Avaya Solution & Interoperability Test Lab

Application Notes for IgeaCare ApoloDS with Avaya IP Office – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for IgeaCare ApoloDS to interoperate with Avaya IP Office. In the compliance testing, the IgeaCare ApoloDS used the analog user interface from Avaya IP Office to transfer resident calls to the nurse staff, and used the Avaya Push API to push text to nurses with Avaya 4610SW and Avaya 4625SW IP Telephones.

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

The IgeaCare ApoloDS is a system that provides notification of events triggered by the IgeaCare igeacom nurse call devices to different types of media including pager, telephone, virtual marquee, email, and text push and text-to-speech to telephones.

The ApoloDS can use either the EI/T1 or analog user connections to Avaya IP Office. In the compliance testing, the ApoloDS used a 4-ports internal analog card to connect to Avaya IP Office, with each analog port administered as an analog user and member of an ApoloDS hunt group on Avaya IP Office. The nurse staff was equipped with Avaya 4610SW and 4625SW IP Telephones, and configured as members of several nurse hunt groups.

The igeacom nurse call devices are essentially analog speaker telephones that can be activated by residents via multiple call points to reach the nurse staff. Each igeacom device is configured as an analog user on Avaya IP Office. When the resident activates an igeacom via a call point to reach the nurse staff, the igeacom originates a call to the ApoloDS hunt group. The ApoloDS obtains information on the resident and the call point type via the DTMF digits out-pulsed by the igeacom device, and uses that information to transfer the call to the appropriate nurse hunt group.

When the call is delivered to a nurse station in the nurse hunt group, the telephone display for the nurse station will show the name of the resident's igeacom device along with the name of the called hunt group. The ApoloDS can be configured to call a different hunt group for each type of call point, such that the nurse can use the station display to identify both the name of the resident and the specific call point.

In the compliance test, the ApoloDS also used the text-to-speech capability to play information such as resident name and call point type to the answering nurse, and used the Avaya Push API interface to push text to nurses with Avaya 4610SW and Avaya 4625SW IP Telephones.

Two types of igeacom nurse call devices were used in the compliance testing – the igeacom500 and igeacom700. As shown in **Figure 1**, a PC with the igeacom programming software was used to configure and download the configurations to the igeacom devices.

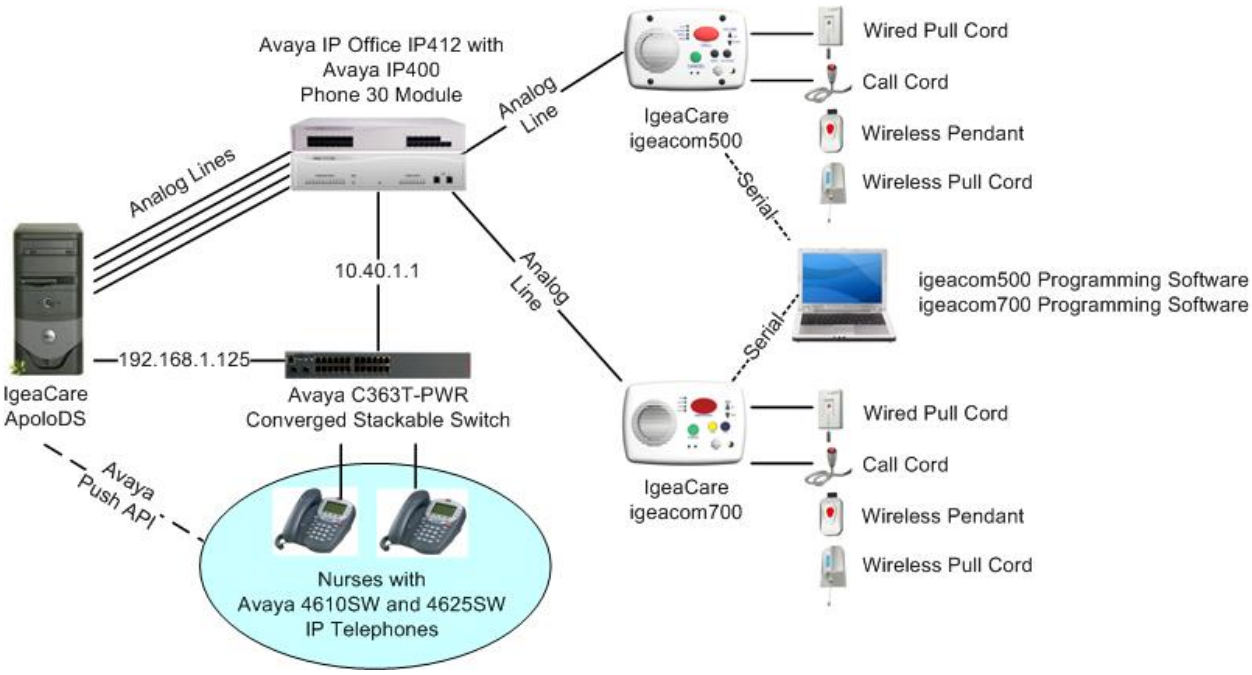


Figure 1: IgeaCare ApoloDS with Avaya IP Office

2. Equipment and Software Validated

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

Equipment	Software
Avaya IP Office IP412	4.2 (4)
Avaya IP400 Phone 30 Module	NA
Avaya 4610SW and 4625SW IP Telephones (H.323)	2.8
IgeaCare igeacom500	IC500-B1.4S 0807-0285
IgeaCare igeacom700	IC700-B1.0S 0806-0017
igeacom500 Programming Software	6.11
igeacom700 Programming Software	6.08.3
IgeaCare ApoloDS	2.0

3. Configure Avaya IP Office

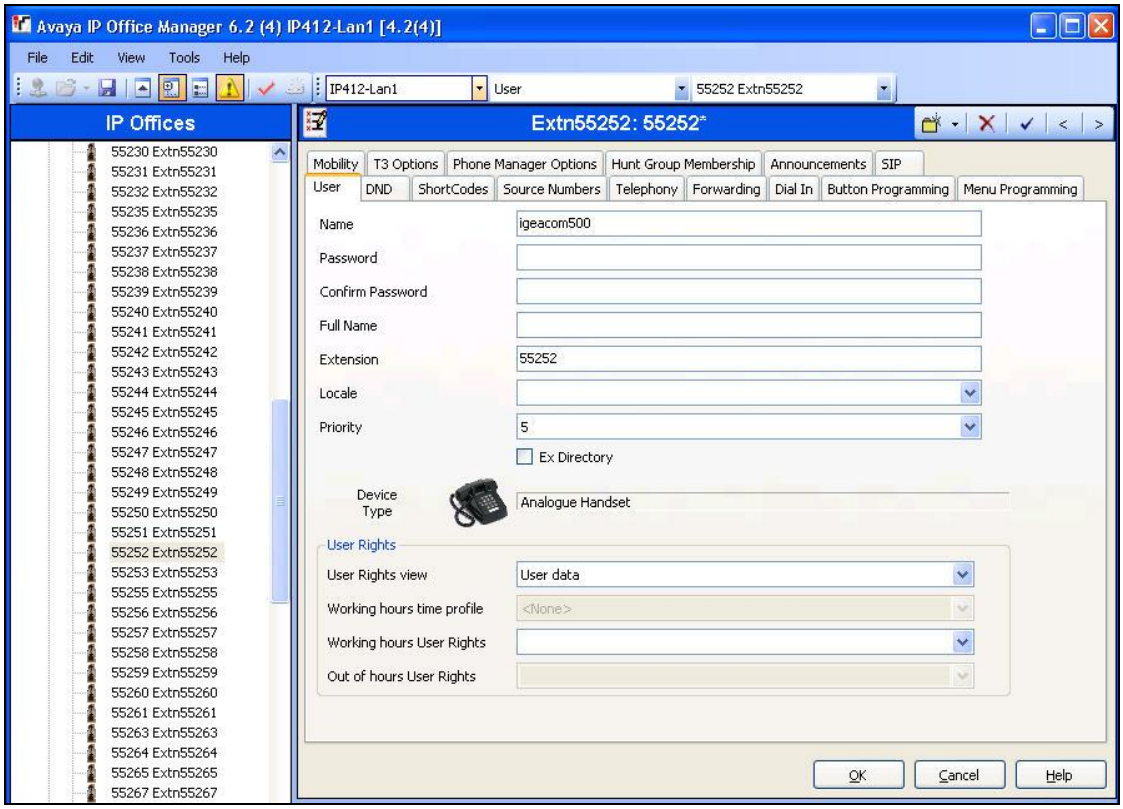
This section provides the procedures for configuring Avaya IP Office. The procedures fall into the following areas:

- Administer resident users
- Administer nurse users
- Administer nurse hunt groups
- Administer ApoloDS users
- Administer ApoloDS coverage hunt group
- Administer ApoloDS hunt group

3.1. Administer Resident Users

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 appropriate credentials. From the configuration tree in the left pane, select **User** followed by the specific user corresponding to the analog port connected to the igeacom500 device, in this case "55252 Extn55252". Enter a descriptive **Name**.

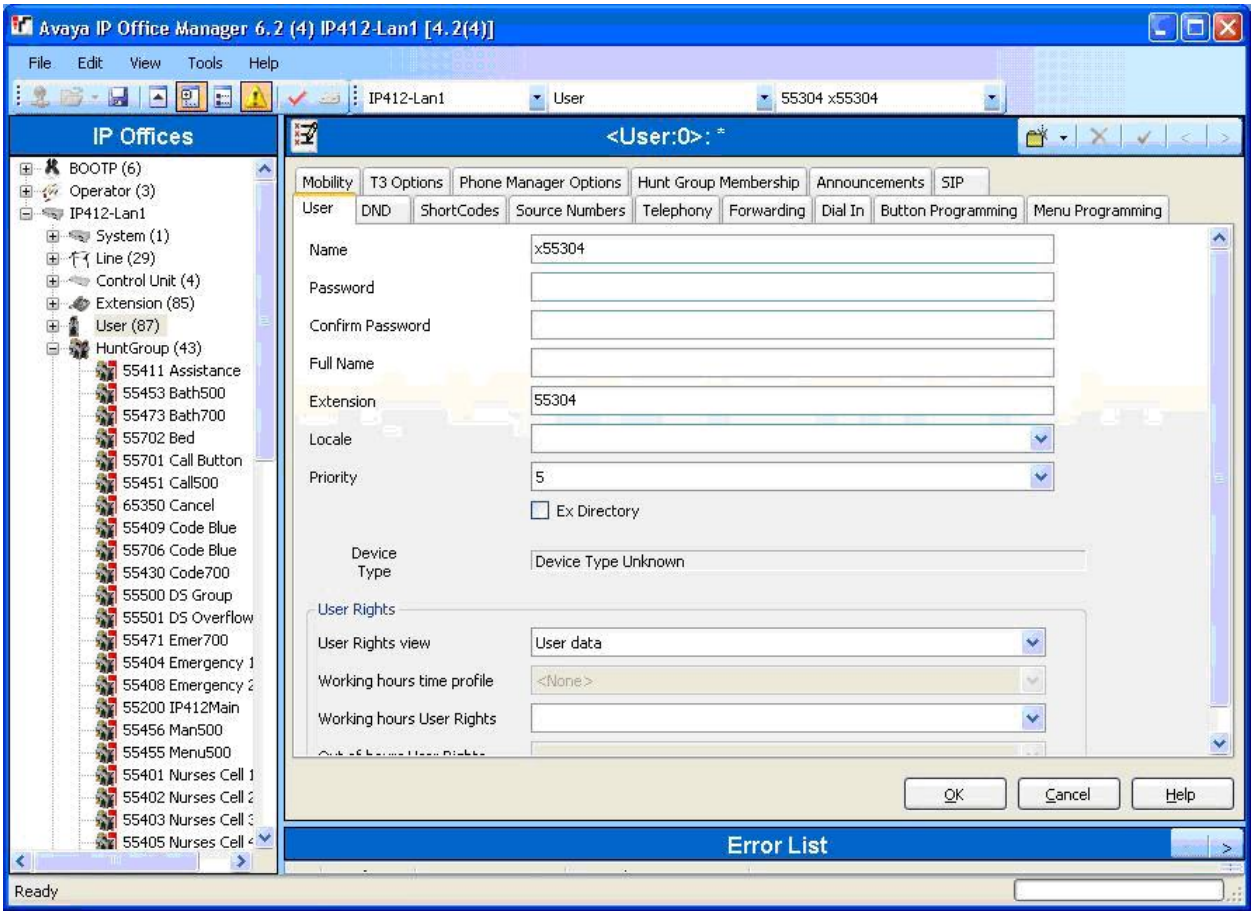
Repeat this section to administer a descriptive name for each igeacom nurse call device. In the compliance testing, two users with extensions "55252" and "55253" were administered.



3.2. Administer Nurse Users

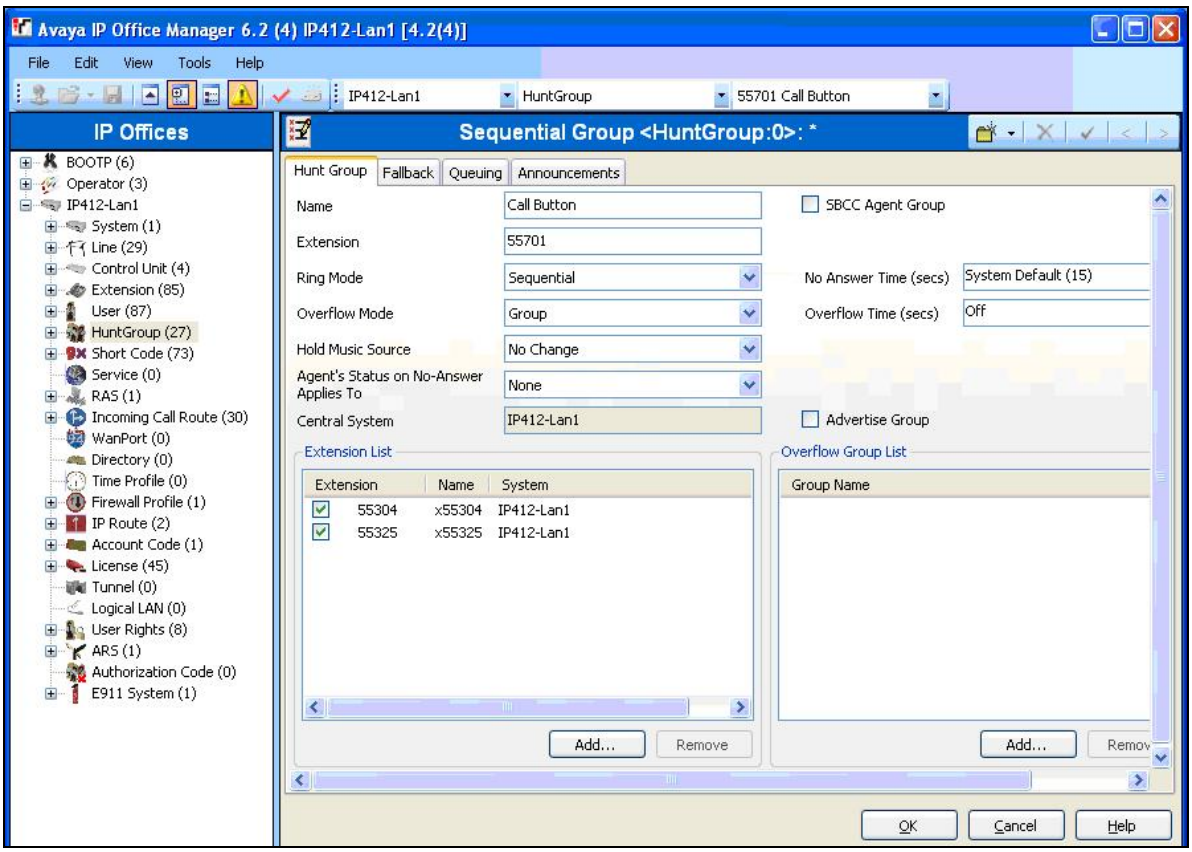
From the configuration tree in the left pane, right-click on **User** and select **New** from the pop-up list to add a new nurse user. Enter desired values for the **Name**, **Password**, and **Confirm Password** fields. For the **Extension** field, enter an available VoIP extension.

Repeat this section to administer a user for each nurse. In the compliance testing, two nurse users with extensions "55304" and "55325" were administered.



3.3. Administer Nurse Hunt Groups

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. For **Name**, enter a descriptive value that can identify the type of call point. For **Extension**, enter an available extension number. Click **Add** under the **Extension List** section, and add the nurse user extensions from **Section 3.2** as members to this hunt group, as shown below.



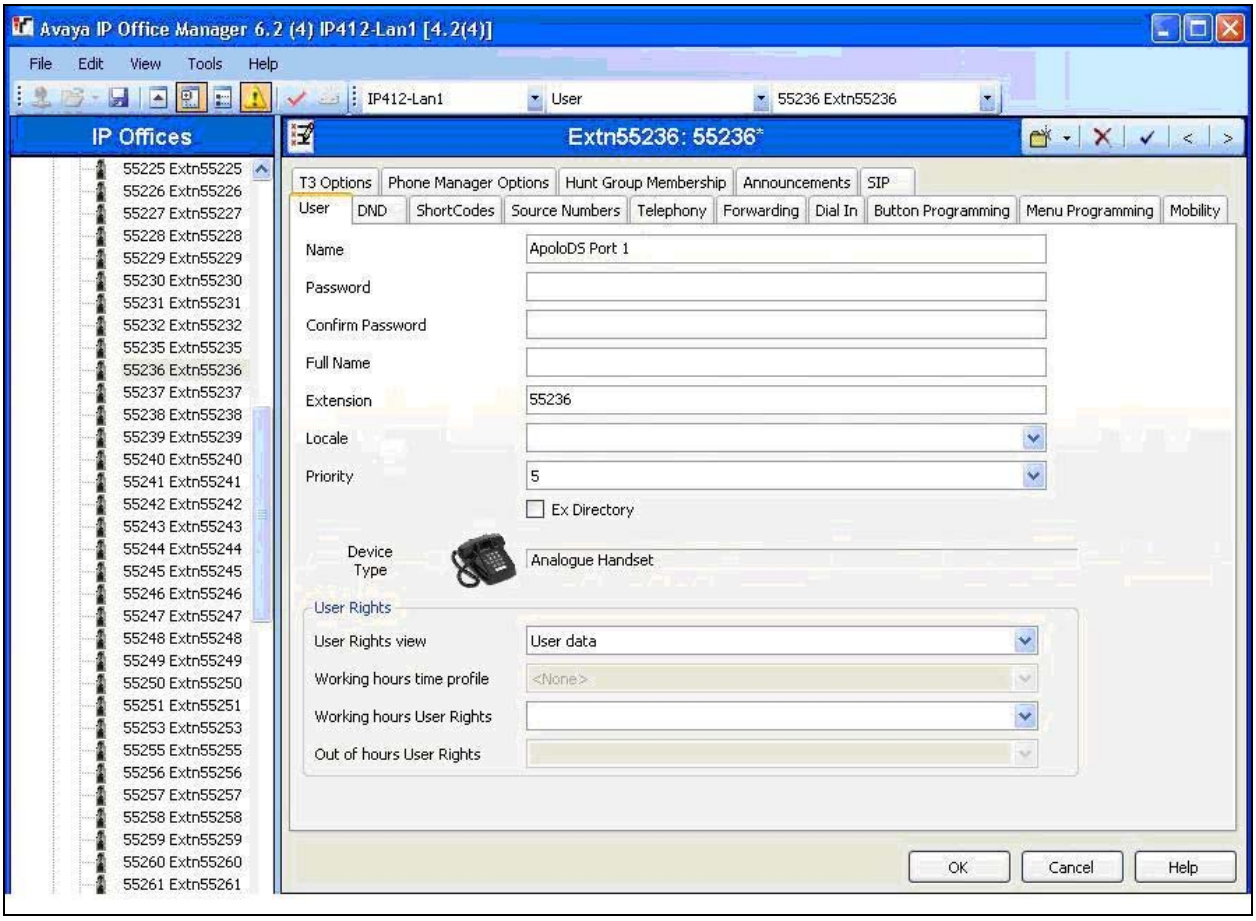
Repeat this section to add a hunt group for every call point type. The hunt groups that were used for the compliance testing are shown below.

Hunt Group Extension	Name
55701	Call Button
55702	Bed Cord
55703	Wired Cord
55704	Pendant
55705	Wireless Pull
55706	Code Blue
55707	Staff Assist

3.4. Administer ApoloDS Users

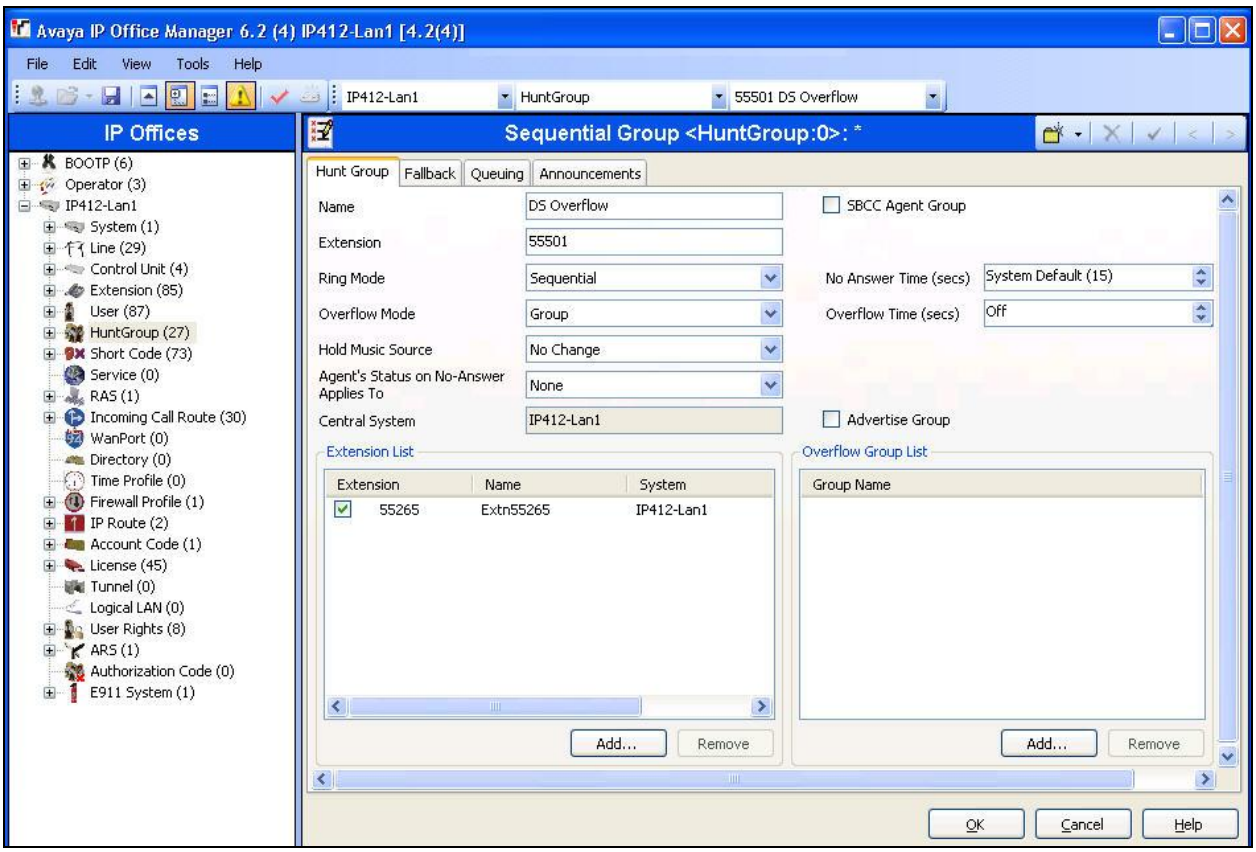
From the configuration tree in the left pane, select **User** followed by the specific user corresponding to the analog port connected to the first ApoloDS analog port, in this case "55236 Extn55236". Enter a descriptive **Name**.

Repeat this section to administer a descriptive name for each ApoloDS analog port. In the compliance testing, four users with extensions "55236-55239" were administered.



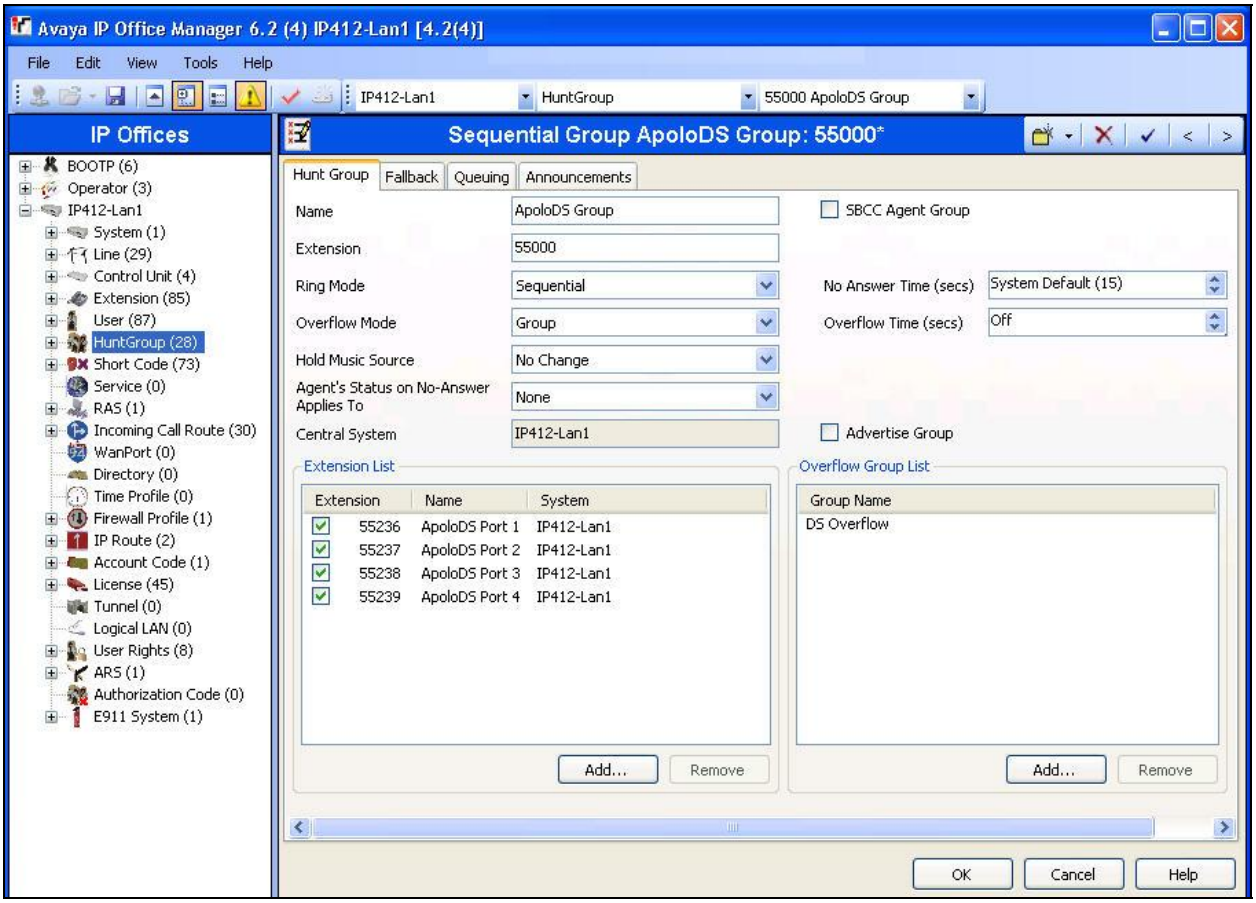
3.5. Administer ApoloDS Coverage Hunt Group

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. For **Name**, enter a descriptive name. For **Extension**, enter an available extension number. Click **Add** under the **Extension List** section, and add the desired coverage points, as shown below. In the compliance testing, "55265" corresponds to an existing user. This hunt group will serve as coverage for the ApoloDS hunt group in **Section 3.6**.



3.6. Administer ApoloDS 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 to reach ApoloDS. For **Name**, enter a descriptive name. For **Extension**, enter an available extension number. Click **Add** under the **Extension List** section, and add the ApoloDS users from **Section 3.4** to this hunt group. Click Add under the **Overflow Group Lis**t section, and add the ApoloDS coverage hunt group from **Section 3.5**, as shown below.



4. Configure Avaya 4610SW and 4625SW IP Telephones

This section provides the procedures for configuring the Avaya 4610SW and 4625SW IP Telephones to support the push interface.

From the appropriate HTTP or TFTP server serving the Avaya 4610SW and 4625SW IP Telephones, locate the **46xxsettings.txt** file. Set the **WMLEXCEPT, TPSLIST,** and **FILTERLIST** parameters to point to the ApoloDS server. Set the **SUBSCRIBELIST** parameter to the specific path on the ApoloDS server shown below.

Reboot the Avaya 4610SW and 4625SW IP Telephones.

```
SET WMLEXCEPT  192.168.1.125
SET TPSLIST    192.168.1.125
SET FILTERLIST 192.168.1.125

SET SUBSCRIBELIST http://192.168.1.125/ASPpushsamples/subscribe.asp
```

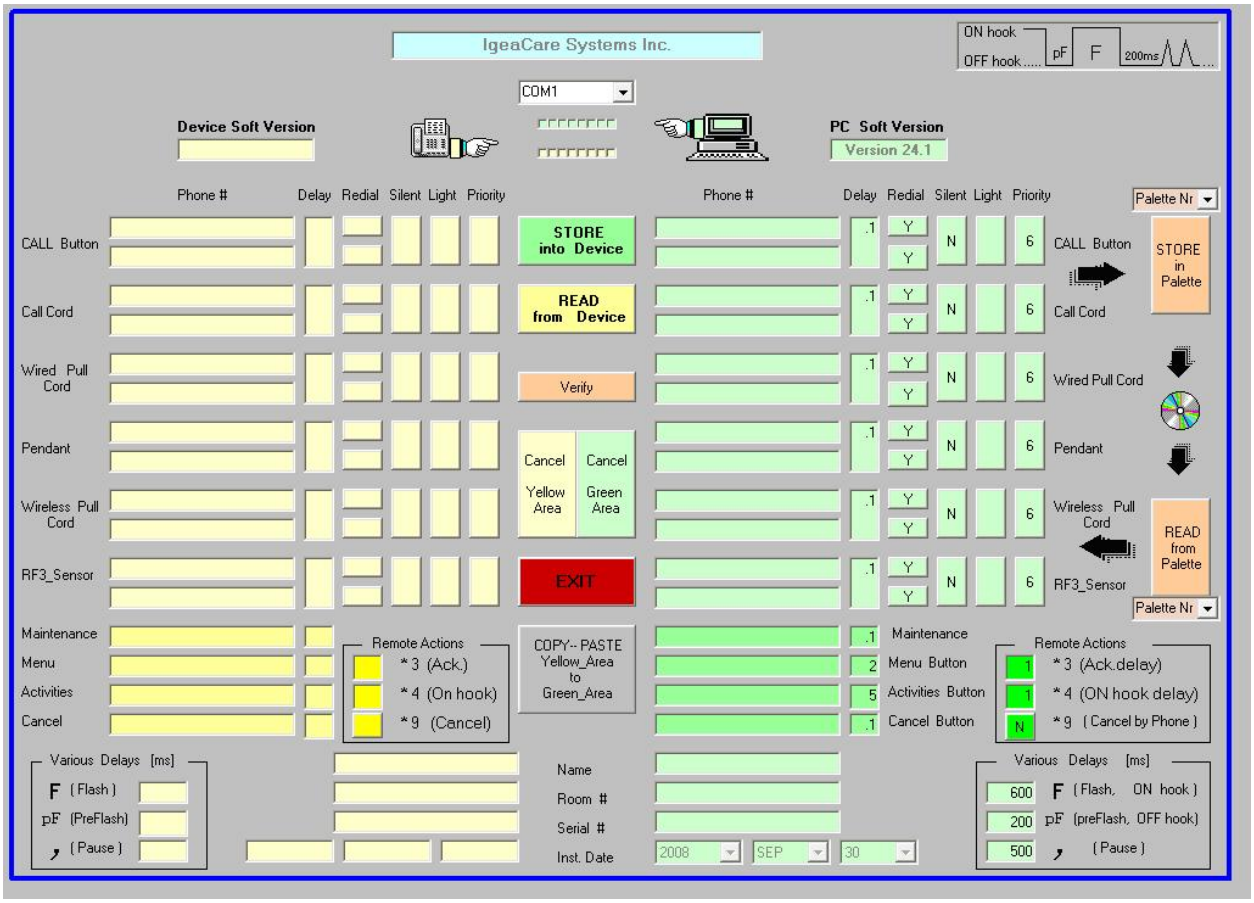
5. Configure IgeaCare igeacom500

This section provides the procedures for configuring the IgeaCare igeacom500 nurse call device. The procedures fall into the following areas:

- Launch igeacom500 programming software
- Administer call point destinations and coverage

5.1. Launch igeacom Programming Software

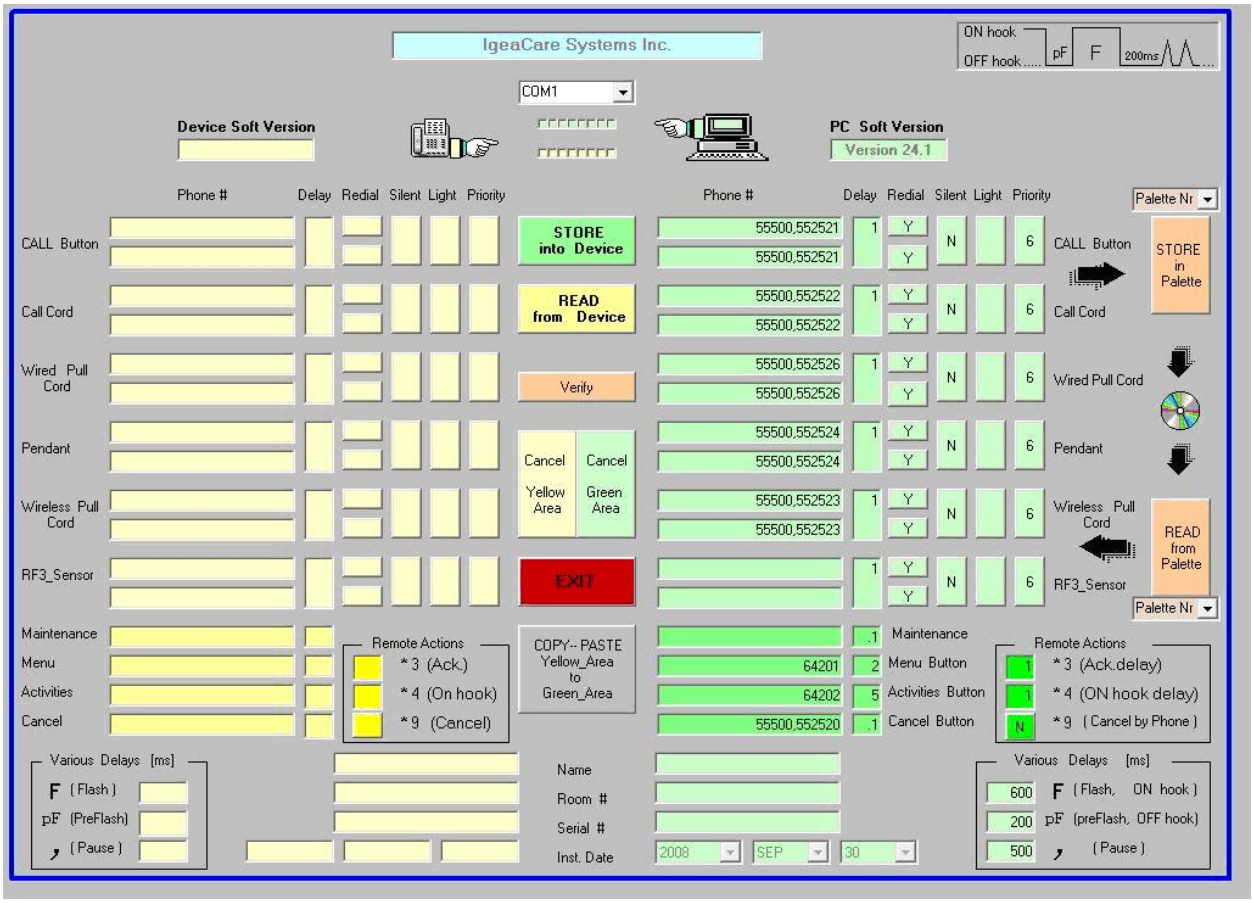
From any PC running the igeacom500 programming software, physically connect the PC serial COM port to the igeacom500 circuit board. Launch the administration application by selecting **Start > All Programs > IgeaCare Systems Inc > IgeaCare Systems Inc.** from the PC. The screen below is displayed.



Configure igacom500 as shown below. The format for the **Phone #** field value is "x,yz", where "x" is the extension of the ApoloDS hunt group from **Section 3.6**, "y" is the extension of the igeacom500 device from **Section 3.1**, and "z" is the unique default value associated with the specific call point type. Note that the second **Phone #** associated with each call point below is the escalation point, used in the event that the call has not been successfully canceled within the time specified in the **Delay** field.

Enter desired destinations for the **Menu Button** and **Activities Button**, which are typically messaging extensions on Avaya IP Office. For the compliance testing, "64201" and "64202" corresponded to existing users on Avaya IP Office.

Configure the other fields as desired using the appropriate documentation from **Section 11**, and download the resultant configuration to the igeacom500.



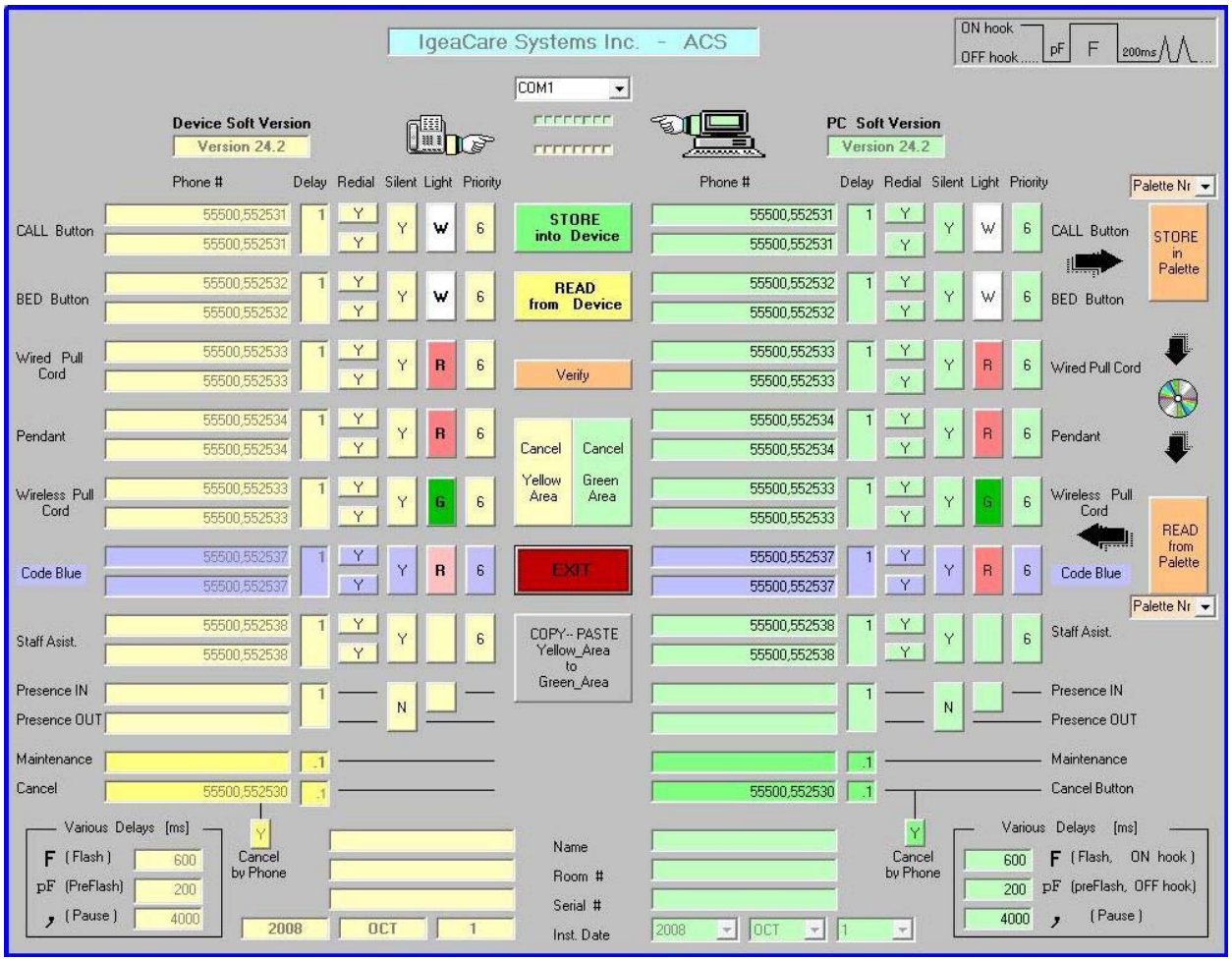
6. Configure IgeaCare igeacom700

This section provides the procedures for configuring the IgeaCare igeacom700 nurse call device. The procedures fall into the following areas:

- Launch igeacom700 programming software
- Administer call point destinations and coverage

6.1. Launch igeacom Programming Software

From any PC running the igeacom700 programming software, physically connect the PC serial COM port to the igeacom700 circuit board. Launch the administration application by selecting **Start > All Programs > IgeaCare Systems Inc > IgeaCare Systems Inc. – ACS** from the PC. Follow the steps in **Section 4.1** to similarly configure the igeacom700. The resultant screenshot after pushing the configuration to the igeacom700 is shown below.



7. Configure IgeaCare ApoloDS

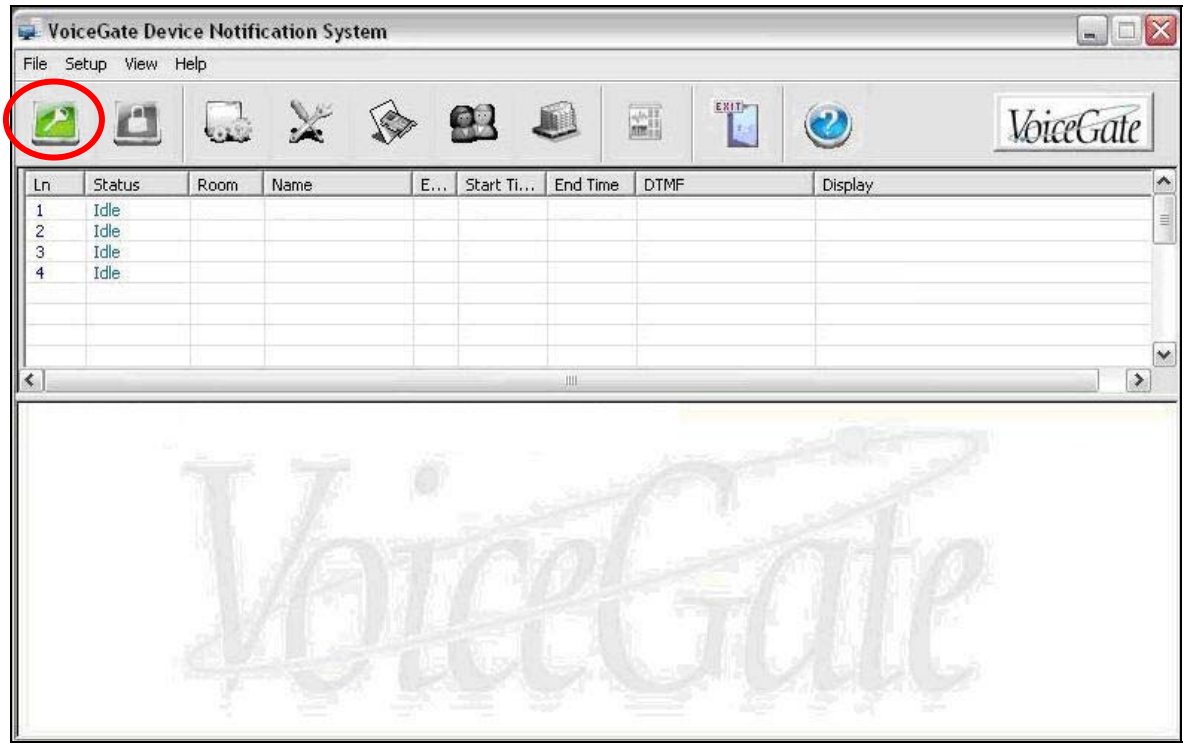
This section provides the procedures for configuring the IgeaCare ApoloDS. The procedures fall into the following areas:

- Launch administration application
- Administer program setup
- Administer channel setup
- Administer room setup

7.1. Launch Administration Application

From the IgeaCare ApoloDS server, launch the administration application by double-clicking the **VG_DNS** icon shown below, which was created as part of installation.

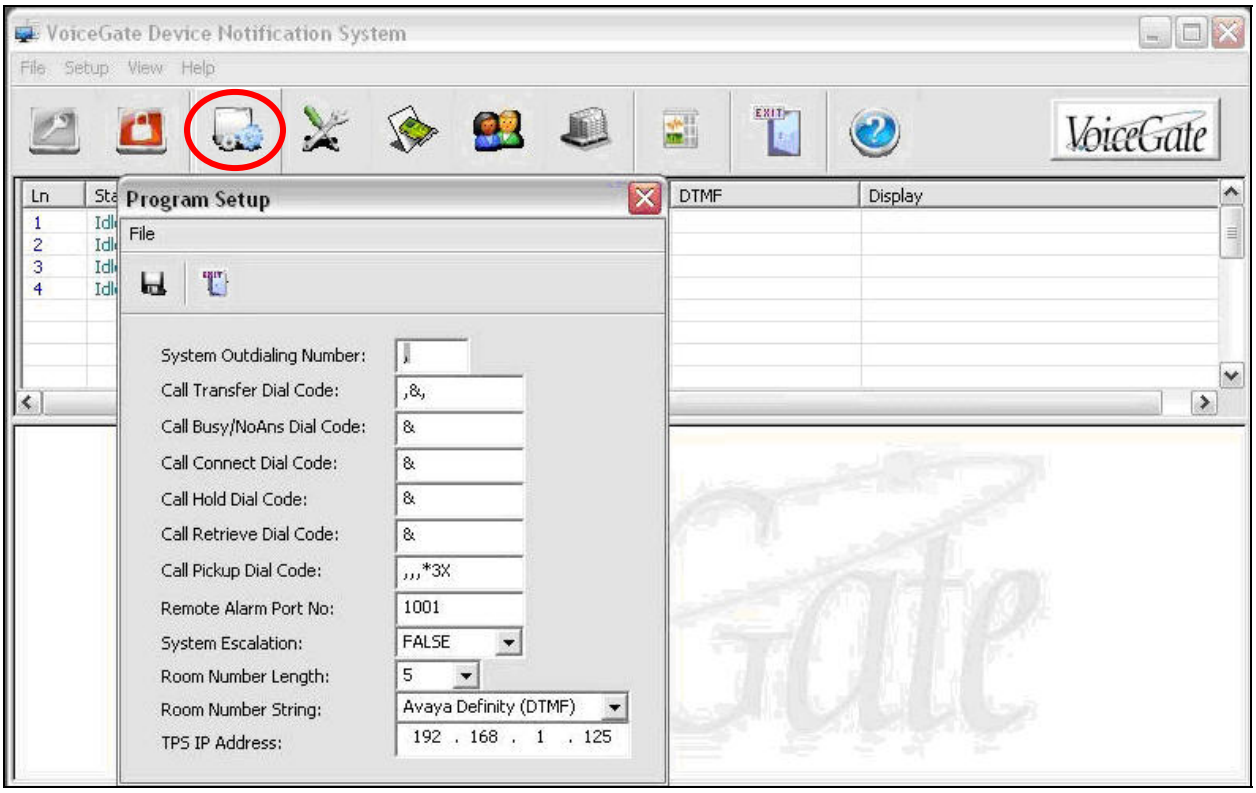
The **VoiceGate Device Notification System** screen is displayed. Click the login icon, located at the upper left corner of the screen, and enter the appropriate credentials to log in (not shown below).



7.2. Administer Program Setup

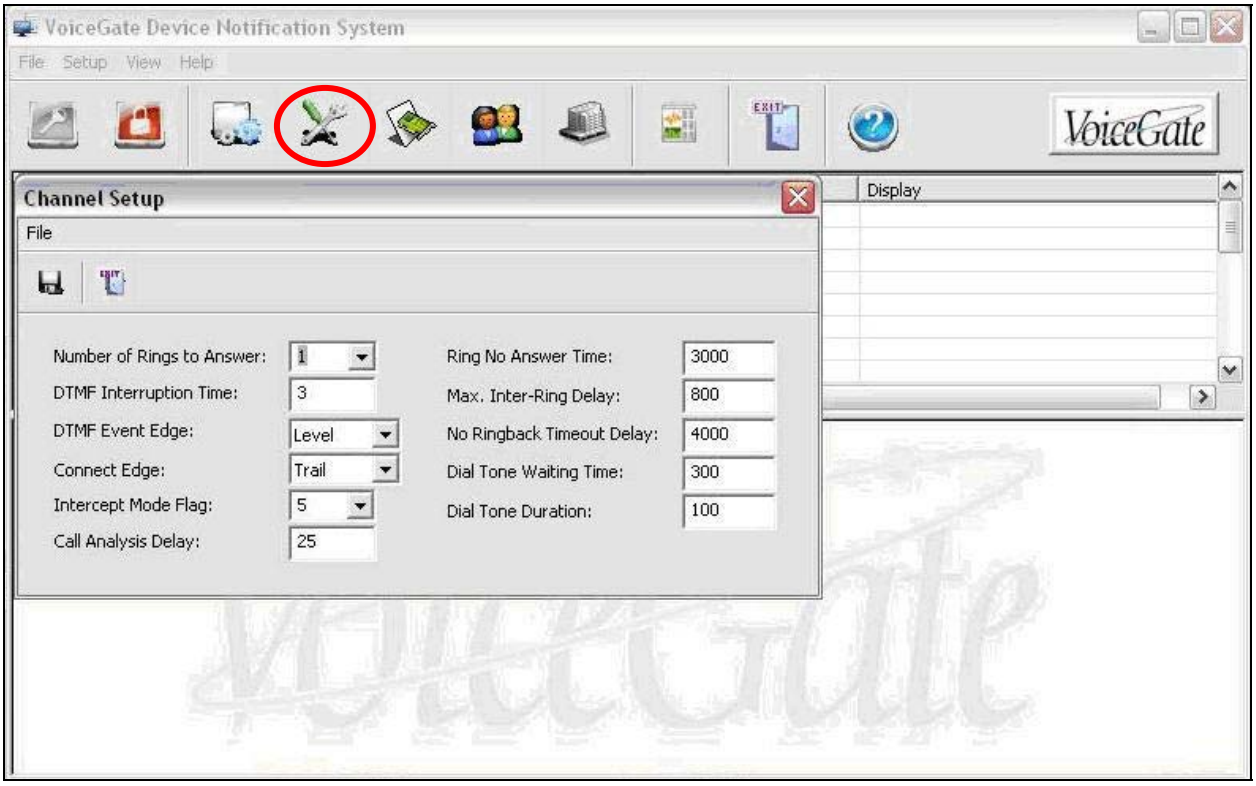
Click the program setup icon circled below, to display the **Program Setup** pop-up screen. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **System Escalation:** "FALSE"
- **Room Number Length:** The number of digits in the resident extensions, in this case "5".
- **Room Number String:** "Avaya Definity (DTMF)"
- **TPS IP Address:** The IP address of the ApoloDS server.



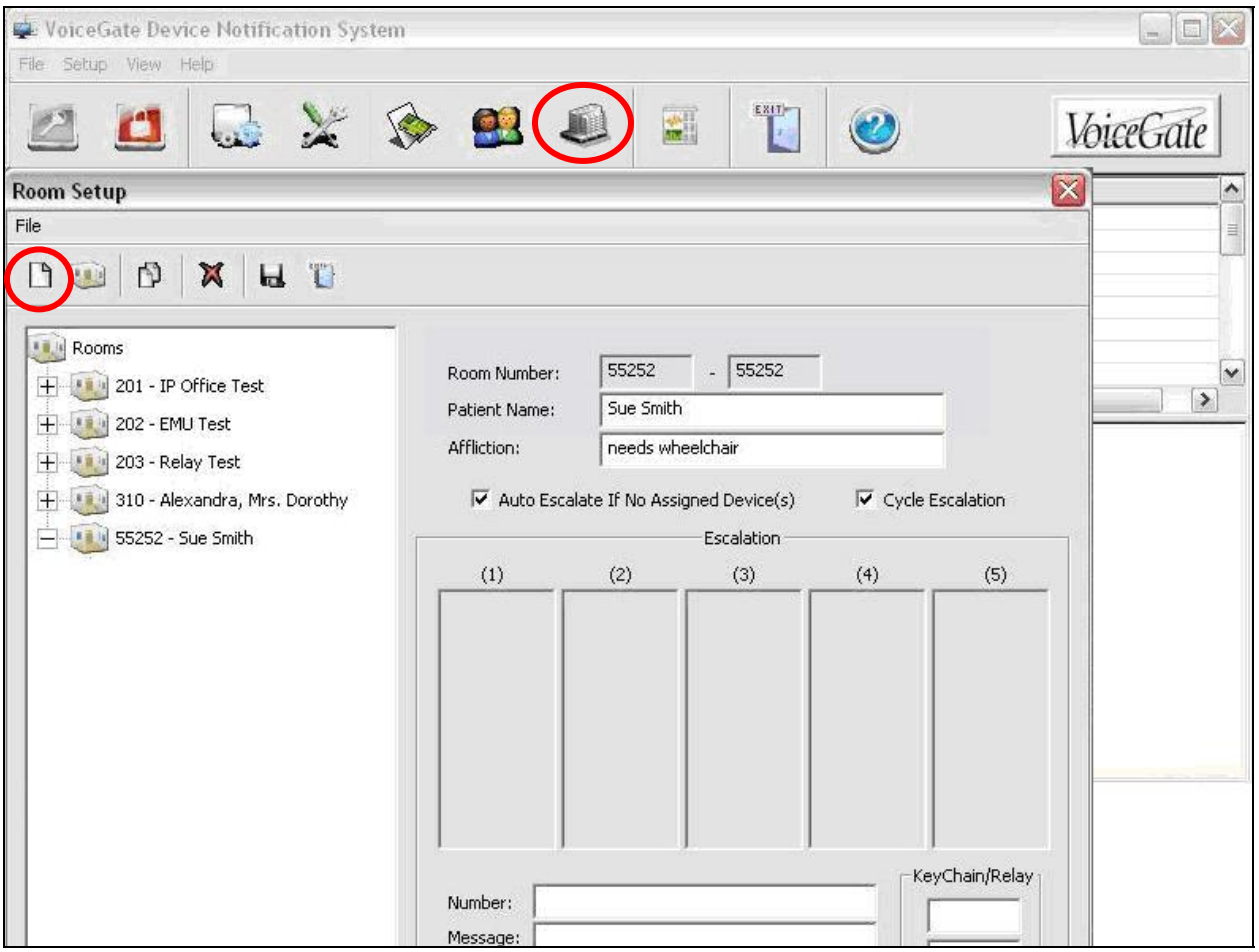
7.3. Administer Channel Setup

Click the channel setup icon circled below, to display the **Channel Setup** pop-up screen. For **Number of Rings to Answer**, select "1" from the drop-down list. Retain the default values in the remaining fields.



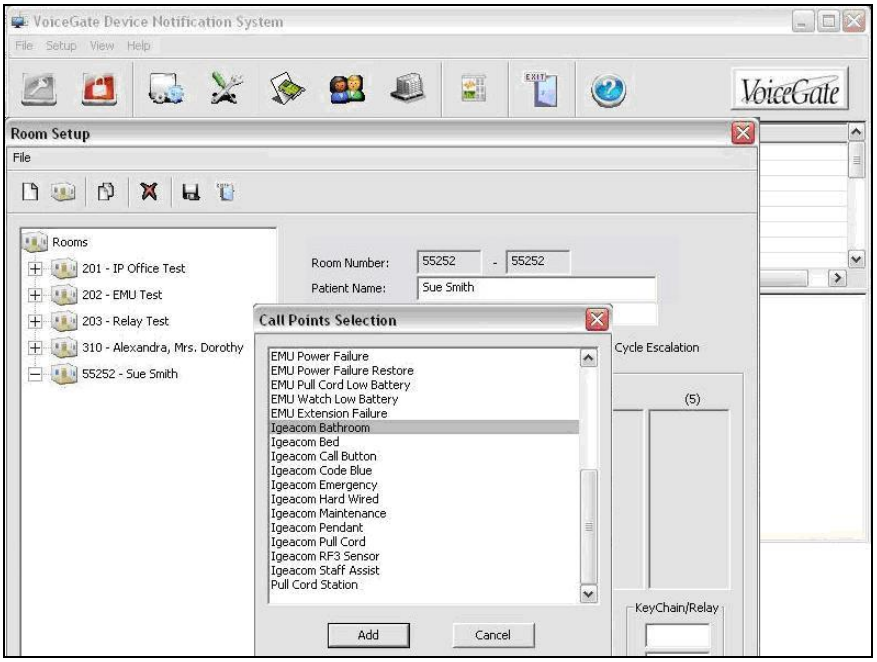
7.4. Administer Room Setup

Click the room setup icon circled below, to display the **Room Setup** pop-up screen. In the **Room Setup** screen, click the add icon to add a new room. For **Room Number**, enter the igeacom user extension from **Section 3.1**. For **Patient Name**, enter a desired name. For **Affliction**, enter any important information regarding this resident. The screen shot shows the room number and the patient name in the left pane, after the entry has been saved.

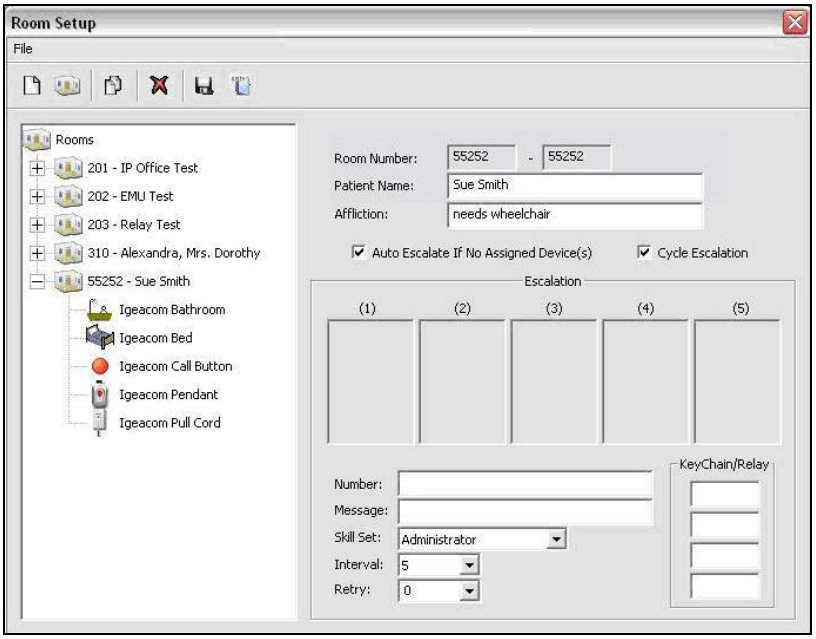


7.4.1. Administer Call Points

Right-click on the newly created room entry in the left pane, in this case "55252 – Sue Smith", and select **Add Call Point** from the drop-down list to display the **Call Points Selection** pop-up screen. Select an applicable call point for this igeacom device, and click **Add**. Note that the **Igeacom Bathroom** entry below corresponds to the wired cord call point from **Section 3.3**.



Repeat this section to add all applicable call points for the igeacom device. The screen shot below shows all call points that have been added for this device.

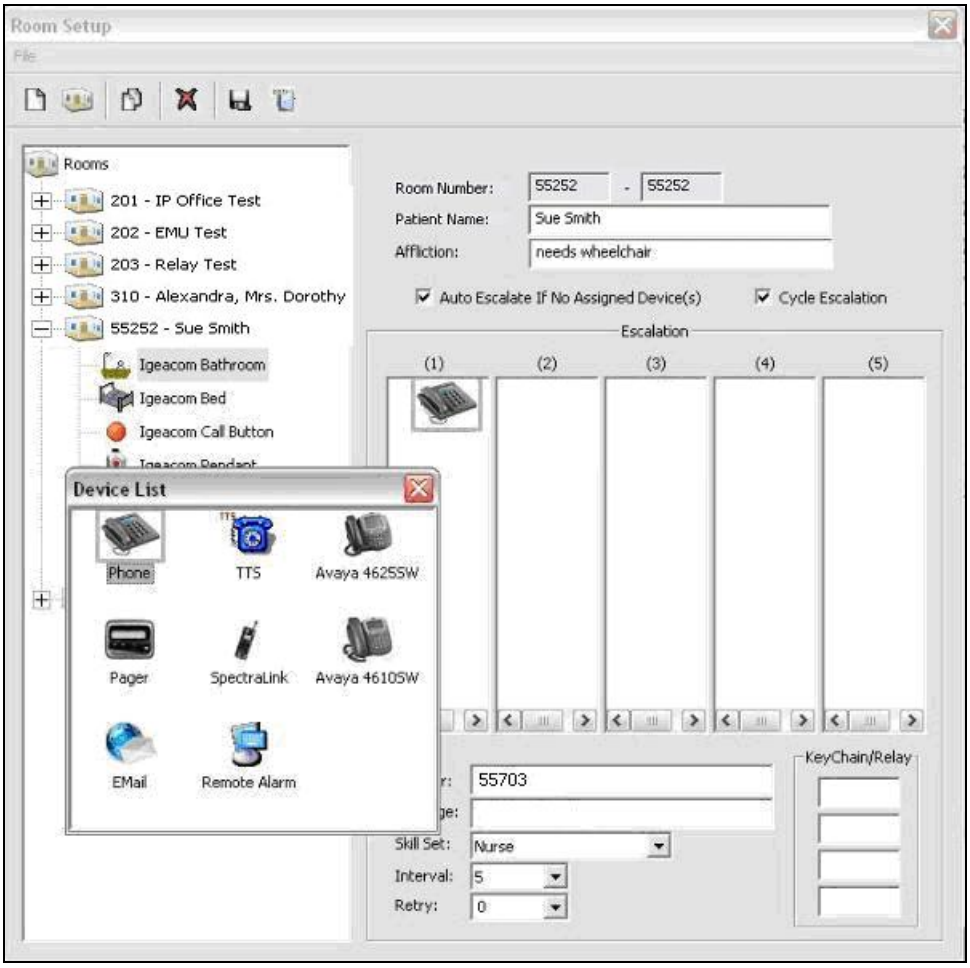


7.4.2. Administer Escalations

Click on the first newly added call point in the left pane for the resident, in this case **Igeacom Bathroom**. Right click in any of the white column area in the **Escalation** section, and select **Add** from the pop-up list (not shown below) to administer notification points for each escalation level. The **Device List** pop-up screen is displayed.

Click and drag the **Phone** device to **Escalation (1),** as shown below. For the **Number** field (partly blocked by the **Device List** screen below), enter the hunt group extension from **Section 3.3** that corresponds to this call point type, in this case "67003". In the **Skill Set** field, select "Nurse" from the drop-down list.

Repeat this section to administer all desired notification points and escalation levels. For text-to-speech notifications, drag the **TTS** icon from the **Device List** screen, and administer the hunt group extension from **Section 3.3** that corresponds to this call point type in the **Number** field. For text push notifications, drag the appropriate Avaya 4625SW or Avaya 4610SW icon from the **Device List** screen, and administer the IP address of the receiving telephone in the **Number** field. Note that each escalation level can consist of multiple notification points.



8. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the ability of ApoloDS to transfer resident calls from the igeacom500 and igeacom700 nurse call devices to the proper nurse hunt groups associated with various call points. The verification included proper nurse station display, connected two-way talk paths, proper call termination, and proper call coverage. The feature testing also included verifying the text-to-speech and text push to the notification points.

The serviceability testing focused on verifying the ability of ApoloDS to recover from adverse conditions, such as disconnecting and reconnecting the analog line cable to the devices.

8.1. General Test Approach

All tests were performed manually.

8.2. Test Results

All tests were executed and passed.

9. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya IP Office, IgeaCare igeacom500 and igeacom700, and IgeaCare ApoloDS.

From a call point, activate a call from the resident's igeacom device to the nurse staff (such as pulling the cord or pressing the button, depending on the call point type). Verify that the call is ringing on a nurse station, and that the nurse station display shows the name of the resident associated with the igeacom device, and the name of the hunt group associated with the call point type. Answer the call at the nurse user, and verify for connected two-way talk paths. The nurse hears an announcement of the resident name and the call point type. Also verify that the nurse's telephone screen displays the preconfigured text from ApoloDS.

10. Support

Technical support on IgeaCare ApoloDS can be obtained through the following:

- **Phone:** (866) 361-6225
- **Email:** support@igeacare.com

11. Conclusion

These Application Notes describe the configuration steps required for IgeaCare ApoloDS to interoperate with Avaya IP Office. All feature and serviceability test cases were completed successfully.

12. Additional References

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

- *IP Office 4.2 Documentation CD*, August 2008, available at http://support.avaya.com.
- *IgeaCare Resident Unit Installation Guide*, Release 2, available at http://www.igeacare.com.
- *IgeaCare 600-700 igeacom Installation Guide*, available at http://www.igeacare.com.
- *Resident Unit Specification Sheet*, Release 4, available at http://www.igeacare.com.
- *Patient Unit Specification Sheet*, Release 3, available at http://www.igeacare.com.
- *ApoloDS User Guide*, 2008, available at http://www.igeacare.com.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at http://www.avaya.com/devconnect.