



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

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# **Application Notes for BBX Technologies Vuesion Multimedia Contact Center Power Outdial 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 Power Outdial to interoperate with Avaya IP Office 9.0. BBX Technologies Vuesion Multimedia Contact Center is a contact center management solution, and Power Outdial is an optional feature that enabled outbound campaign and automatic placement of outbound calls on behalf of available agents.

In the compliance testing, BBX Technologies Vuesion Multimedia Contact Center Power Outdial used the TAPI interface to support initiation and control of outbound campaign calls from the agent desktops.

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 Power Outdial to interoperate with Avaya IP Office 9.0. BBX Technologies Vuesion Multimedia Contact Center is a contact center management solution, and Power Outdial is an optional feature that enabled outbound campaign and automatic placement of outbound calls on behalf of available agents.

In the compliance testing, BBX Technologies Vuesion Multimedia Contact Center Power Outdial used TAPI 2 in third party mode to support initiation and control of outbound campaign calls from the agent desktops.

The call list was uploaded by the administrator as part of the outbound campaign configuration. Agents have the Vuesion Client application running on the desktops. When an agent became available for an outbound campaign call, Power Outdial presented the agent with the customer information, and the agent used the desktop to initiate the outbound call. The agent used the telephone connected to IP Office to manually hear the call progress tones, and used the desktop to manually control the outbound campaign call.

# 2. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. The outbound campaign calls were automatically launched by Power Outdial for available agents. Necessary user actions such as release were performed manually from the desktops and/or telephones to test the various call scenarios.

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 Client application for proper preview and control of outbound campaign calls. A sanity test of Vuesion Reports was performed to verify proper reporting of basic outbound campaign 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 from Power Outdial:

- Use of TAPI functions to support initiation and control of outbound campaign calls via agent desktops.
- Proper handling of outbound campaign call scenarios including preview, hold/reconnect, blind/attended transfer, blind/attended conference, drop, incomplete number, invalid number, no route, ring no answer, voicemail coverage, busy, end of call list, multiple agents, and switching from outbound to inbound and vice versa.
- Proper reporting of basic outbound campaign call scenarios including answer, drop, hold/reconnect, blind/attended transfer, and blind/attended conference.

The serviceability testing focused on verifying the ability of Power Outdial 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 Power Outdial from the compliance testing:

- The application can support multiple outbound agents, however, only one agent at a time can preview and launch an outbound campaign call. Once launched, then the next customer record from the call list will be delivered to the next available agent for preview.
- The out-of-box outbound campaign script does not allow for agent to cancel out of the outbound call preview.
- Agent desktop displayed status of CONNECTED before the outbound campaign call was answered at the PSTN.
- Depending on the specific transfer and conference scenario, the transfer-to/conference-to agent desktop with an active preview may not reflect the incoming call and may need to answer/drop the call using the telephone. Upon completion of the transfer/conference call, the active preview screen at the transfer-to/conference-to agent is then updated with agent prompted to submit a resolution, despite the outbound call hasn't been launched.
- For the hold/unhold scenario, two entries were produced in the Call Detail Activity report with status of Start Start and Unhold.
- When a customer drops from the outbound campaign call first, then there may not be any reporting of the call in the Call Detail Activity report.
- For all transfer and conference scenarios, one of the reported entries in Call Detail Activity contained status of Start Start.
- For an outbound campaign call that was dropped during or after an Ethernet disruption to the server, there is no reported entry in the Call Detail Activity report. Furthermore, the agent will be presented with the same customer record for preview post server recovery.

## 2.3. Support

Technical support on Power Outdial can be obtained through the following:

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

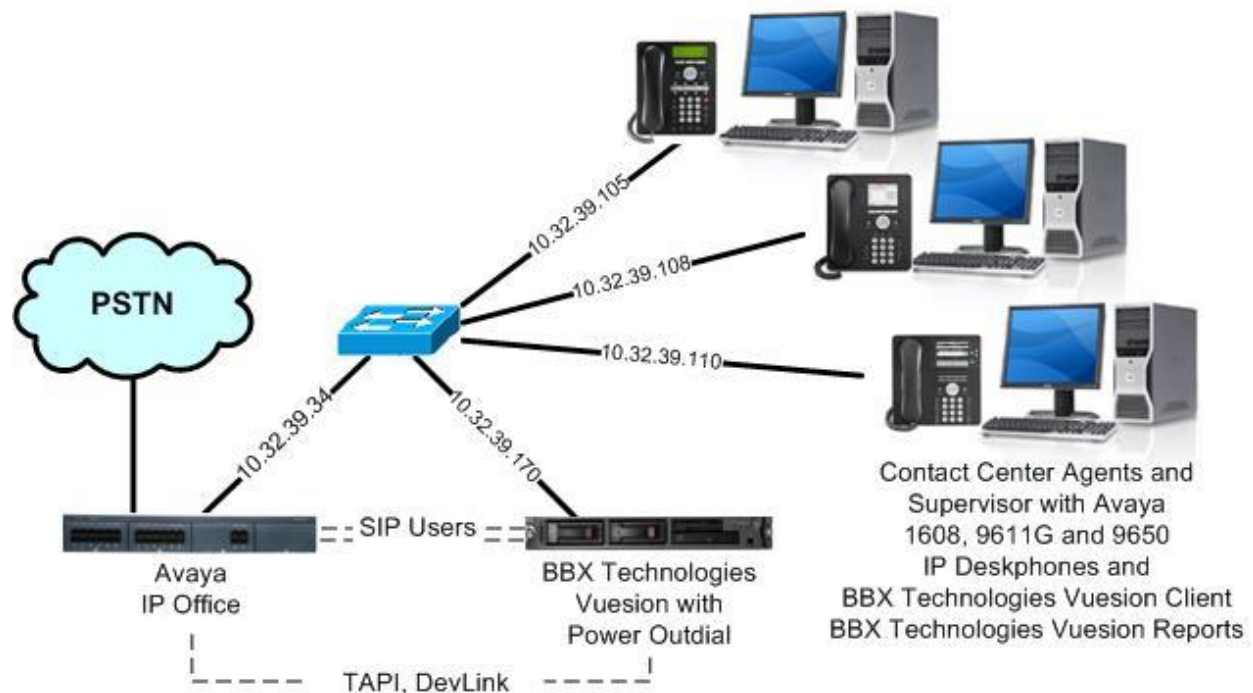
### 3. Reference Configuration

The configuration used for the compliance testing is shown below.

These Application Notes assume the basic Vuesion integration with IP Office using SIP User, TAPI, and DevLink are already in place according to [2] and will not be described.

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. The Power Outdial feature launched outbound campaign calls on behalf of two agent users shown below.

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	V9.0
• Power Outdial	V9.0
• Avaya DevLink (devlink.dll)	1.0.0.5
• Avaya IP Office TAPI2 Driver (tspi2w_64)	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.*

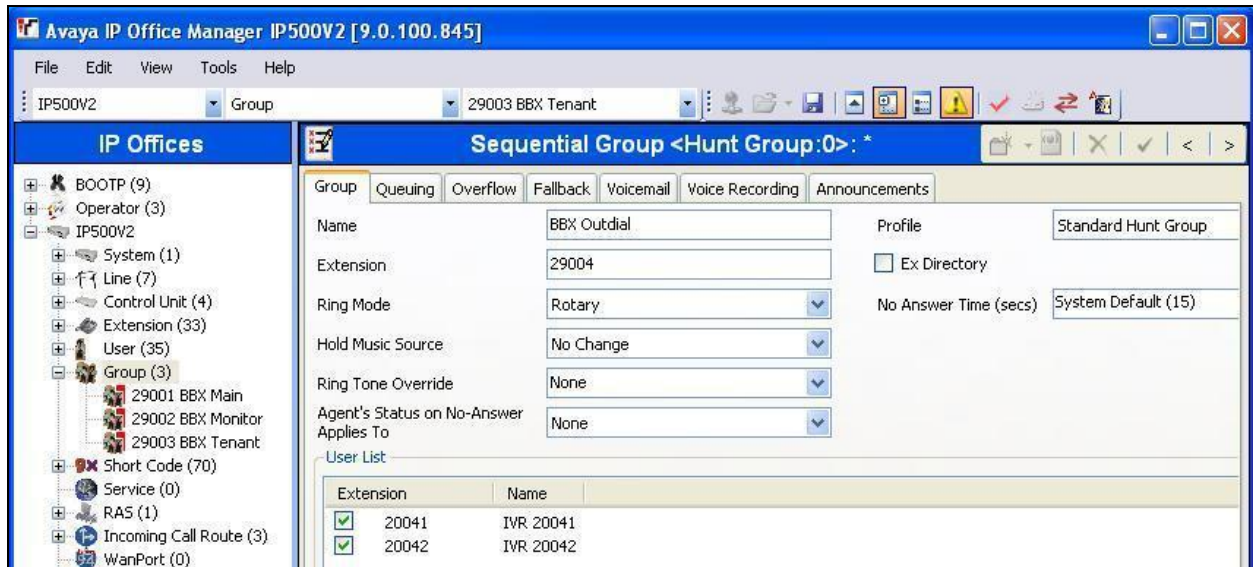
## 5. Configure Avaya IP Office

This section provides the procedures for configuring IP Office.

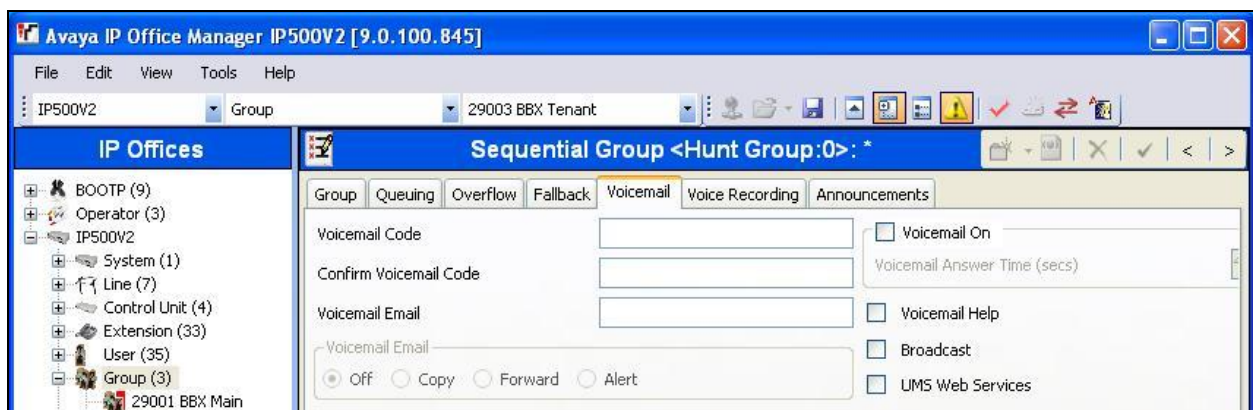
From a PC running the IP Office Manager application, select **Start → All Programs → IP Office → Manager** to launch the application. Select the proper IP Office system, and log in with the appropriate credentials.

The **Avaya IP Office Manager** screen is displayed. From the configuration tree in the left pane, right-click on **Group** and select **New** to add a new group. This group will be used to route incoming calls from the PSTN to the calling number used in the outbound campaign calls.

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 same virtual SIP users as in the tenant group from reference [2] as members.



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



## 6. Configure BBX Technologies Vuesion Multimedia Contact Center Power Outdial

This section provides the procedures for configuring the Power Outdial feature. The procedures include the following areas:

- Launch Vuesion Manager
- Verify license
- Administer ACD groups
- Administer local extensions
- Administer tenants

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

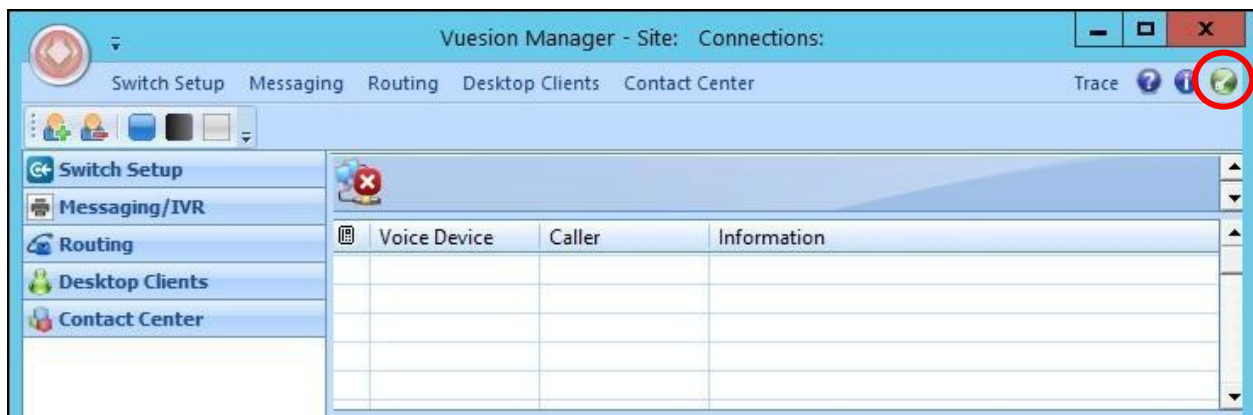
### 6.1. Launch Vuesion Manager

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



### 6.2. Verify License

The **Vuesion Manager** screen is displayed. Click on the **License** icon shown below.



The **VUESION LICENSE** screen is displayed. In the **CONTACT CENTER / ACD** sub-section, verify that there is sufficient license for **Outbound ACD seats**, as shown below.

VUESION LICENSE [Licensed to Customer: DevConnect-2014] [Partner:BBX Internal]

License Serial Number C2792474866	Laser ID number E1 20 14 01 14 40 19 99	Base Software Revision V9
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**MESSAGING**

Voice Processing Ports	10
VoiceMail	U.M.
UM seats	10

**FACSIMILES**

FAX Ports	0
FAX Users	0

**VUESION NETWORKS**

**RECORDING**

Recorder Licenses	10
Recorder channels	10

**HEALTHCARE**

**CONTACT CENTER / ACD**

Call Center Agents	10
Call Center Supervisors	2
Call Center Reports	2
Outbound ACD seats	10
ACD Number CallBack	Enabled
Email Q seats	0

**UC CLIENTS**

Screen POP	Enabled
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**STANDARD CALL REPORTS**

CDR Reports	2
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**HARDWARE LICENSES**

LWCDFAAAI7
AACFC-EACAA-FIGCD-00N4L
LWCDFAAAI7
15415155AADAG2D
2792474866

Print Licenses to File

Vuesion Score Number: 69

From the **Vusion Manager** screen shown in **Section 6.2**, select **Contact Center → ACD Groups** from the top menu to display the **SkillSets Administration** screen. Add an entry for the outbound group from **Section 5** by following reference [2], select the appropriate ACD members with desired skills configuration, and configure an outbound campaign with desired schedule. Note that the **Queue ID** and **Queue Name** must match the outbound group extension and name exactly from **Section 5**.

The screenshot below shows the values used in the compliance testing. The agents and supervisors shown in the **Multimedia Contact Center Members Assignment** sub-section were created as part of the basic Vuesion integration in reference [2], and selected as members for this outbound group.

SkillSets Administration

Queue ID: 29004

Queue Name: BBX Outdial

Parent Group Name:

Group Name	ID
BBX Outdial	29004
BBX Main	29001

Voice Routing Options

☐ Enable
 Priority: 00
 Longest InQ Thr: 40 Sec
 Method: Skills Based
 Force Priority: 00
 Overflow Time: 25 Sec
 Q Threshold: 04
 Overflow Destination:
 Abandon Filter: 15 Sec
 Signed-Out Overflow:
 Abandon Thr: 30
 All Busy Overflow:
 Auto/Manual/Wrap: 15 Sec
 Advance Time: 180 Sec
 Auto Logout: 11:50:00 PM

Email Routing Options

☐ Enable
 Priority: 00
 Subject Filter:
 Overflow Time: 00
 OVF Destination:
 Signed-Out OVF:
 EmailQ Threshold: 10
 Longest InQ Thr: 300
 Force Priority: 0

Announcements

1: AA

QPos: ☒

~ Hold ☒

AA

Once

Never

2: AA

QPos: ☐

~ Hold ☐

AA

Repeat

30 Sec

3: AA

QPos: ☐

~ Hold ☐

AA

Repeat

Never

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: 01

Data Source: Outdial DSN

Table: Sheet1\$

Login: Password:

Name: Name Phone: Phone

Contact: Contact Priority:

Comment:

Resolution:

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

☐ Enable Schedule
 Timezone:(CST)

Start Datetime: 1/28/2014 8:00:00 AM

Stop Datetime: 1/28/2014 5:00:00 PM

M

T

W

T

F

S

S

Import Records

Restart Campaign

Add

Remove

Refresh Scripts

Save

Exit

## 6.4. Administer Local Extensions

From the **Vuesion Manager** screen shown in **Section 6.2**, select **Switch Setup → Local Extensions** from the top menu, to display the **DIRECTORY CONFIGURATION** screen below.

Follow reference [3] to create an entry for the outbound ACD group from **Section 6.3**. For **Title**, use “Queue” for the ACD group entry, as shown below.

The screenshot shows the 'DIRECTORY CONFIGURATION' window. On the left, the 'LOCAL USER EXTENSIONS' section contains a table with the following data:

Full Name	DN #	Port#
Ext 20031	20031	24
Ext 20032	20032	25
Ext 20035	20035	28
BBX Main	29001	0
BBX Outdial	29004	0

At the bottom of this section are 'Add', 'Delete', and 'Save' buttons. The right side of the window is divided into two main sections: 'DIRECTORY ASSIGNMENT' and 'FOLLOW ME OPTIONS'. The 'DIRECTORY ASSIGNMENT' section includes fields for 'Directory #' (29004), 'FullName:' (BBX Outdial), 'Title:' (Queue), 'PBX', 'Account', 'Password', 'Tenant Name', and 'Class of Service' (0). It also contains several checkboxes: 'Shared Station', 'Virtual/Single Line', 'Disable SMDR', 'SIP Client', 'Network Advertise', 'Guest Telephone', 'Music On Hold', 'Nurse/CareGiver', 'Recorder', and 'Disabled'. The 'FOLLOW ME OPTIONS' section includes fields for 'Cellular #:', 'Home #:', 'Alternate #:', and 'Active Forward:'. At the bottom right are 'Refresh All' and 'Exit' buttons.

## 6.5. Administer Tenants

From the **Vuesion Manager** screen shown in **Section 6.2**, select **Messaging → Tenants** from the top menu, to display the **TENANTS/GROUPS** screen.

Select the tenant group entry from reference [2], and click **Edit Members** toward the bottom of the screen (not shown below).

The screenshot shows the 'TENANTS/GROUPS' window. On the left is a table titled 'Tenants/Groups' with columns 'Name', 'ID', and 'Pwd'. The first row is 'BBX Tenant', '29003', '29003'. To the right are configuration fields for 'Tenant/Group Definition': 'Name' (BBX Tenant), 'ID' (29003), and 'Password' (29003). Further right are 'Taxes: %' (0) and 'Discount: %' (0). Below these are 'Long Distance Call Charges' and 'International Call Charges', each with 'First Minute' and 'Add. Minute' fields, all showing '\$ 0'. At the bottom is a checkbox for 'Cost Incoming Calls'.

Tenants/Groups		
Name	ID	Pwd
BBX Tenant	29003	29003

**Tenant/Group Definition**

Name: BBX Tenant  
ID: 29003 Password: 29003

Taxes: % 0  
Discount: % 0

**Long Distance Call Charges**  
First Minute: \$ 0 Add. Minute: \$ 0

**International Call Charges**  
First Minute: \$ 0 Add. Minute: \$ 0

☐ Cost Incoming Calls

The **Selected Tenant** screen is displayed next. Select the entry associated with the outbound ACD group from the **Available User List** and add to the **Tenant/Group Members List**, as shown below.

The screenshot shows the 'Selected Tenant : BBX Tenant' window. It has two main tables: 'Tenant/Group Members List' on the left and 'Available Users List' on the right. The 'Tenant/Group Members List' has columns 'Member Name' and 'Member Ext', with entries: 'Ext 20031' (20031), 'Ext 20032' (20032), 'Ext 20035' (20035), and 'BBX Outdial' (29004). The 'Available Users List' has columns 'Member Name' and 'Member Ext', with one entry: 'BBX Main' (29001). Between the tables are two buttons: '<<--' and '-->>'. The '<<--' button is highlighted.

Tenant/Group Members List	
Member Name	Member Ext
Ext 20031	20031
Ext 20032	20032
Ext 20035	20035
BBX Outdial	29004

Available Users List	
Member Name	Member Ext
BBX Main	29001

<<--  
-->>

## 7. Verification Steps

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

Follow the procedure in reference [2] to launch the Vuesion Client application on an agent PC. The **Vuesion** screen below is displayed. Click on the **Login** icon from the left pane.

Vuesion EXT 20031 BBX Agent1

Home View Settings History Applications Sort Options

**Call Control**

- All Staff
- Login
- Set-Break
- Set-PBreak
- Set-Work
- Park Idle
- Transfer
- Hold
- Answer
- Release
- Set-Meeting

**All Staff**

BBX Agent1 BBX Agent2 **BBX Main** Ext 20035

Status	Number	Name	Time	Length	From	ID	DNIS

Voice Queues	Queued	Longest	Active	Abandon	Handled	Overflow	Callback	^TTA	S.L.	Msgs	Avails	Logins
BBX Main	0	0:00	0	0	2	0	0	0:26	50%	0	0	0

Outdial Queues	Queued	Active	Handled today	Callback	Handled so far	Total Contacts	Avails	Logins
BBX Outdial	0	0	0	0	0	20	0	0

Upon logging in, the screen below pops up showing the customer information for the next outbound campaign call. Click on **Dial** to launch the call.

**ABC Company 9**

Contact Information

Telephone: 9088485601 **Dial**

Company: ABC Company 9

Address: 21504 Crown Lake Drive

City: Dallas

State: TX

70009

Adam Pierson

9088485601

Existing Customer

Previous Touch

Email

Previous Resolution

Previous Note

Scripts

Hello, I am calling from ABC Company about our current promotion, would you like to hear more?

Yes No

Resolution

Email

Notify By Email ☐

Brief Note

<http://www.bbxtech.com>

Information

Callback ☐ 1:51:31 PM 1/29/2014

Verify the screen is updated to reflect the outbound campaign call, as shown below. Follow reference [3] to enter a resolution and complete the outbound campaign call.

**Vuesion EXT 20031 BBX Agent1**

Home View Settings History Applications Sort Options

Call Control

All Staff

BBX Agent1 BBX Agent2 BBX Main Ext 20035

Status	Number	Name	Time	Length	From	ID	DNIS
Connected	908-848-5601	BBX Outdial	13:22:04	00:00:09	ABC Company 9	13	

Logout

Set-Break

Set-PBreak

Set-Work

Park Idle

Follow procedure in reference [2] to launch the Vuesion Reports application on an agent PC, and to display the **Call Detail Activity** report for the current day.

Verify there is an entry reflecting the last outbound campaign call with proper information, as shown below.

The screenshot displays the Vuesion Reports application interface. The title bar reads "Vuesion Reporting". The left sidebar contains a navigation menu with sections: Explorer, Call Tags, Tenant, IVR, Mailboxes, and All Calls. The "All Calls" section is expanded, showing "Activity" (highlighted), "Summary", and "Call ID Activity". The main content area is titled "Vuesion Reports" and includes filters for "Daily" (selected), "Hourly", "Sort By Name", and "Sort By ID". The date range is set to "1/29/2014" from "12:00:01 AM" to "11:59:59 PM". A "Refresh" button and "Queues Filter - OFF" are also visible. Below the filters, the report is titled "Call Detail Activity" for "Wednesday 1/29/2014 - Wednesday 1/29/2014", labeled as "Page 1 of 1". A table displays the call data:

Date / Time	Ext.	Name	Call Type	ANI / Number Dialed	Name	Call Duration	DNIS	Call ID
01/29/2014								
13:22:04	20031	BBX Agent1	Outbound	908.848.5601	ABC Company 9	00:01:33		13

At the bottom right of the application window, there are buttons for "CAP", "NUM", and "SCRL".

## 8. Conclusion

These Application Notes describe the configuration steps required for BBX Technologies Vuesion Multimedia Contact Center Power Outdial 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. *Application Notes for BBX Technologies Vuesion Multimedia Contact Center with Avaya IP Office 9.0 – Issue 1.0*, available at <http://support.avaya.com>.
3. *Vuesion Application Server Contact Center Configuration Guide*, 01/2014 Release V9, available upon request to BBX Technologies Support.

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