



Avaya Solution & Interoperability Test Lab

Application Notes for VTech 1-Line Corded Analog Hotel Phone with Avaya IP Office 8.1 and Voicemail Pro 8.1 – Issue 1.0

Abstract

These Application Notes describe a compliance-tested configuration consisting of Avaya IP Office 8.1, Voicemail Pro 8.1 and the A2310 VTech 1-Line corded Analog Hotel Phone.

VTech's hospitality product line provides a clear cost and feature advantage that is backed by decades of expertise in the corded/cordless telephony industry. These Analog endpoints connect directly with Avaya IP Office 8.1.

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 a compliance-tested configuration consisting of Avaya IP Office and Voicemail Pro with the VTech A2310 1-Line Hotel Phone.

The compliance testing covers the following VTech analog phone:

- 1-Line Contemporary Analog TrimStyle Phone –A2310

2. General Test Approach and Test Results

The compliance testing focused on the interoperability between the VTech A2310 Analog Hotel Phone, Avaya IP Office and Voicemail Pro, including the ability to make and receive calls from PSTN endpoints, Avaya SIP, H.323 and Digital phones.

As the purpose of these phones is for hotel guest rooms and hotel lobbies, certain functionality considered to be standard on Avaya endpoints is not supported and therefore was not tested. More details on these limitations are described in **Sections 2.1** and **2.2**.

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 for 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

Testing consisted of typical call scenarios involving external endpoints using a simulated PSTN, and various Avaya endpoints aimed at simulating a typical hotel in which the staff uses full featured Avaya phones and guests use VTech analog phones.

The feature testing included basic calls, mute/un-mute, hold/reconnect, drop, music on hold, DTMF, attended transfer, attended conference, call forwarding, park/unpark, Hunt group member, MWI, and voicemail with Voicemail Pro. Hospitality features Do Not Disturb and Alarm Set with Voicemail Pro were also covered. The VTech A2310 phone is not able to initiate transfers or conferences but was tested as members of these scenarios.

The MWI testing was performed using an IPO 500 Extn Card Phone 8, analog line card. The VTech phone was configured for MWI with jumpers J1 and J3 installed. Other combinations of jumper settings were not covered in the compliance testing.

The following tests were not covered because the VTech phones do not support these functions:

- Display
- Call Forward Key
- Phonebook
- Speed Dial
- Redial

2.2. Test Results

The objectives described in **Section 2.1** were verified and all applicable tests passed with the following observation.

- When the VTech phone was configured for MWI with jumpers J1 and J3, IP Office needs to be configured for the 51V Stepped MWI method.

2.3. Support

Information, documentation and technical support for VTech Hotel Phones can be obtained at:

- Phone: 1 (888) 714-7385
- <http://vtechhotelphones.com>

3. Reference Configuration

The configuration used for the compliance testing is shown below.

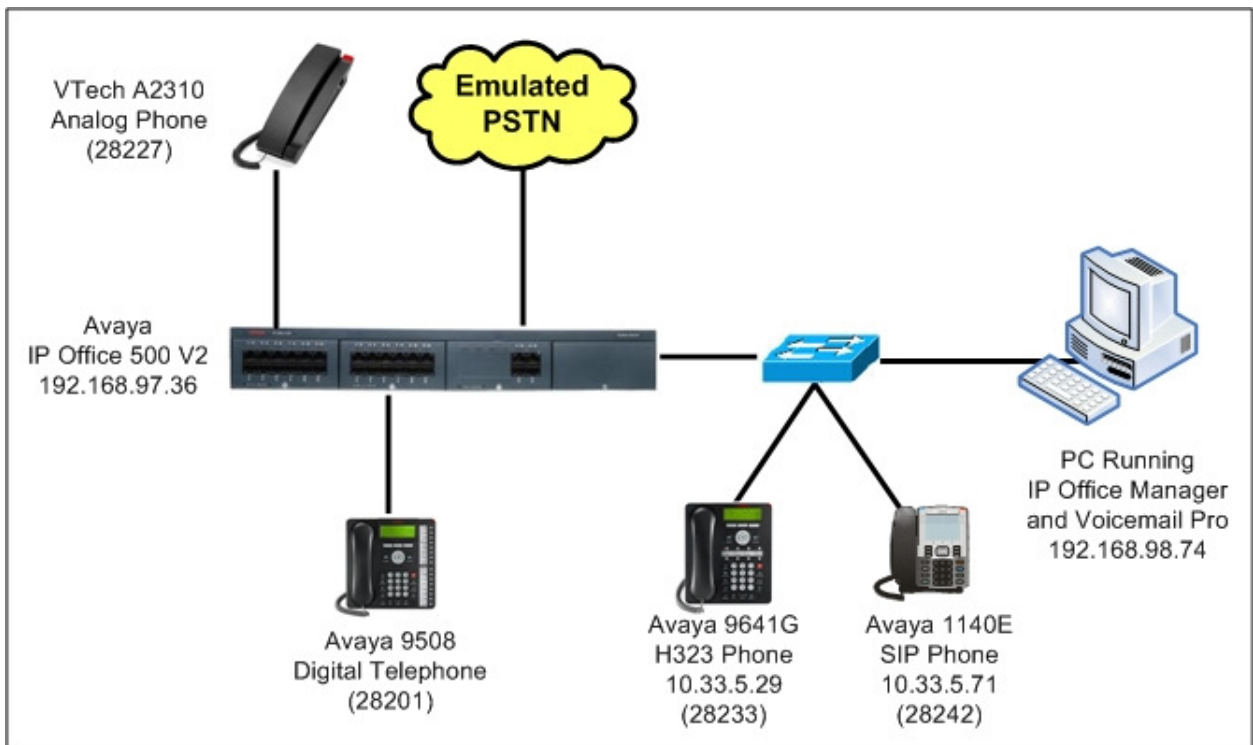


Figure 1 –Test Configuration for VTech A2310 Analog Hotel Phone

4. Equipment and Software Validated

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

| Equipment | Version |
|--|--|
| Avaya IP Office 500 V2 | 8.1(67) |
| IPO 500 Extn Card Phone 8 (Analog Line Card) | 700417231 |
| Voicemail Pro | 8.1.810.0 |
| Avaya 9641G H.323 Phone | Avaya one-X [®] Deskphone S62.2209U |
| Avaya 1140E SIP Phone | 04.03.12.00 |
| Avaya 9508 Digital Phone | N/A |
| VTech 1-Line Contemporary Analog TrimStyle Phone Model A2310 | N/A |

Testing was performed with IP Office 500 R8.1, but it also applies to IP Office Server Edition R8.1. Note that IP Office Server Edition requires an Expansion IP Office 500 v2 R8.1 to support analog or digital endpoints or trunks.

5. Configure Avaya IP Office

This section describes the steps to configure IP Office to interoperate with VTech Analog Hotel phones. It is assumed that IP Office has already been installed and is functioning. For additional information on IP Office installation and configuration refer to references in **Section 10**.

Summary of the IP Office Configuration to add a Vtech analog endpoint:

- Configuring an Analog Extension
- Configuring a User
- Verify Locale Setting
- Configuring a Short Code for Alarm Set

5.1. Configuring an Analog Extension

This section explains the steps to modify an analog extension. Open the IP Office Manager by navigating to **Start > Programs > IP Office > Manager** on the server or PC that IP Office Manager is installed on (not shown).

In the left panel navigate to **Extension** and then select an available analog extension in the center **Extension** panel. In the example configuration, **port 3** of **module BP2** was used. In the **Analogue Extension** panel enter a **Base Extension** that works with the dialing plan of the IP Office system. The **Caller Display Type** can be set to **Off** as the Vtech A2310 phone doesn't have a display.

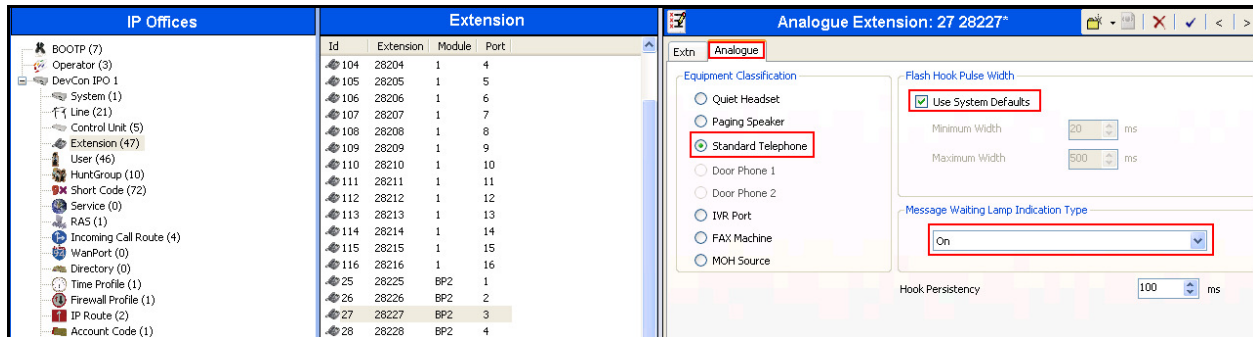
The screenshot displays the Avaya IP Office Manager interface. On the left, the 'IP Offices' tree shows 'Extension (47)' selected. The center panel, titled 'Extension', contains a table of extensions. The right panel, titled 'Analogue Extension: 27 28227', shows the configuration for the selected extension.

| Id | Extension | Module | Port |
|-----|-----------|--------|------|
| 104 | 28204 | 1 | 4 |
| 105 | 28205 | 1 | 5 |
| 106 | 28206 | 1 | 6 |
| 107 | 28207 | 1 | 7 |
| 108 | 28208 | 1 | 8 |
| 109 | 28209 | 1 | 9 |
| 110 | 28210 | 1 | 10 |
| 111 | 28211 | 1 | 11 |
| 112 | 28212 | 1 | 12 |
| 113 | 28213 | 1 | 13 |
| 114 | 28214 | 1 | 14 |
| 115 | 28215 | 1 | 15 |
| 116 | 28216 | 1 | 16 |
| 25 | 28225 | BP2 | 1 |
| 26 | 28226 | BP2 | 2 |
| 27 | 28227 | BP2 | 3 |
| 28 | 28228 | BP2 | 4 |
| 29 | 28229 | BP2 | 5 |
| 30 | 28230 | BP2 | 6 |

The 'Analogue Extension: 27 28227' panel shows the following configuration:

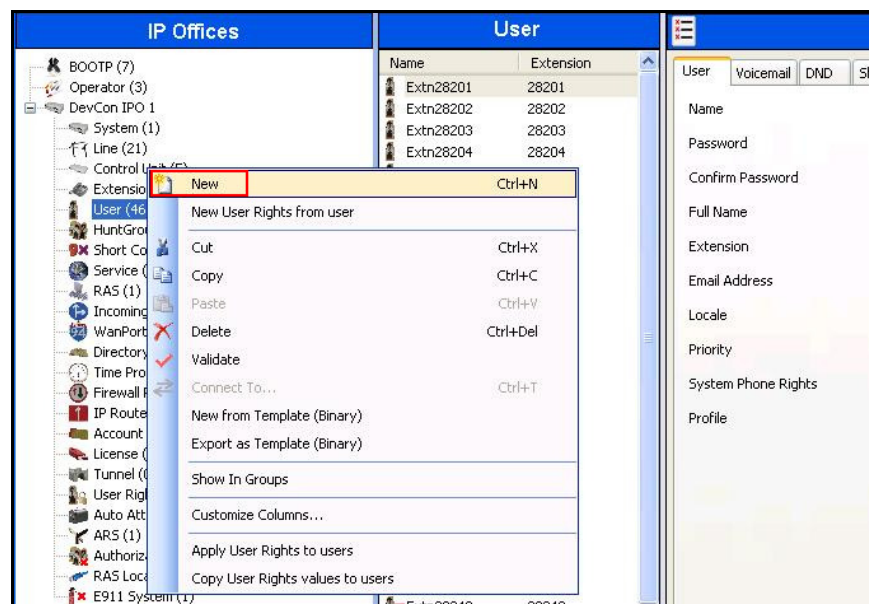
- Extension Id: 27
- Base Extension: 28227
- Caller Display Type: Off
- Device Type: Analogue Handset
- Module: BP2
- Port: 3

In the **Analogue Extension** panel select the **Analogue** tab. Ensure that **Standard Telephone** is selected. For **Flash Hook Pulse Width** select **Use System Defaults**. Verify that the **Message Waiting Lamp Indication Type** is set to **On**. This configuration will then use the **system locale** setting to determine the message waiting type as in **Section 5.3**. Now select OK (not shown).



5.2. Configuring a User

This section shows the steps to add a new user. In the left panel, right click on **User** and then select **New** as shown below.



In the right panel, enter a **Name** for this user and the **Extension** number as configured in **Section 5.1**. In this sample configuration defaults were used for the remaining fields and tabs. Select **OK** when done.

<User:0>: *

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

Name Extn28227

Password

Confirm Password

Full Name

Extension 28227

Email Address

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

☐ Enable Flare

Flare Mode Standalone

☐ Ex Directory

Device Type All Other Phone Types

User Rights

User Rights view User data

Working hours time profile <None>

Working hours User Rights

Out of hours User Rights

OK Cancel Help

5.3. Verify Locale Setting

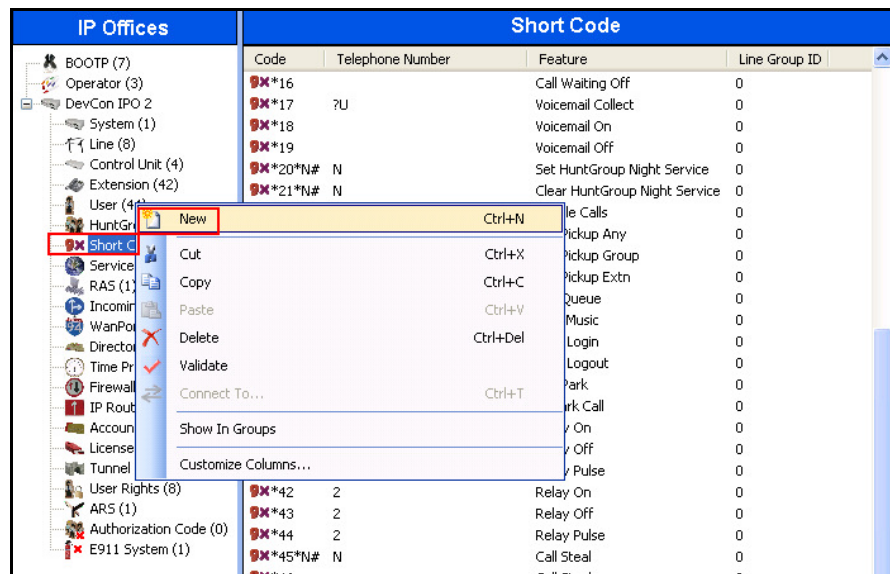
With the **Message Waiting Lamp Indication Type** set to **On** as shown in **Section 5.1**, the **Locale** setting determines the method that IP Office will use to trigger the message waiting lamp. To change this setting, select the IP Office **System** in the left panel. In the right panel the **Locale** can be selected from the drop-down box. For this sample configuration, **Locale** was set to **United States (US English)** as shown below.

The screenshot displays the Avaya IP Office configuration interface. On the left, the 'IP Offices' tree shows a hierarchy where 'DevCon IPO 1' is selected under the 'System' node. The main panel on the right is titled 'DevCon IPO 1' and contains several tabs: 'System', 'LAN1', 'LAN2', 'DNS', 'Voicemail', 'Telephony', 'Directory Services', 'System Events', 'SMTP', 'SMDR', 'Twinning', 'VCM', 'CCR', and 'Codecs'. The 'System' tab is active. Within this tab, the 'Locale' dropdown menu is set to 'United States (US English)'. Other visible settings include 'Name' (DevCon IPO 1), 'Contact Information' (a text area for special control), 'Device ID', 'TFTP Server IP Address' (192.168.97.36), 'HTTP Server IP Address' (192.168.97.36), 'Phone File Server Type' (Memory Card), 'Manager PC IP Address' (0.0.0.0), 'Avaya HTTP Clients Only' (unchecked), 'Enable Softphone HTTP Provisioning' (checked), 'Automatic Backup' (checked), 'Time Setting Config Source' (Voicemail Pro/Manager), 'Branch Prefix' (empty), and 'Local Number Length' (empty). There is also an unchecked checkbox for 'Favor RIP Routes, over static routes'.

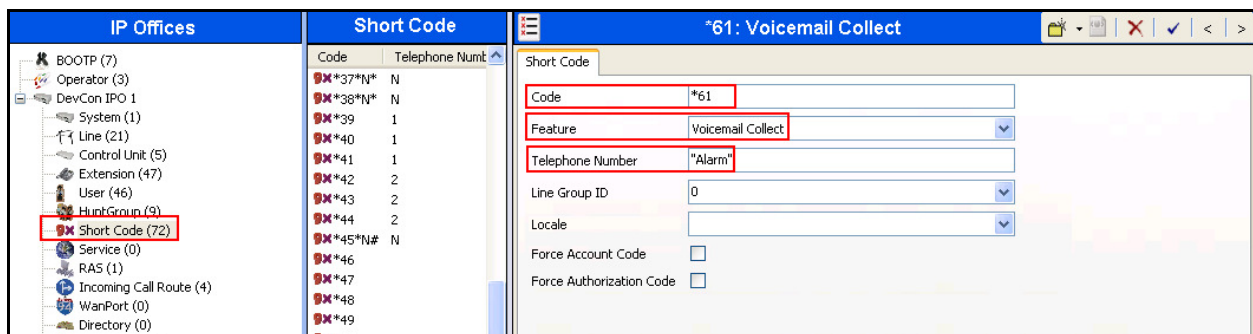
5.4. Configuring a Short Code for Alarm Set

This section describes the steps required to configure a new Short Code that can be used to access the Alarm Set feature of Voicemail Pro.

To configure a new Short Code, right click on **Short Code** as seen in the left hand window pane of IP Office Manager, and select **New** as shown below.



In the right hand window pane enter a unique **Code** that will be used to access Alarm Set in Voicemail Pro. In this example configuration, ***61** was used for the **Code**. For the **Feature** field select **Voicemail Collect** from the drop down menu. Now enter a unique name in double quotes in the **Telephone Number** field. In the example **"Alarm"** was used. This name needs to match the name configured in the Voicemail Pro Client shown in **Section 6**. When finished click on **OK** (not shown).



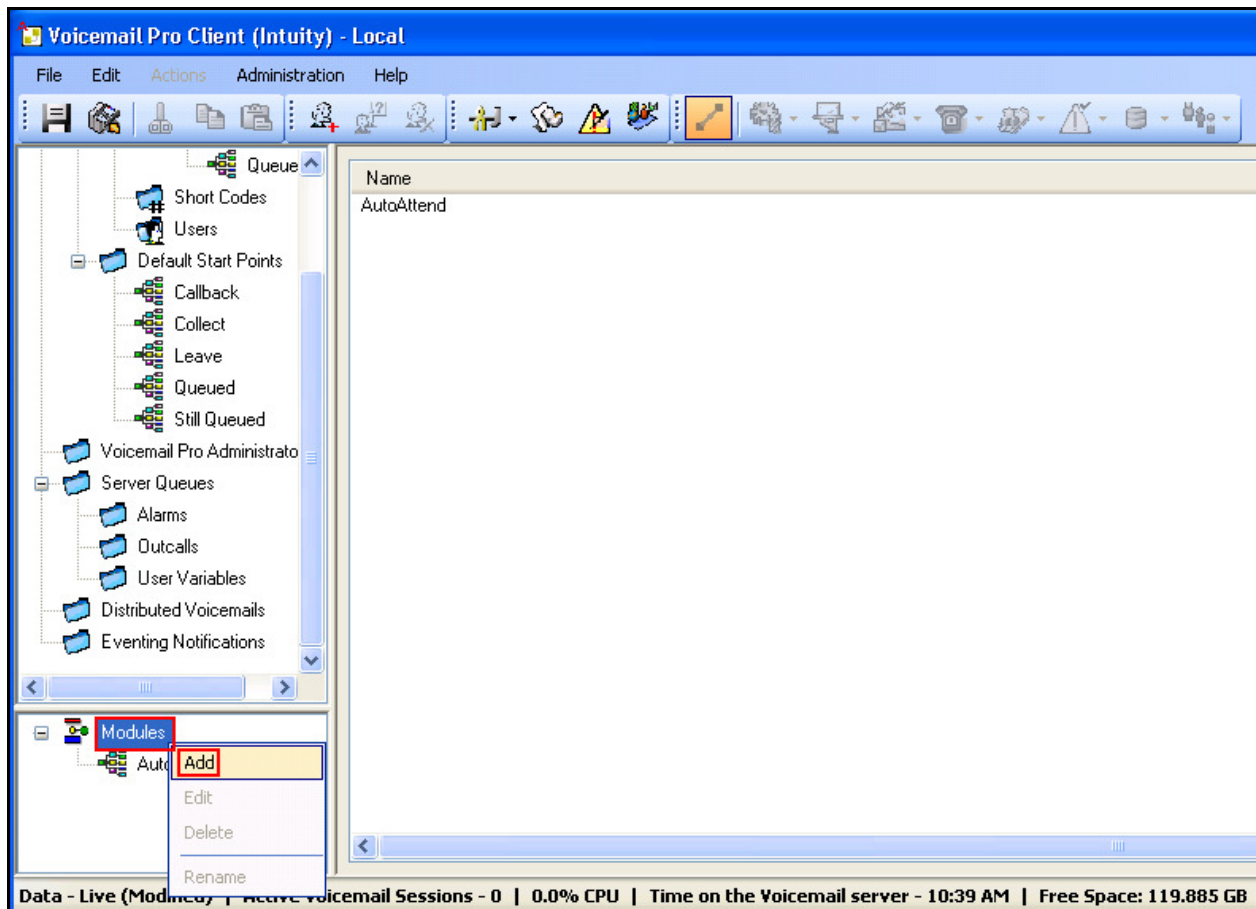
Now perform a save of the IP Office configuration (not shown).

6. Configure Voicemail Pro for Alarm Set

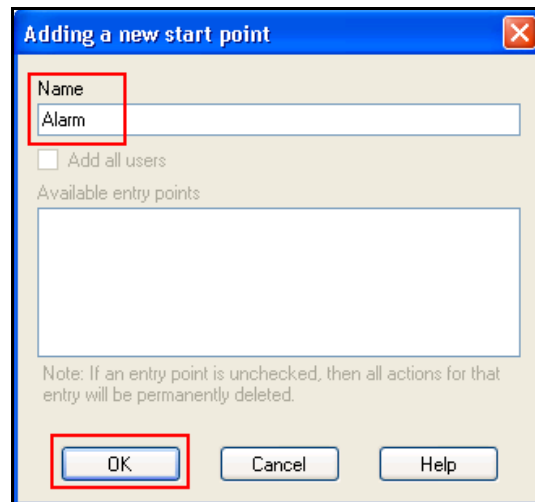
This section describes the steps required to configure Voicemail Pro for the Alarm Set feature.

Open the Voicemail Pro Client by navigating to **Start > Programs > IP Office > Voicemail Pro Client** on the server Voicemail Pro is installed on (not shown).

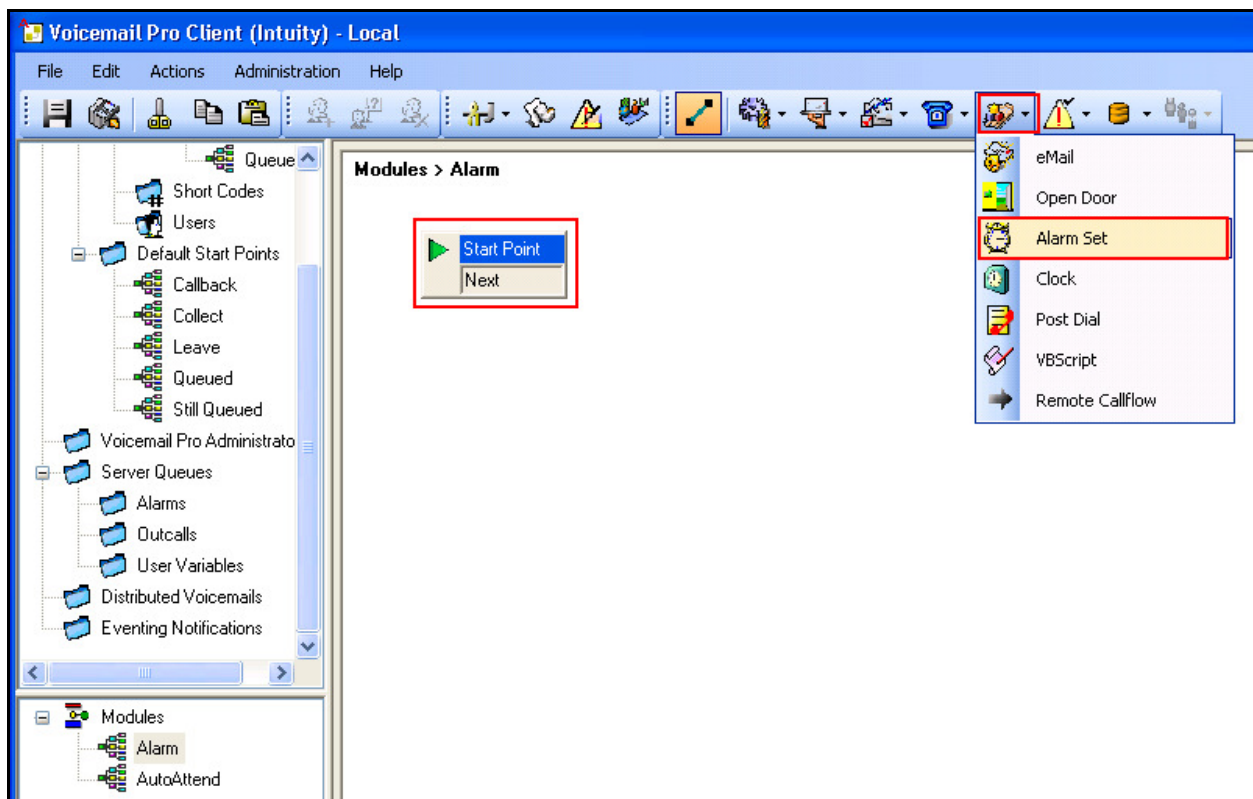
In the Voicemail Pro Client, right click on **Modules** and select **Add**.



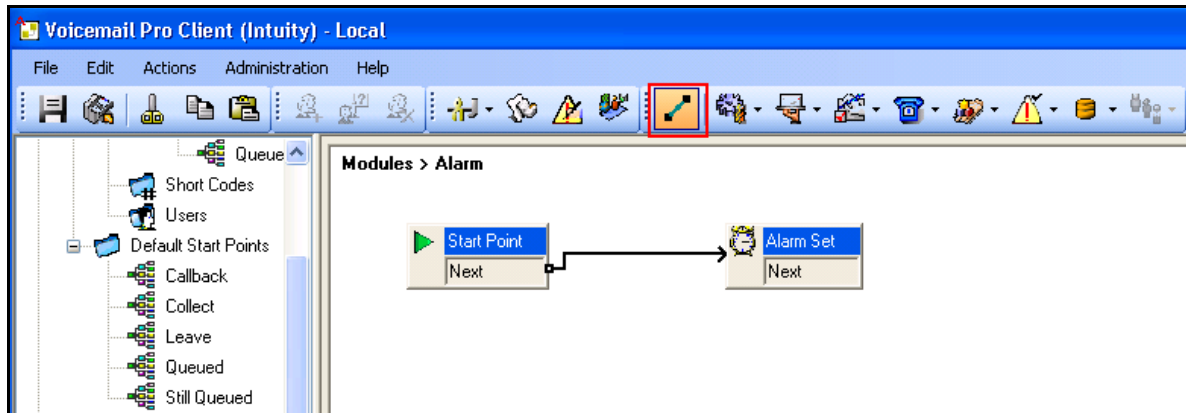
In the **Name** field of the new window that appears, enter the name that was entered in the **Telephone Number** field in **Section 5.4**. Note that the double quotes are not required here. In this example configuration **Alarm** was used for the name. When finished click on **OK**.



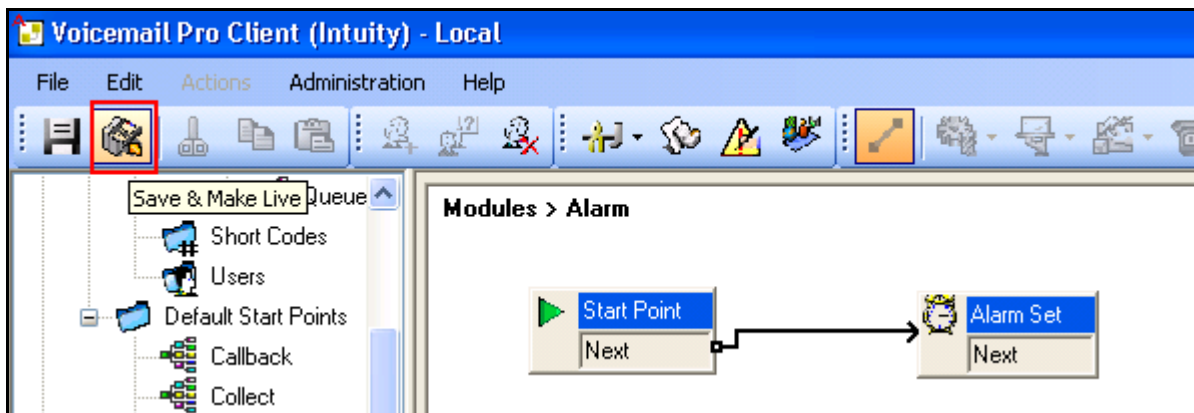
Next click on the **Start Point** object to enable the icons in the toolbar, then select the **Miscellaneous Actions** toolbar icon and select **Alarm Set**. Then, click in the **Modules > Alarm** window to add the Alarm Set object (not shown).



Now use the **Connection** tool to connect the **Start Point** object to the **Alarm Set** object as shown below.



When finished, click on the **Save & Make Live** icon.



Now when the Short Code, as configured in **Section 5.4** is entered on a phone, the user will be prompted to enter an alarm time using dialed digits on the phone.

7. Configure VTech A2310 Phone

The VTech A2310 Hotel Phone as listed in **Section 4** can be configured using jumpers located on the bottom of the phone under a sticker. See VTech documentation listed in **Section 10** for more details. The VTech phone was configured for MWI with jumpers J1 and J3 installed for this sample configuration.

8. Verification Steps

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

From a PC where IP Office software is installed, select **Start > Programs > IP Office > System Status** to launch the System Status application. The **Avaya IP Office System Status** screen is displayed. From the left panel expand **Extensions** then select an **extension**. Place a call from the selected extension. In the **Extension Status** window the **Current State** should be **Connected** as shown below.

The screenshot shows the Avaya IP Office System Status application. The left sidebar contains a tree view with the following items: System, Alarms (13), Extensions (28), Trunks (5), Active Calls, Resources, Voicemail, and IP Networking. The Extensions (28) item is expanded, and extension 28225 is selected. The main pane displays the Extension Status for extension 28225. The status is 'Connected'.

Extension Status

Extension Number: 28225
Slot: 2
Port: 1
Telephone Type: POT (CLI On)
Current User Extension Number: 28225
Current User Name: Extn28225
Forwarding: Off
Twinning: Off
Do Not Disturb: Off
Message Waiting: Off
Number of New Messages: 0
Phone Manager Type: None
Packet Loss Fraction:
Jitter:
Round Trip Delay:
Connection Type:
Codec:
Remote Media Address:

| Call Ref | Current State | Time in State | Calling Number or Called Number | Direction | Other Party on Call |
|----------|---------------|---------------|---------------------------------|-----------|-----------------------|
| 31 | Connected | 00:01:41 | | Outgoing | Extn 28201, Extn28201 |

Buttons at the bottom: Trace, Trace All, Pause, Call Details, Print..., Save As...

Bottom right: 1:26:04 PM, Online

9. Conclusion

The VTech A2310 1-Line Analog Hotel Phone successfully interoperated with Avaya IP Office and Voicemail Pro as described in these application notes.

10. Additional References

Product documentation for Avaya products may be found at <http://support.avaya.com>.

- 1) *Avaya IP Office Basic Edition - Quick Mode 8.1 Manager* –Issue 05e, 25 May 2012
- 2) *Avaya IP Office Technical Bulletin, Bulletin no: 145*, 16 July 2012
- 3) *Avaya IP Office Administering Voicemail Pro* 15-601063 Issue 8b - December 11, 2012

Product information for VTech Analog Hotel Phones may be found at <http://vtechhotelphones.com>.

- 4) *Analog Contemporary Series Master User Guide*, 91-003835-030-100

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