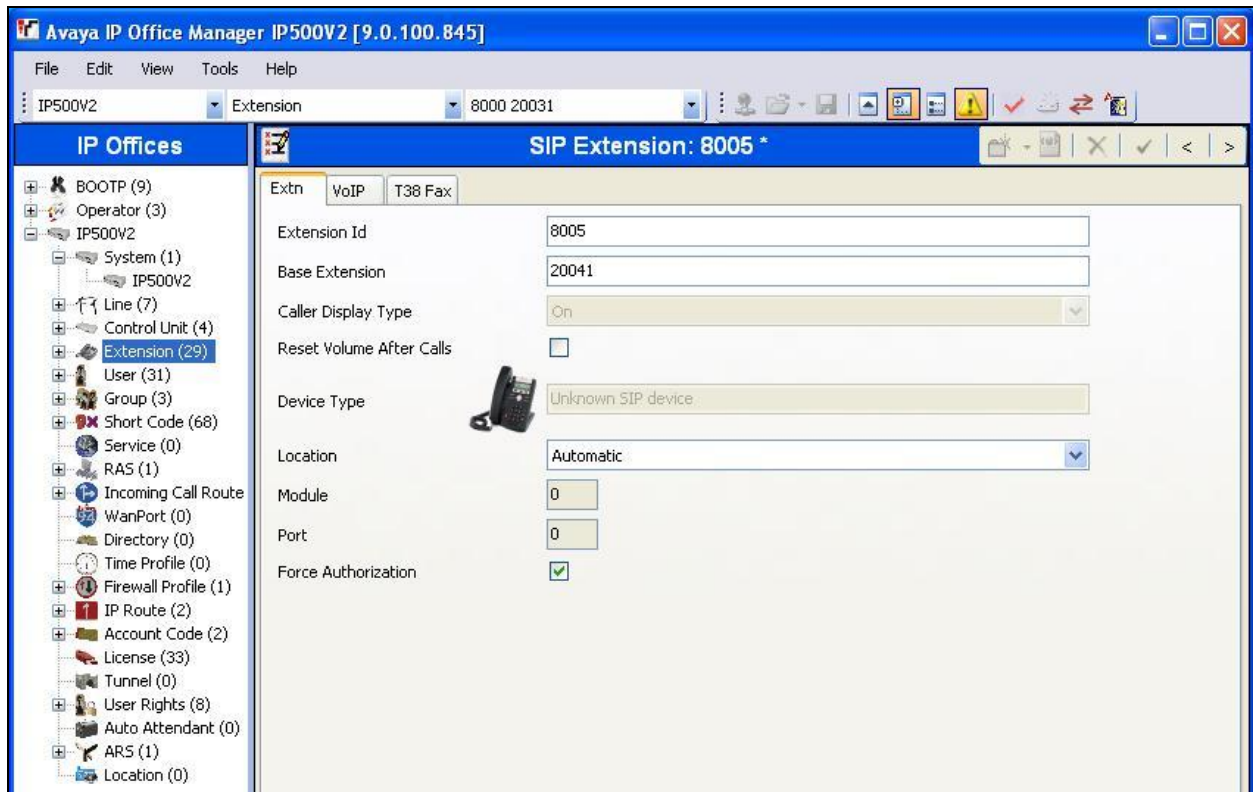
Select the **VoIP** sub-tab. Make certain that **SIP Registrar Enable** is checked. A **Domain Name** can be entered for SIP endpoints to use for registration with IP Office.

In the compliance testing, the **Domain Name** was left blank, so the LAN IP address was used for registration.



5.4. Administer SIP Extensions

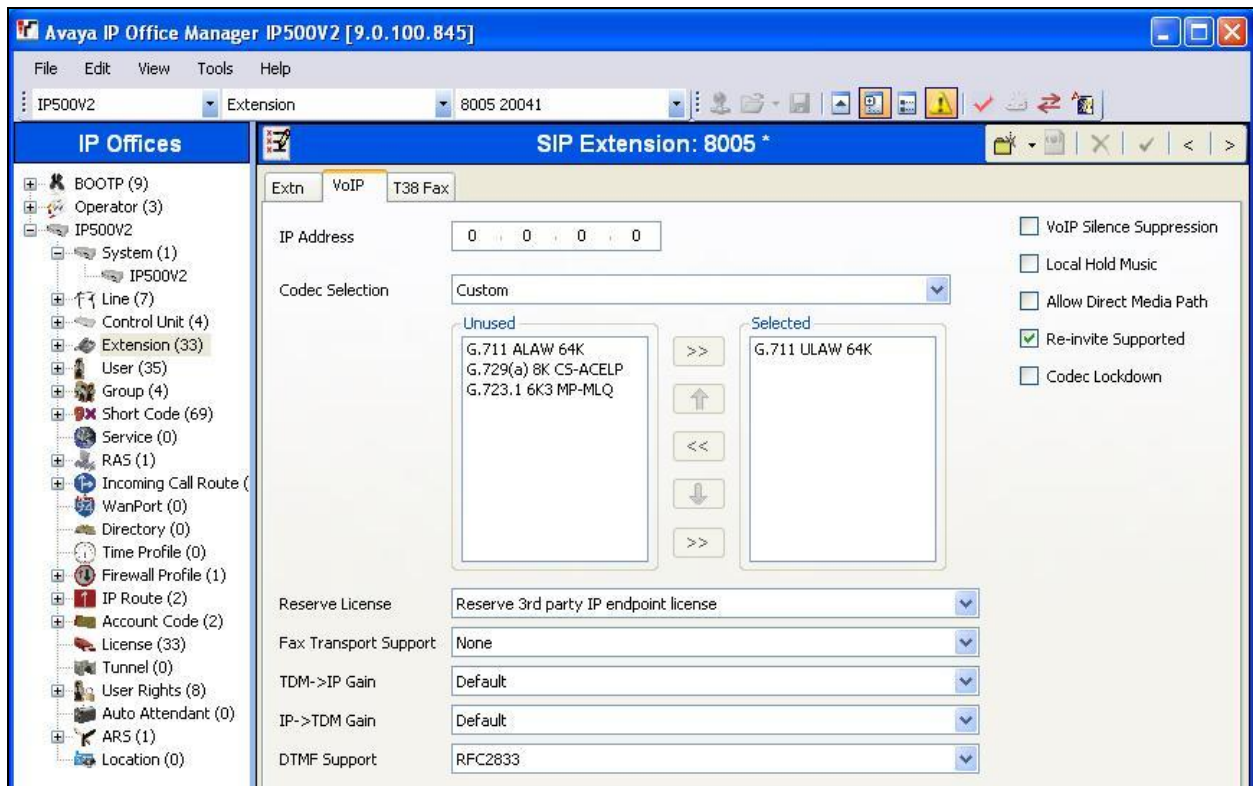
From the configuration tree in the left pane, right-click on **Extension**, and select **New** → **SIP Extension** from the pop-up list to add a new SIP extension. Enter the desired digits for **Base Extension**, and retain the default values in the remaining fields.



Select the **VoIP** tab. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Codec Selection:** “Custom”
- **Selected:** Retain only the applicable G.711 codec variation.
- **Allow Direct Media Path:** Uncheck this field.
- **Reserve License:** “Reserve 3rd party IP endpoint license”

Repeat this section to add the desired number of SIP extensions. In the compliance testing, four SIP extensions with base extensions of 20041-20044 were created.



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**.

Avaya IP Office Manager IP500V2 [9.0.100.845]

File Edit View Tools Help

IP500V2 User RemoteManager

IP Offices

- BOOTP (9)
- Operator (3)
- IP500V2
 - System (1)
 - IP500V2
 - Line (7)
 - Control Unit (4)
 - Extension (33)
 - User (31)
 - Group (3)
 - Short Code (68)
 - Service (0)
 - RAS (1)
 - Incoming Call Route (0)
 - WanPort (0)
 - Directory (0)
 - Time Profile (0)
 - Firewall Profile (1)
 - IP Route (2)
 - Account Code (2)
 - License (33)
 - Tunnel (0)

<User:0>: *

User Voicemail DND Short Codes Source Numbers Telephony Forwarding Dial In Voice Recording Button

Name: IVR 20041

Password:

Confirm Password:

Account Status: Enabled

Full Name: IVR 20041

Extension: 20041

Email Address:

Locale:

Priority: 5

System Phone Rights: None

Profile: Basic User

☐ Receptionist

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

Avaya IP Office Manager IP500V2 [9.0.100.845]

File Edit View Tools Help

IP500V2 User RemoteManager

IP Offices

- BOOTP (9)
- Operator (3)
- IP500V2
 - System (1)
 - IP500V2
 - Line (7)
 - Control Unit (4)
 - Extension (33)
 - User (31)
 - Group (3)
 - Short Code (68)
 - Service (0)
 - RAS (1)

<User:0>: *

User Voicemail DND Short Codes Source Numbers Telephony Forwarding Dial In Voice Recording Button

Voicemail Code:

Confirm Voicemail Code:

Voicemail Email:

☐ Voicemail On

☐ Voicemail Help

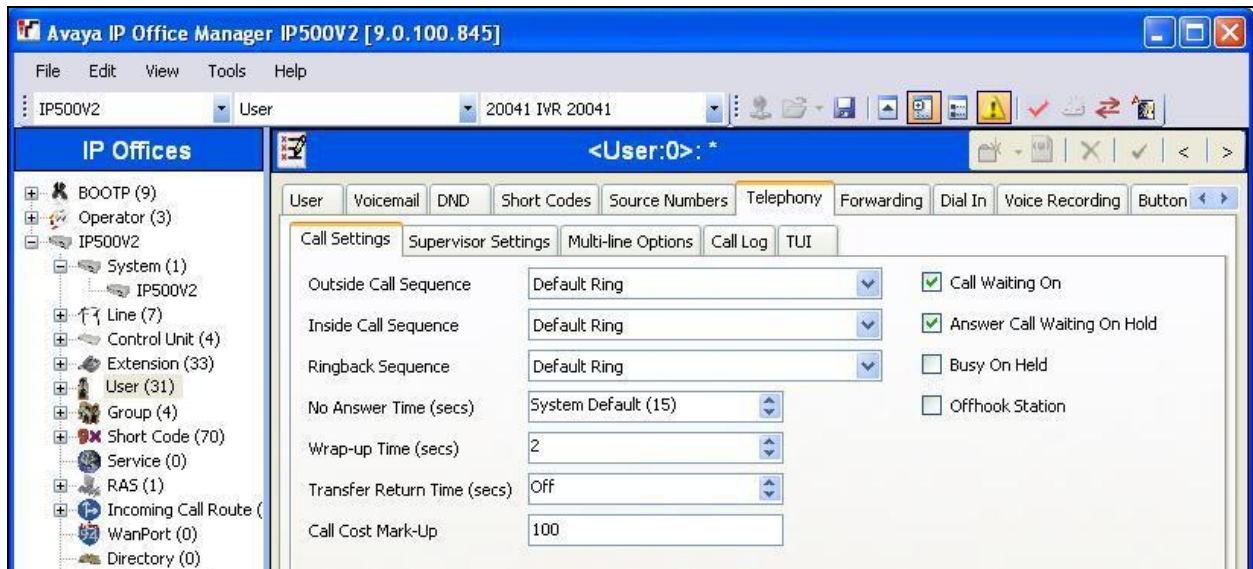
☐ Voicemail Ringback

☐ Voicemail Email Reading

☐ UMS Web Services

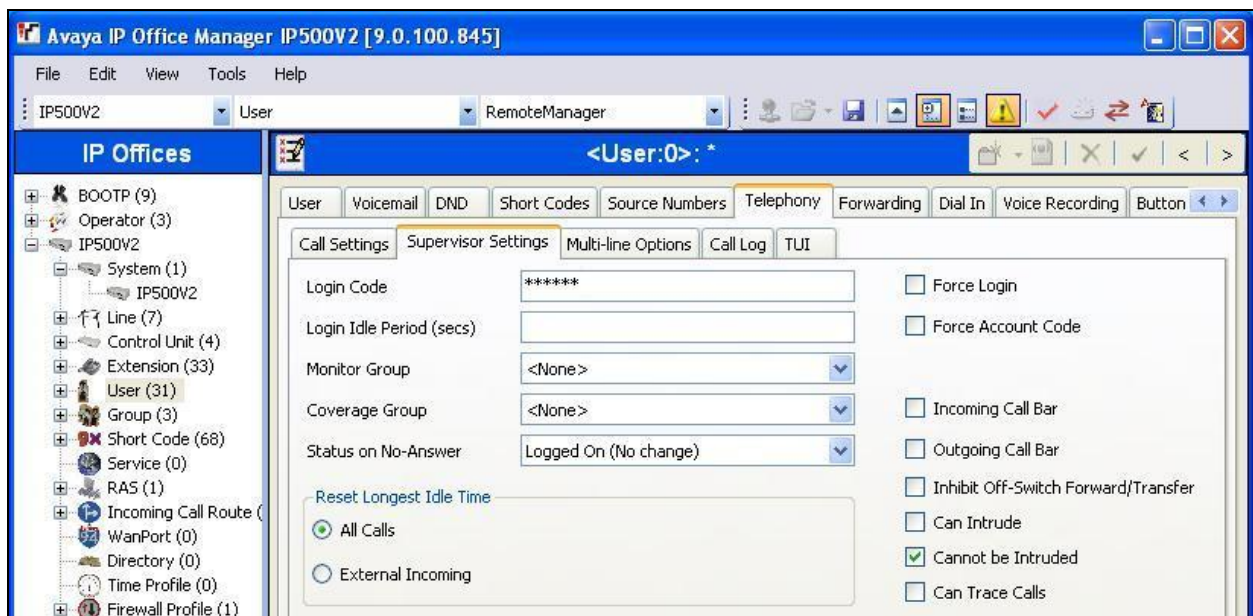
Voicemail Email:
 ☒ Off ☐ Copy ☐ Forward ☐ Alert

Select the **Telephony** tab, followed by the **Call Settings** sub-tab. Check **Call Waiting On**.



Select the **Supervisor Settings** sub-tab, and 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, four users with extensions 20041-20044 were created.



5.6. Administer Groups

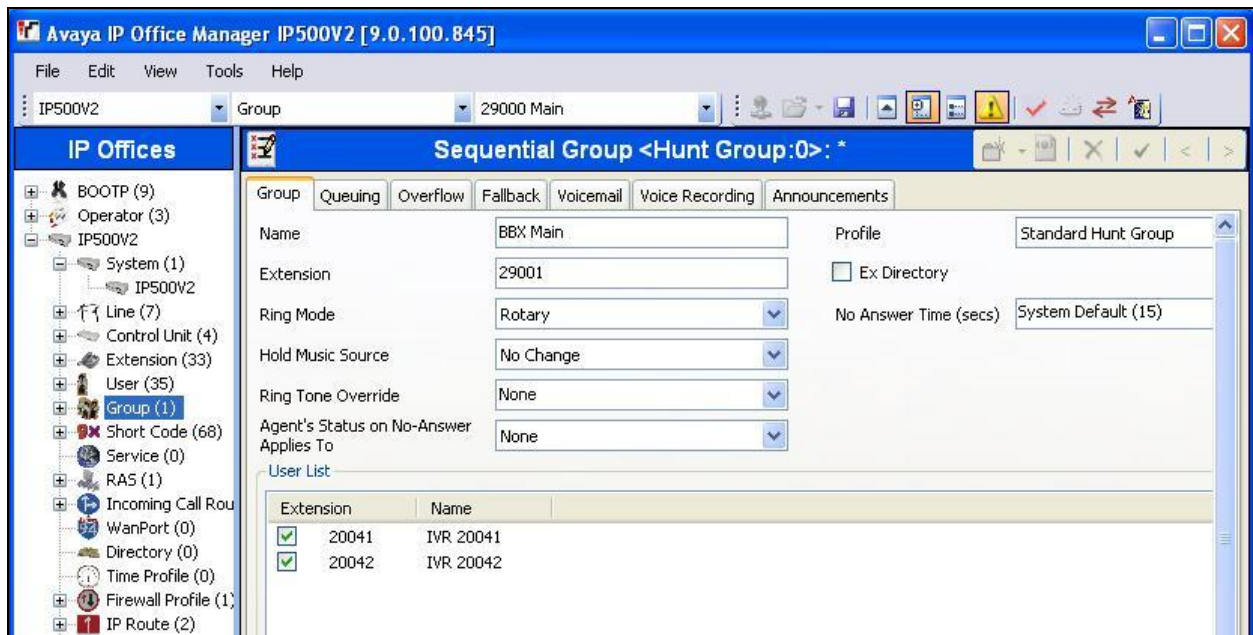
Administer three groups for the following purposes:

- Main group for delivering of incoming trunk calls to Vuesion.
- Monitor group for supervisor monitoring of agents.
- Tenant group for applying call treatments such as announcements and auto attendant.

From the configuration tree in the left pane, right-click on **Group** and select **New** from the pop-up list to add a new group. This 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

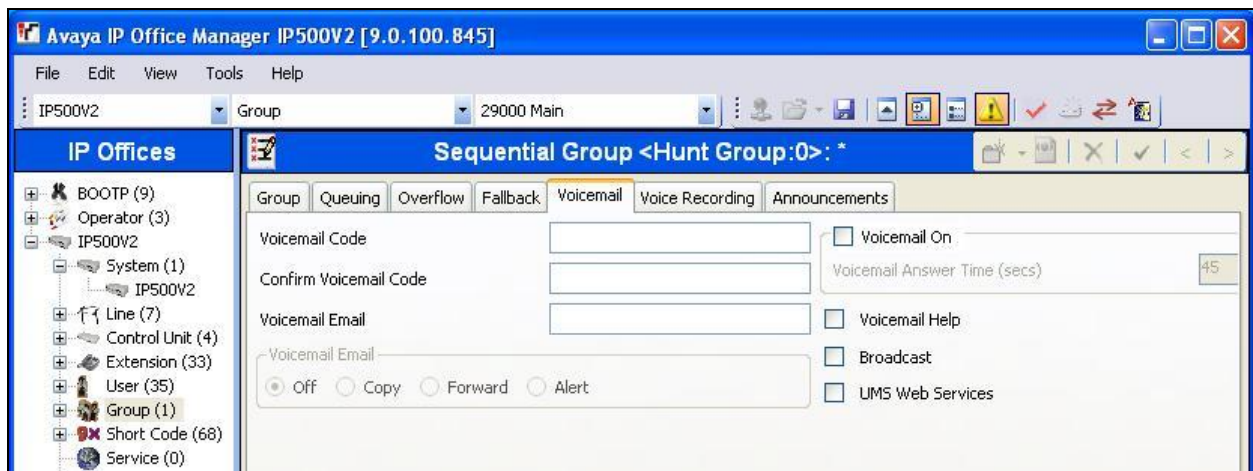
In the **User List** section, add the desired subset of virtual SIP users from **Section 5.5** as members. In the compliance testing, 20041 and 20042 were added as members.



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

Repeat this section to add the two remaining groups. For the monitor group, the assigned **Name** was “BBX Monitor”, **Extension** was “29002”, and the **User List** consisted of agent users 20031 and 20032 from **Section 3**. Default values were retained for the remaining fields.

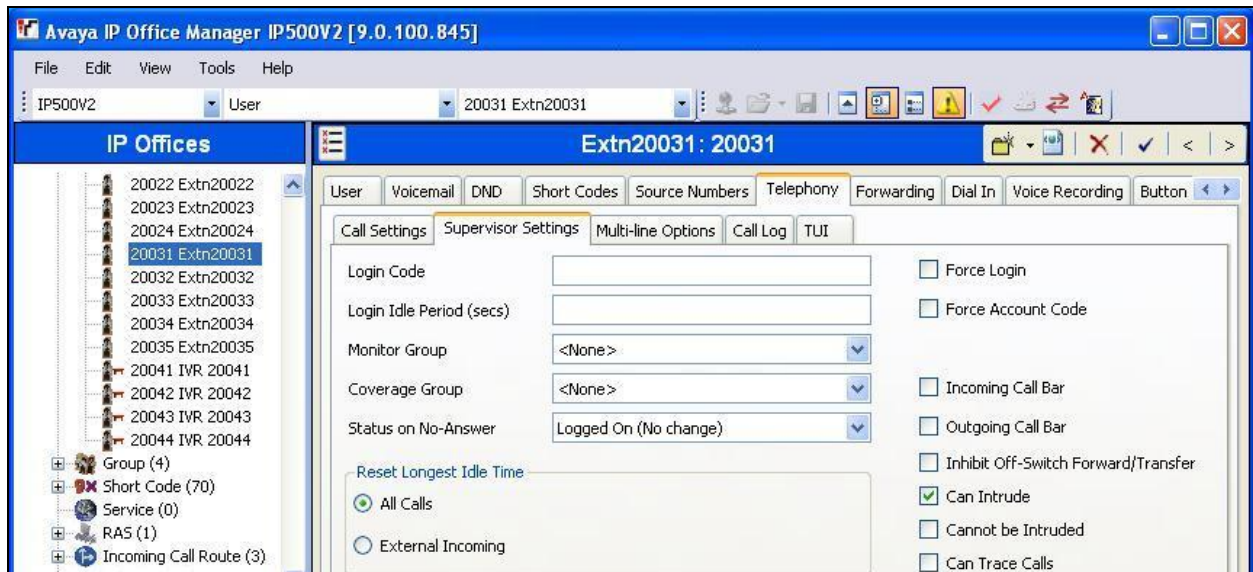
For the tenant group, the assigned **Name** was “BBX Tenant”, **Extension** was “29003”, **Ring Mode** was “Rotary”, **Voicemail On** was unchecked, and the **User List** consisted of the same SIP users 20041 and 20042 as in the main group. Default values were retained for the remaining fields.



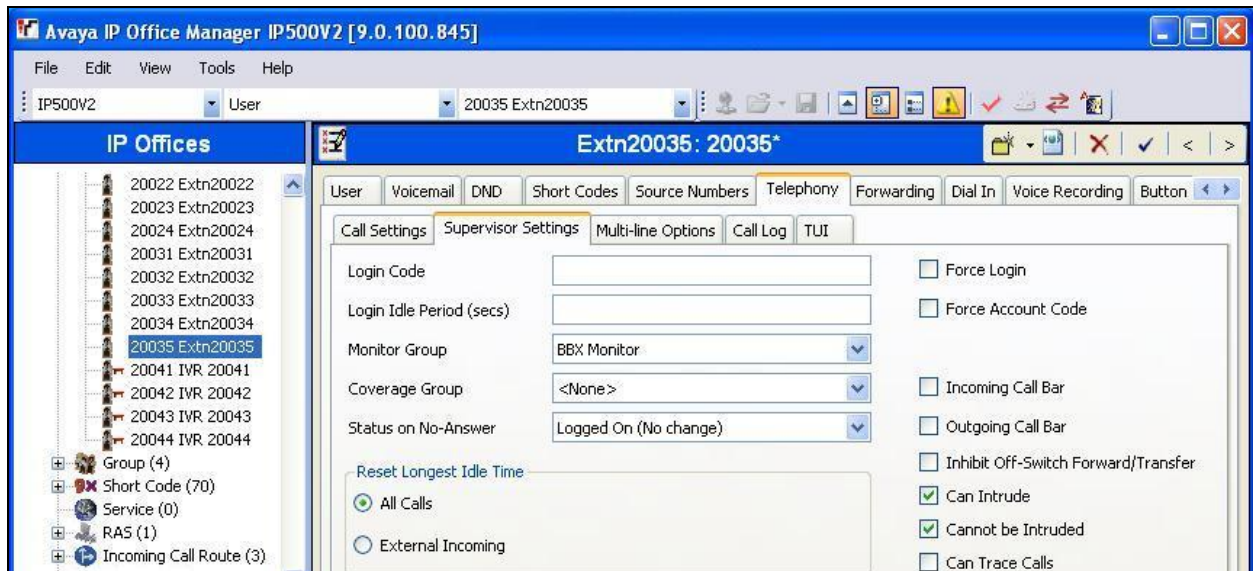
5.7. Administer Agents and Supervisors

From the configuration tree in the left pane, select the first agent user, in this case “20031”. Select the **Telephony** tab, followed by the **Supervisor Settings** sub-tab. Uncheck **Cannot be Intruded** and configure **Can Intrude** as desired.

Repeat this for all agent users from **Section 3**. In the compliance testing, two agent users with extensions 20031-20032 were configured.



For each supervisor user, check **Can Intrude** and **Cannot be Intruded**. For **Monitor Group**, select the monitor group from **Section 5.6**. Repeat this for all supervisor users from **Section 3**.



5.8. Administer Incoming Call Route

If necessary, create an incoming call route to route incoming calls to the main group. In the compliance testing, the existing incoming call route for an ISDN PRI line can route to any five digit extensions on IP Office.

As shown in screen below, the **Incoming Number** for the ISDN PRI line “9” is “73285xxxxx”, which uses five single digit wildcards “x” allowing the last five digits to be any number.

The screenshot shows the Avaya IP Office Manager interface. The left pane displays a tree view of the system hierarchy, including IP Offices, BOOTP, Operator, IP500V2, System, Line, Control Unit, Extension, User, Group, Short Code, Service, RAS, Incoming Call Route, WanPort, Directory, and Time Profile. The right pane shows the configuration for the selected Incoming Call Route, with the following fields:

Field	Value
Bearer Capability	Any Voice
Line Group ID	9
Incoming Number	73285xxxxx
Incoming Sub Address	
Incoming CLI	
Locale	
Priority	1 - Low
Tag	
Hold Music Source	System Source
Ring Tone Override	None

In the **Destinations** tab, the use of “#” in the **Destination** field enabled routing to base on “xxxxx” from the **Incoming Number** field from above. Therefore, incoming calls to “7328529001” will be routed to the main group configured in **Section 5.6**.

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

The screenshot shows the Avaya IP Office Manager interface with the **Destinations** tab selected. The configuration table is as follows:

TimeProfile	Destination	Fallback Extension
Default Value	#	

6. Configure BBX Technologies Vuesion Multimedia Contact Center

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

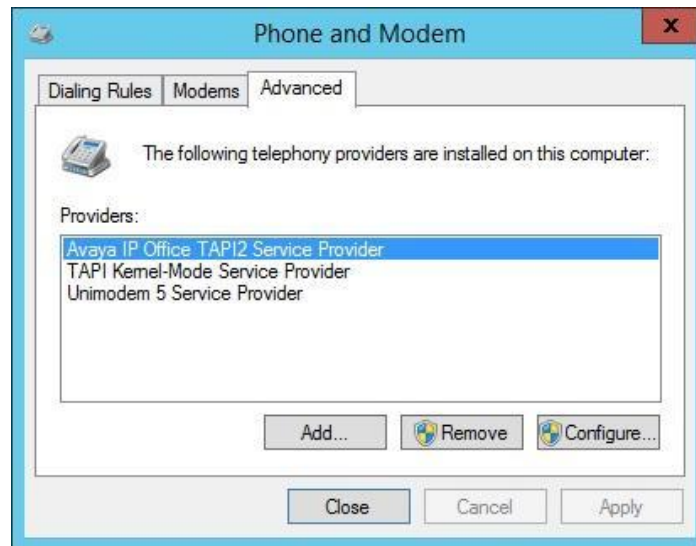
- Administer TAPI driver
- Launch Vuesion Manager
- Administer communication setup
- Administer ACD groups
- Administer ACD members
- Administer local extensions
- Administer tenants
- Start services
- Administer VMAIL extensions
- Administer queue bandwidth
- Administer park orbits

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

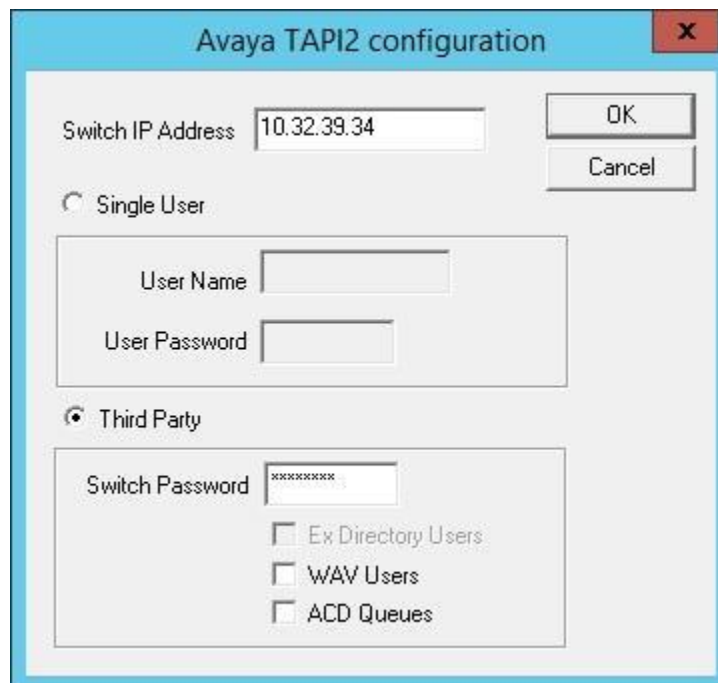
In addition to the shown procedural steps, the application also requires the auto attendant, and class of service for agents and supervisors be configured by following reference [2].

6.1. Administer TAPI Driver

From the Vuesion server, select **Start → Control Panel → Phone and Modem**, to display the **Phone and Modem** screen below. Select the **Advanced** tab, followed by **Avaya IP Office TAPI2 Service Provider**, and click **Configure**.



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



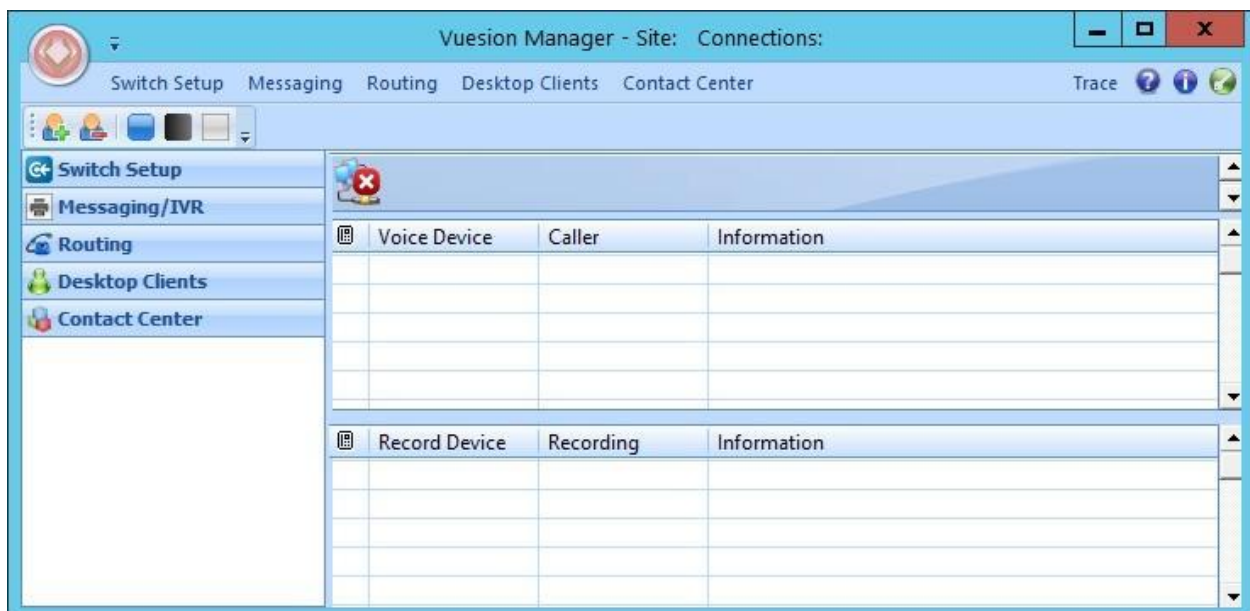
6.2. Launch Vuesion Manager

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



6.3. Administer Communication Setup

The **Vuesion Manager** screen is displayed. Select **Switch Setup** → **Communication Setup** from the top menu.



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

- **IP Enabled:** Check this field.
- **PBX IP Addr:** IP address of IP Office.
- **PBX Password:** Password of IP Office.
- **Customer Location Name:** A descriptive name.
- **This Server IP Address:** IP address of the Vuesion server.
- **IVR Location:** Same descriptive name.
- **IVR Pilot Number:** The tenant group extension from **Section 5.6**.

COMMUNICATION SETTINGS

SWITCH COMMUNICATION

RS232 Port #: COM1 BaudRate: 9600

☒ IP Enabled

PBX IP Addr: 10.32.39.34

PBX Password: xxxxxxxx

PBX SMDR IP Address:

PBX SMDR TCP Port: 0

NETWORKING SETUP: MASTER SERVER

NetServer IP address:

NetServer IP Port: 65000

Node Index: 0

THIS SERVER DEFINITION

Customer Location Name: Avaya DevConnect

This Server IP address: 10.32.39.170

This Server IP Port: 62029

IVR Location: Avaya DevConnect

IVR Pilot Number: 29003

OK

6.4. Administer ACD Groups

From the **Vuesion Manager** screen shown in **Section 6.3**, select **Contact Center → ACD Groups** from the top menu, to display the **SkillSets Administration** screen. Follow reference [2] to create an entry for the main group from **Section 5.6**, as shown below. Note that the **Queue ID** and **Queue Name** must match the main group extension and name exactly from **Section 5.6**.

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

The screenshot below shows the values used in the compliance testing. Note that the ACD group was created initially without any member assignments, and subsequently updated to include assignments after the ACD members were administered in the next section.

The screenshot displays the **SkillSets Administration** window with the following sections and values:

- Queue ID:** 29001, **Queue Name:** BBX Main, **Parent Group Name:** (empty)
- Group Name/ID Table:**

Group Name	ID
BBX Main	29001
- Voice Routing Options:**
 - ☒ Enable, Priority: 09, Longest InQ Thr: 40 Sec
 - Method: Skills Based, Force Priority: 00
 - Overflow Time: 25 Sec, Q Threshold: 04
 - Overflow Destination: (empty), Abandon Filter: 15 Sec
 - Signed-Out Overflow: (empty), Abandon Thr: 30
 - All Busy Overflow: (empty), ☒ Auto/Manual Wrap 15 Sec
 - Advance Time: 10 Sec, ☐ Auto Logout 11:50:00 PM
- Email Routing Options:**
 - ☐ Enable, Priority: 00
 - Subject Filter: (empty)
 - Overflow Time: 00
 - Ovf Destination: (empty)
 - Signed-Out Ovf: (empty)
 - EmailQ Threshold: 10
 - Longest InQ Thr: 300
 - Force Priority: 0
- Announcements:**

	QPos.	~ Hold	AA	Frequency
1: AA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	AA	Once
2: AA	<input type="checkbox"/>	<input type="checkbox"/>	AA	Repeat
3: AA	<input type="checkbox"/>	<input type="checkbox"/>	AA	Repeat
- Multimedia Contact Center Members Assignment:**
 - Voice Skill Level: 00, Email Skill Level: 00, Outdial Skill Level: 00
 - | Name | ID | Type |
|-----------------|--------|----------------|
| BBX Agent1 | 700... | ACD Agent |
| BBX Agent2 | 700... | ACD Agent |
| BBX Supervisor1 | 700... | ACD Supervisor |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
 - | Name |
|------|
| |
| |
| |
| |
| |
| |
| |
| |
| |
- Outbound Campaign:**
 - ☐ Enable Campaign, Campaign Priority: 00
 - Data Source: (empty), Table: (empty)
 - Login: (empty), Password: (empty)
 - Name: (empty), Phone: (empty)
 - Contact: (empty), Priority: (empty)
 - Comment: (empty), Resolution: (empty)
 - Restricted Hours During Schedule (Format: 12:00-13:00,...): (empty)
 - ☐ Enable Schedule, Timezone: (CST)
 - Start Datetime: 1/22/2014, 8:00:00 AM
 - Stop Datetime: 1/22/2014, 5:00:00 PM
 - M T W T F S S
 - Buttons: Import Records, Restart Campaign, Add, Remove, Refresh Scripts, Save, Exit

6.5. Administer ACD Members

From the **Vuesion Manager** screen shown in **Section 6.3**, select **Contact Center → ACD Members** from the top menu, to display the **ACD Members** screen. Follow reference [2] to create an entry for each agent and supervisor user from **Section 3**.

Enter the desired **FullName**. For **Member**, enter a unique value for each agent and supervisor. The recommendation is to use an available extension number on IP Office. For **Password**, enter desired values. In the compliance testing, the same values were used for **Member** and **Password** for simplicity.

For **Type**, select “ACD Agent” for agents and “ACD Supervisor” for supervisors. For **Primary Group**, select the ACD group from **Section 6.4**. For **Class**, select the appropriate class of service.

[illegible]

From the **Vuesion Manager** screen shown in **Section 6.3**, select **Switch Setup → Local Extensions** from the top menu, to display the **DIRECTORY CONFIGURATION** screen below.

For **Title**, use “Queue” for the ACD group entry, and configure as desired for the ACD members.

TLT; Reviewed:
SPOC 3/14/2014

6.7. Administer Tenants

From the **Vuesion Manager** screen shown in **Section 6.3**, select **Messaging → Tenants** from the top menu, to display the **TENANTS/GROUPS** screen.

Follow reference [2] to create an entry for the tenant group from **Section 5.6**. For **Name**, enter the tenant group name from **Section 5.6**. For **ID** and **Password**, enter the tenant group extension from **Section 5.6**. Retain the default values in the remaining fields, and click **Edit Members** toward the bottom of the screen (not shown below).

Name	ID	Pwd
BBX Tenant	29003	29003

Tenant/Group Definition
Name:
ID: Password:
Taxes: %
Discount: %
Long Distance Call Charges
First Minute: Add. Minute:
International Call Charges
First Minute: Add. Minute:
☐ Cost Incoming Calls

The **Selected Tenant** screen is displayed next. Select entries associated with agents and supervisors from the **Available User List** and move to the **Tenant/Group Members List**, as shown below.

Selected Tenant : BBX Tenant

Tenant/Group Members List

Member Name	Member Ext
Ext 20031	20031
Ext 20032	20032
Ext 20035	20035

<<--
-->>

Available Users List

Member Name	Member Ext
BBX Main	29001

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**.



Follow procedures in **Section 6.2** to launch Vuesion Manager. From the **Vuesion Manager** screen shown in **Section 6.3**, select **Messaging → VMAIL Extensions** from the top menu, to display the **DIRECTORY CONFIGURATION** screen below.

[illegible]

6.10. Administer Queue Bandwidth

From the **Vuesion Manager** screen shown in **Section 6.3**, select **Contact Center → Queue Bandwidth** from the top menu, to display the **DIRECTORY CONFIGURATION** screen below.

Follow reference [2] to create desired number of entries for queuing of incoming calls. For **Directory #**, use available extension numbers on IP Office.

The screenshot shows the 'DIRECTORY CONFIGURATION' window with the 'CALL CENTER QUEUE' tab selected. On the left is a table with columns 'Full Name', 'DN #', and 'Port#'. It contains ten rows, each with 'Queue' in the first column and '29901' through '29910' in the second column, with '0' in the third column. On the right is the 'DIRECTORY ASSIGNMENT' section with fields for 'Directory #', 'FullName:', 'Title:', 'PBX', 'Power-Up Destination:', 'Password:', 'Tenant Name:', and 'Class of Service' (set to 0).

Full Name	DN #	Port#
Queue	29901	0
Queue	29902	0
Queue	29903	0
Queue	29904	0
Queue	29905	0
Queue	29906	0
Queue	29907	0
Queue	29908	0
Queue	29909	0
Queue	29910	0

6.11. Administer Park Orbits

From the **Vuesion Manager** screen shown in **Section 6.3**, select **Switch Setup → Park Orbits** from the top menu, to display the **DIRECTORY CONFIGURATION** screen below.

Follow reference [2] to create desired number of entries for parking of calls. The **Directory #** are used by Vuesion to park and unpark queued calls on IP Office, therefore use available extension numbers on IP Office.

The screenshot shows the 'DIRECTORY CONFIGURATION' window with the 'PARK ORBITS' tab selected. On the left is a table with columns 'Full Name', 'DN #', and 'Port#'. It contains three rows: 'Park 01' with '29951', 'Park 02' with '29952', and 'Park 03' with '29953', all with '0' in the third column. On the right is the 'DIRECTORY ASSIGNMENT' section with fields for 'Directory #', 'FullName:', 'Title:', 'PBX', 'Account Code:', 'Password:', 'Tenant Name:', and 'Class of Service' (set to 0).

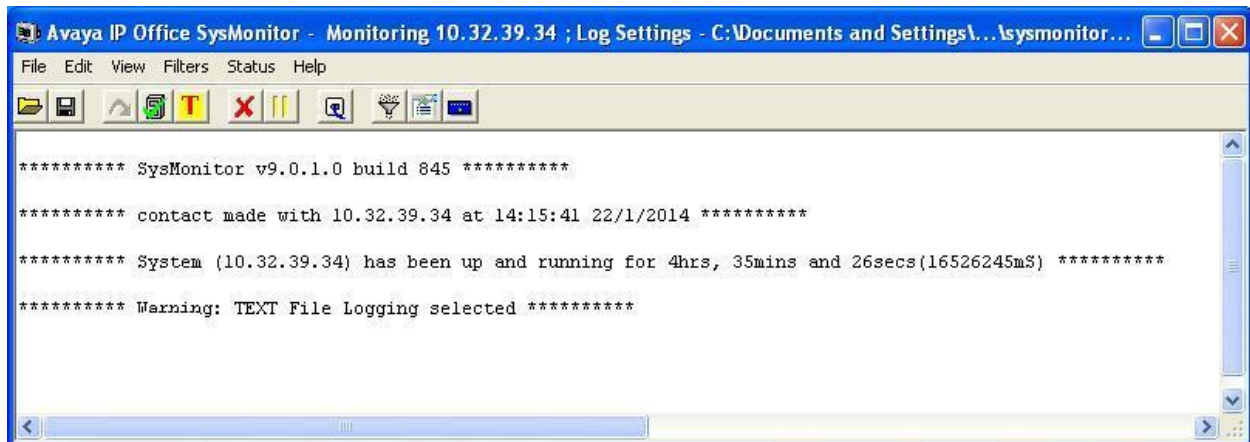
Full Name	DN #	Port#
Park 01	29951	0
Park 02	29952	0
Park 03	29953	0

7. Verification Steps

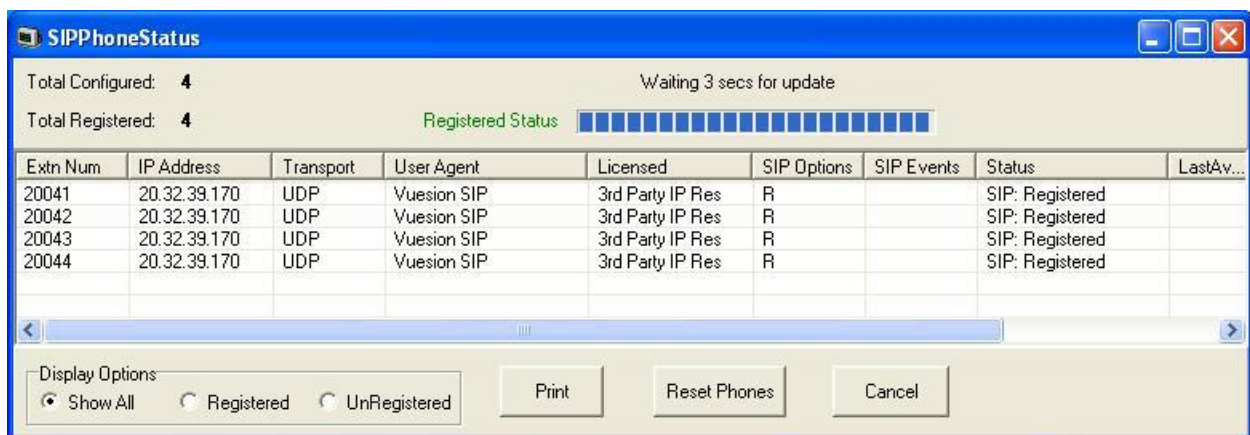
This section provides the tests that can be performed to verify proper configuration of IP Office and Vuesion.

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 SysMonitor** screen is displayed, as shown below. Select **Status → SIP Phone Status** from the top menu.

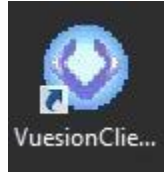


The **SIPPhoneStatus** screen is displayed. Verify that there is an entry for each virtual SIP user from **Section 5.5**, that the **User Agent** contains “Vuesion SIP”, and that the **Status** is “SIP: Registered”, as shown below.



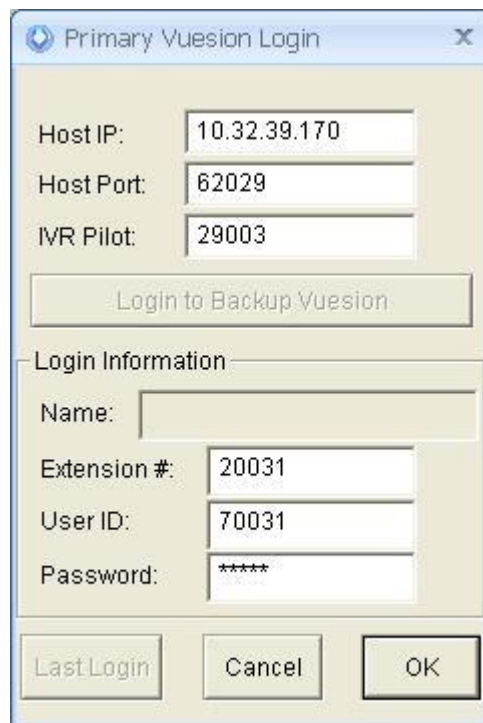
7.2. Verify BBX Technologies Vuesion Multimedia Contact Center

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

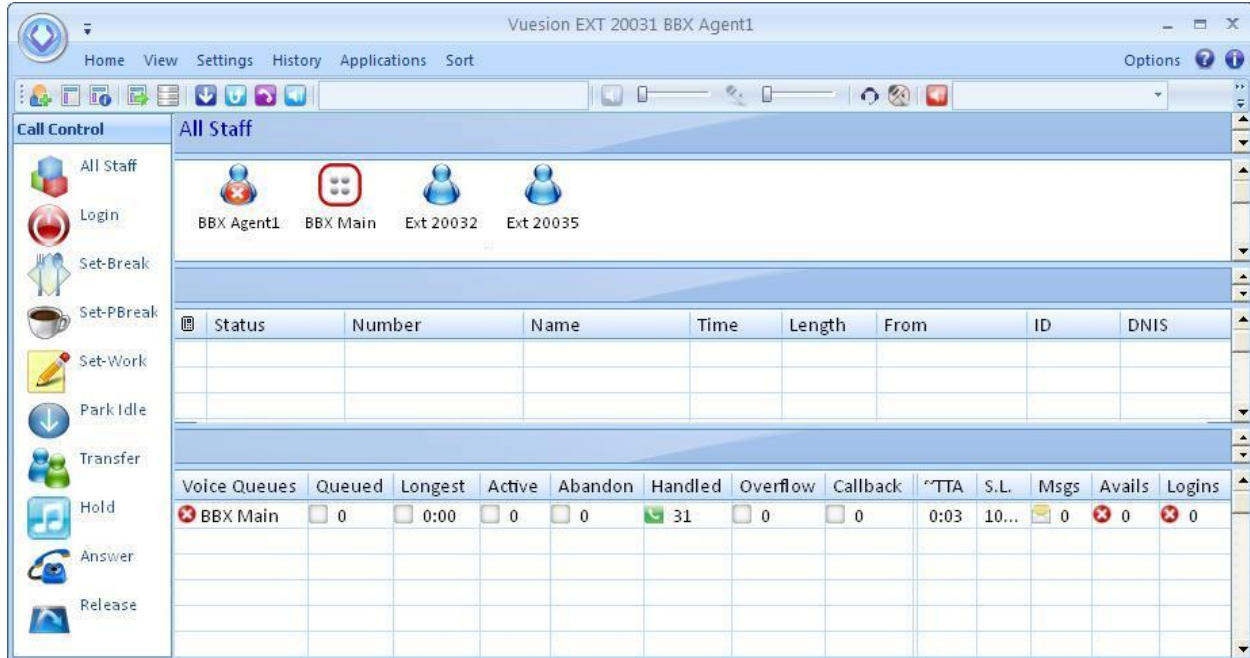


The **Vuesion User Login** screen is displayed. Enter the following values for the specified fields, and retain the default values for the remaining fields.

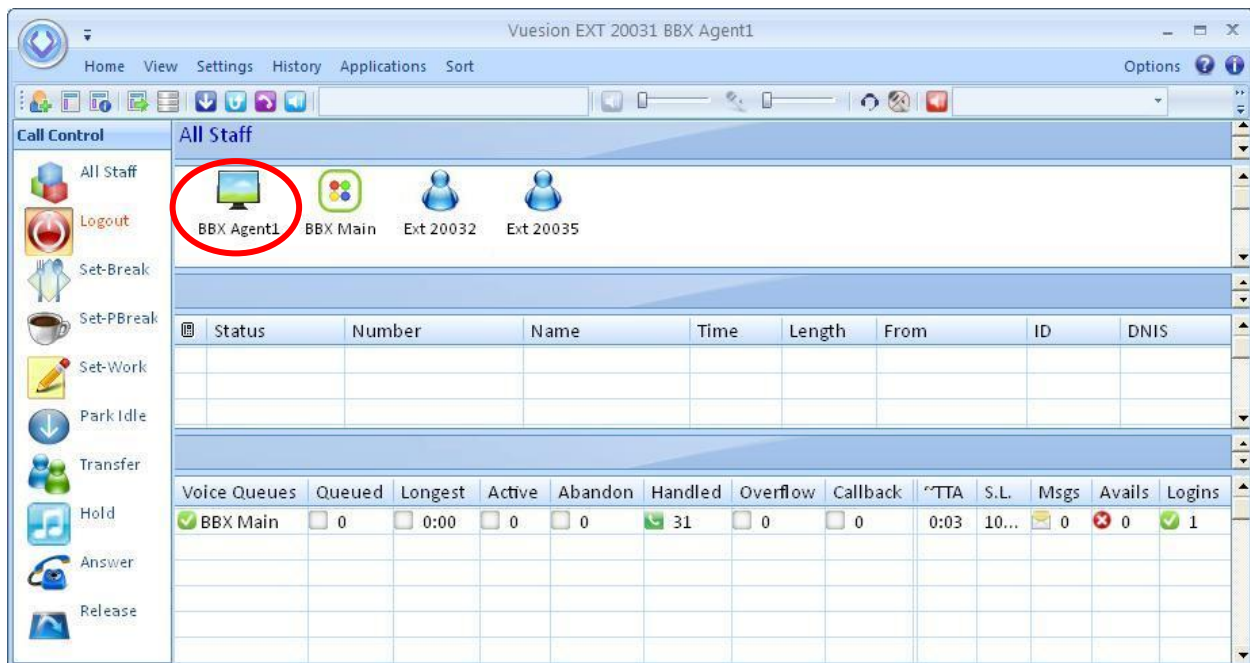
- **Host IP:** The server IP address from **Section 6.3**.
- **Host Port:** The default server IP port from **Section 6.3**.
- **IVR Pilot:** The IVR pilot number from **Section 6.3**.
- **Extension #:** The applicable tenant extension number from **Section 6.7**.
- **User ID:** The applicable ACD member credentials from **Section 6.5**.
- **Password:** The applicable ACD member credentials from **Section 6.5**.

A screenshot of the 'Primary Vuesion Login' dialog box. The dialog has a title bar with a blue icon and the text 'Primary Vuesion Login'. It contains several input fields and buttons. The 'Host IP' field is set to '10.32.39.170', 'Host Port' is '62029', and 'IVR Pilot' is '29003'. Below these is a button labeled 'Login to Backup Vuesion'. A section titled 'Login Information' contains fields for 'Name' (empty), 'Extension #' (set to '20031'), 'User ID' (set to '70031'), and 'Password' (set to '*****'). At the bottom are three buttons: 'Last Login', 'Cancel', and 'OK'.

The **Vuesion** screen below is displayed. Click on the **Login** icon from the left pane.



The applicable agent icon is updated in the right pane, as shown below.



Make an incoming trunk call to the main group, and verify that the screen is updated to reflect a ringing call. Also verify that the entry shown in the middle right pane reflects proper information for the call. Click on the **Answer** icon in the left pane to answer the call.

The screenshot shows the Vuesion EXT 20031 BBX Agent1 interface. The left pane contains a 'Call Control' menu with icons for All Staff, Logout, Set-Break, Set-PBreak, Set-Work, Park Idle, Transfer, Hold, Answer, and Release. The main pane displays 'All Staff' with icons for BBX Agent1, BBX Main, Ext 20032, and Ext 20035. Below this is a table showing call details:

Status	Number	Name	Time	Length	From	ID	DNIS
Incoming	908-848-5601	BBX Main	09:56:00	00:00:00	9088485601	3	7328529001

Below the call details table is a 'Voice Queues' table:

Voice Queues	Queued	Longest	Active	Abandon	Handled	Overflow	Callback	~TTA	S.L.	Msgs	Avails	Logins
BBX Main	1	0:00	0	0	1	0	0	0:05	10...	0	1	1

Verify the agent telephone is connected to the caller with two-way talk paths, and that the agent screen is updated to reflect the call being connected, as shown below. Click on the **Release** icon in the left pane to complete the call.

The screenshot shows the Vuesion EXT 20031 BBX Agent1 interface after the call has been answered. The left pane remains the same. The main pane displays 'All Staff' with icons for BBX Agent1, BBX Main, Ext 20032, and Ext 20035. Below this is a table showing call details:

Status	Number	Name	Time	Length	From	ID	DNIS
Connected	908-848-5601	BBX Main	09:56:00	00:00:12	9088485601	3	7328529001

Below the call details table is a 'Voice Queues' table:

Voice Queues	Queued	Longest	Active	Abandon	Handled	Overflow	Callback	~TTA	S.L.	Msgs	Avails	Logins
BBX Main	0	0:00	1	0	1	0	0	0:05	10...	0	0	1

From the PC running Vuesion Reports, double-click on the **VuesionReports.exe** icon shown on the desktop, which was created as part of installation. In the compliance testing, Vuesion Reports was running on the supervisor PC.



The **Vuesion Reporting** screen is displayed. For **Server IP/Name**, enter the server IP address from **Section 6.3**. For **TCP/Port**, enter the default server IP port from **Section 6.3**

For **Supervisor ID** and **Password**, enter the applicable credentials for the supervisor from **Section 6.5**, as shown below.

The screenshot shows the 'Vuesion Reporting' application window. The title bar says 'Vuesion Reporting' with standard window controls. Below the title bar is a menu bar with 'Tools' and 'Reporting'. On the left is an 'Explorer' pane with a 'Queues' section expanded, showing a list of items: Performance (highlighted), Performance DNIS, DOW Performance, DOW All Groups, Service Level, Abandon Activity, Activity, DNIS Activity, Resolution-IN Activity, Resolution-IN Summary, Resolution-OUT Activity, Resolution-OUT Summary, Email Activity, and Email Summary. The main area is titled 'Initial Login' and contains four input fields: 'Server IP/Name' with the value '10.32.39.170', 'TCP/Port' with '62029', 'Supervisor ID' with '70035', and 'Password' with masked characters. Below these fields are 'Cancel' and 'Login' buttons. At the bottom right, there are three small buttons: 'CAP', 'NUM', and 'SCRL'.

The **Vuesion Reporting** screen below is displayed. Retain the default values, and click **View Reports** to view reports for the current day.

REPORTS SELECTIONS AND FILTERS

Start Date Selection: January, 2014
 End Date Selection: January, 2014

Reports Start Time: 12:00:01 AM
 Reports Stop Time: 11:59:59 PM

Answer Threshold: 120
 Abandon Threshold: 120

TTA - Columns: 10 30 60
 Talk - Columns: 60 120 180 240
 Abandon - Columns: 10 30 60

Long calls greater than: 1800
 Short calls less than: 10

Sort By Names: ☒
 Sort By IDs: ☐

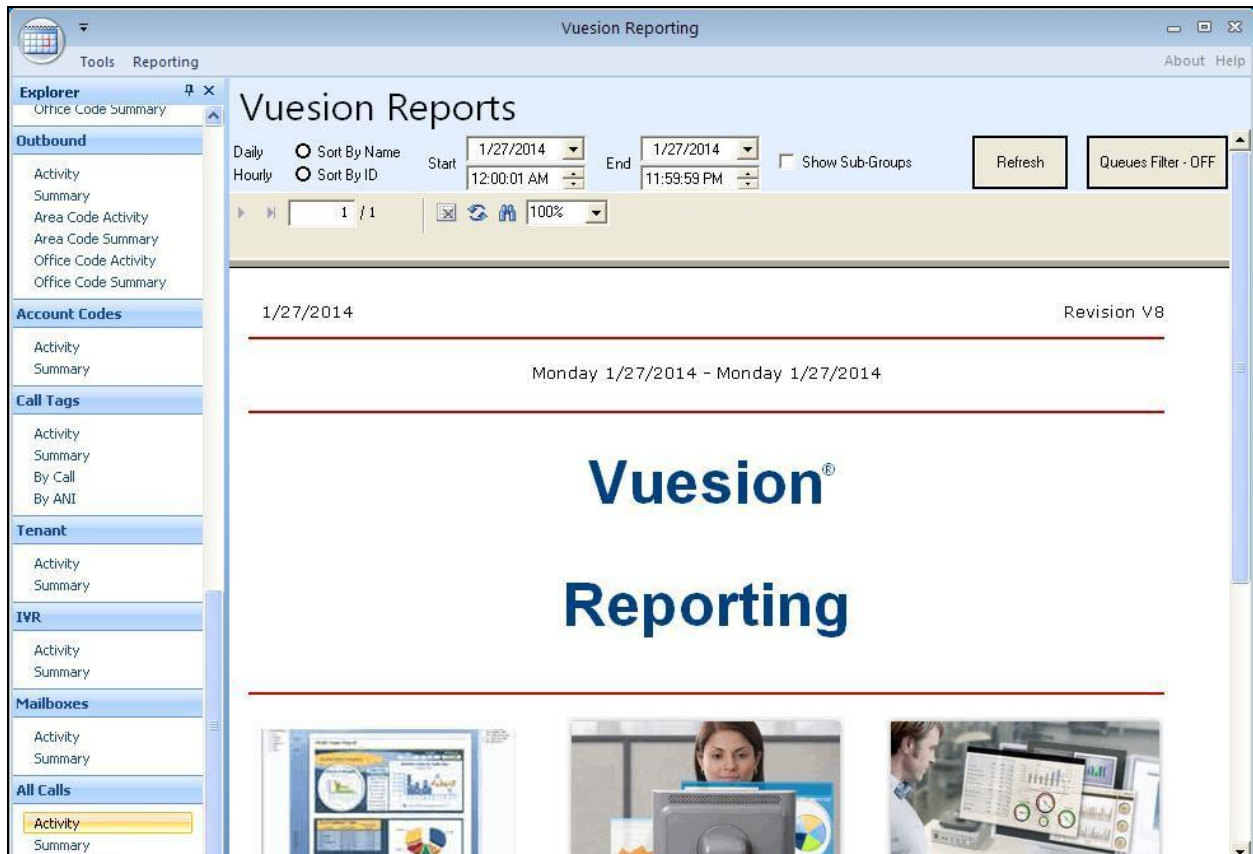
AUTOMATIC REPORTS

Reports Name:
☐ Enable File Format: HTML40
☐ Yesterday ☐ Last Week ☐ Last Month
 Week Starts On: SUN
 Reports Start Time: 12:00:00 AM Reports Stop Time: 12:00:00 AM
☐ Month Layout ☐ Day Layout ☐ Hour Layout
 Email Address:
 Send Email At: 12:00:00 AM

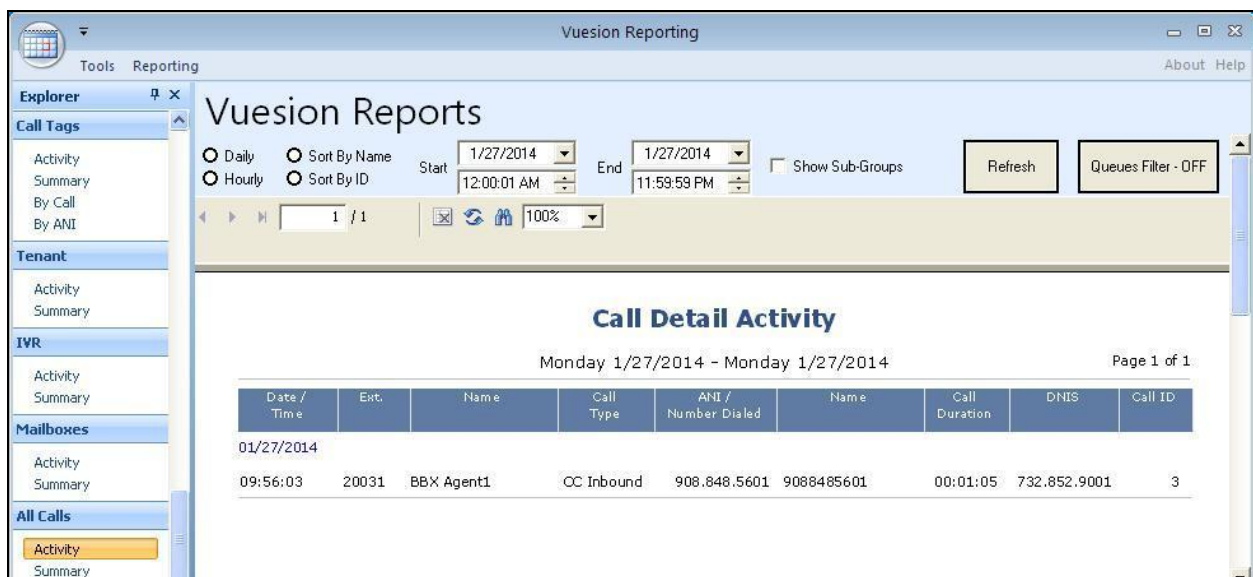
Preferred Reports:

Buttons: Cancel, View Reports, Send Request

The **Vuesion Reporting** screen is updated. Select **All Calls** → **Activity** from the left pane.



The **Vuesion Reporting** screen is updated with the **Call Detail Activity** report. Verify that there is an entry reflecting the last call with proper information, as shown below.



8. Conclusion

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

9. Additional References

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

1. *Avaya IP Office Manager*, Release 9.0, Issue 9.01, September 2013, Document Number 15-601011, available at <http://support.avaya.com>.
2. *Vuesion Application Server Contact Center Configuration Guide*, 01/2014 Release V9, available upon request to BBX Technologies Support.

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