AVAYA

Avaya Solution & Interoperability Test Lab

Application Notes for Interoperating IgeaCom Emergency Response Devices with Avaya IP Office – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for IgeaCom Emergency Response devices by IgeaCare Systems Inc., to connect and interoperate with Avaya IP Office. IgeaCom Emergency Response devices are hardware devices that interface with the analog capabilities of Avaya IP Office and appropriately alert various Avaya IP Office telephones when activated.

Information in these Application Notes was obtained through compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

SVS Reviewed:
SPOC 2/18/2008

Solution & Interoperability Test Lab Application Notes
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IPO40-IgeaCom

1. Introduction

These Application Notes describe the compliance-tested configuration verifiying IgeaCare Systems' IgeaCom 500 and IgeaCom 700 devices (IgeaCom devices) interoperability with Avaya IP Offices. The IgeaCom devices are wireless, push-button, and pull-cord devices that integrates the traditional patient-to-nurse, nurse-to-staff functionality by providing instant two-way speech connectivity between the IgeaCom device and Avaya endpoint(s). The devices are essentially an analog speaker telephone, primarily for nursing-home residents to communicate with the staff. Avaya IP Office adds additional capabilities for alerting multiple destination endpoints, whether located locally or remotely over a Small Community Network (SCN) trunk. Avaya IP Office SCNs allow dial plan information to be shared between multiple Avaya IP Offices. SCNs are also used to collectively ring extensions across two (or more) Avaya IP Offices by dialing a single hunt group extension.

The IgeaCom devices are connected to the Avaya IP Office Analog telephone ports and are configured within the IgeaCom application, to alert an individual telephone or a group of telephones.

The configuration shown in **Figure 1** below was used to compliance test the IgeaCom devices with the Avaya IP Offices.
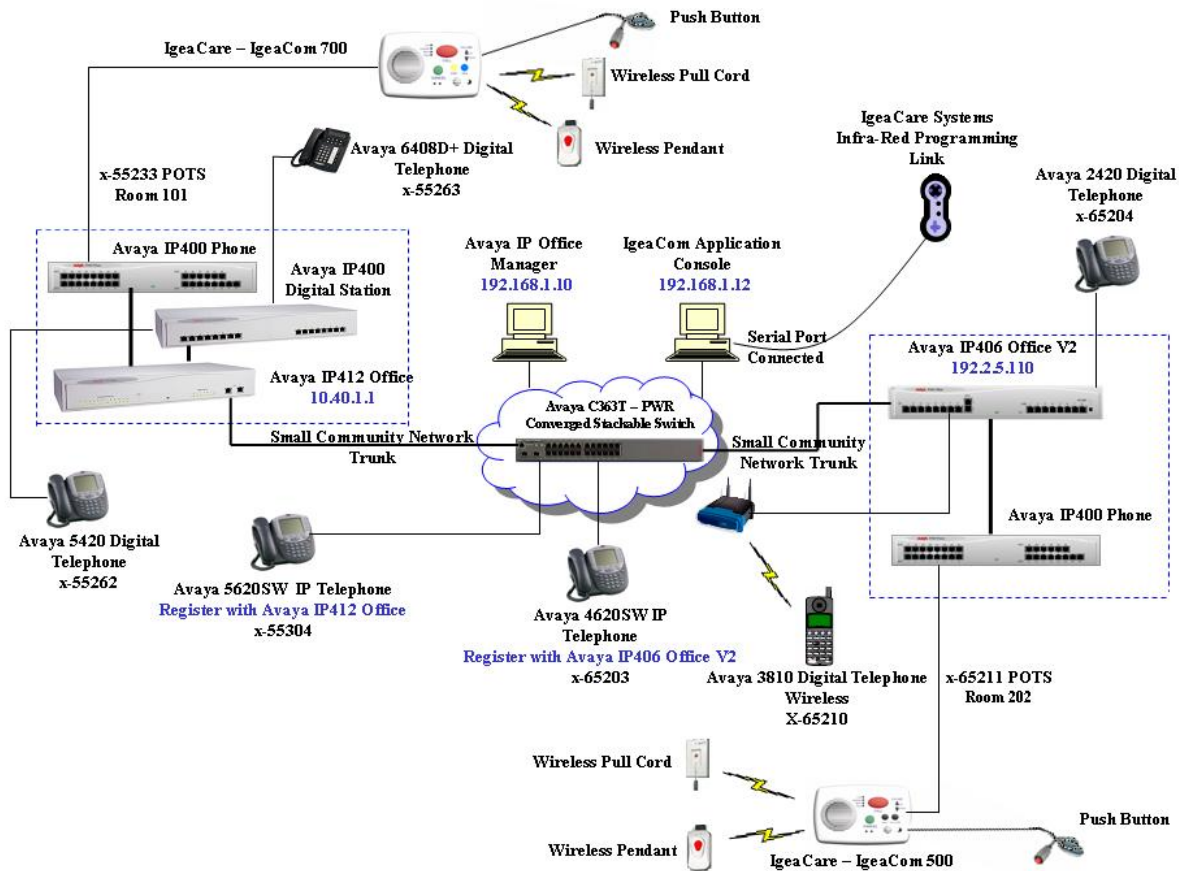
Figure 1 – Network Configuration Diagram

The test configuration simulates local and remote Avaya IP Offices communicating with each other over a SCN trunk. This gives the IgeaCom devices the advantage of dialing a single station, or a hunt group with a number of stations on either or both Avaya IP Offices, without performing additional administration.

Note: For test purposes, pulling the wireless pull cord, or pushing the wireless pendant button are referred to as IgeaCom button pressing.

2. Equipment and Software Validated

The following products and software were used for the configuration in **Figure 1**:

Product	Software/Version
Avaya IP412 Office	4.0.10
Avaya IP406 Office V2	4.0.10
Avaya IP400 Phone Module (Analog)	6.0.10
Avaya IP400 Digital Station Module	6.0.10
Avaya IP Office Manager	6.0.10
Avaya 4620SW IP Telephone	2.3
Avaya 5620SW IP Telephone	2.3
Avaya 2420 Digital Telephone	5.0
Avaya 5400 Digital Telephone	5.0
Avaya 3810 Digital Telephone Wireless	
Avaya C363T – PWR Converged Stackable Switch	4.5.14
IgeaCare Systems Inc. IgeaCom 500	IC500-B1.4S 0807-0285
IgeaCare Systems Inc. IgeaCom 700	IC700-B1.0S 0806-0017
IgeaCare Systems Inc. Infra-Red Programming Link	n/a
IgeaCare Systems Inc. (for IgeaCom 500)	V6.11
IgeaCare Systems Inc. – ACS (for IgeaCom 700)	V6.08.3
PCs for Avaya IP Office Manager and IgeaCom Programming Application	Windows 2003 XP Professional Service Pack 2

Table 1 – Product and Software Version

3. Avaya IP Office

For all other configuration information, such as Avaya IP Office installation and configuration, etc., please refer to the Avaya IP Office product documentation in reference [1].

3.1. Avaya IP412 Office Configuration

The configuration information provided in this section describes the steps required to set up Avaya IP Office SCN, hunt groups, and user extensions on an Avaya IP412 Office. Except where noted, similar configurations are performed on each Avaya IP Office.

1. From the IP Office Manager PC, go to **Start → Programs → IP Office → Manager** to launch the Manager application. Log into the Manager application using the appropriate credentials.

2. In the Manager window that is displayed, select **File → Open** to search for the IP Office in the network.

3. Log into the Avaya IP412 Office using the appropriate login credentials to receive its configuration.
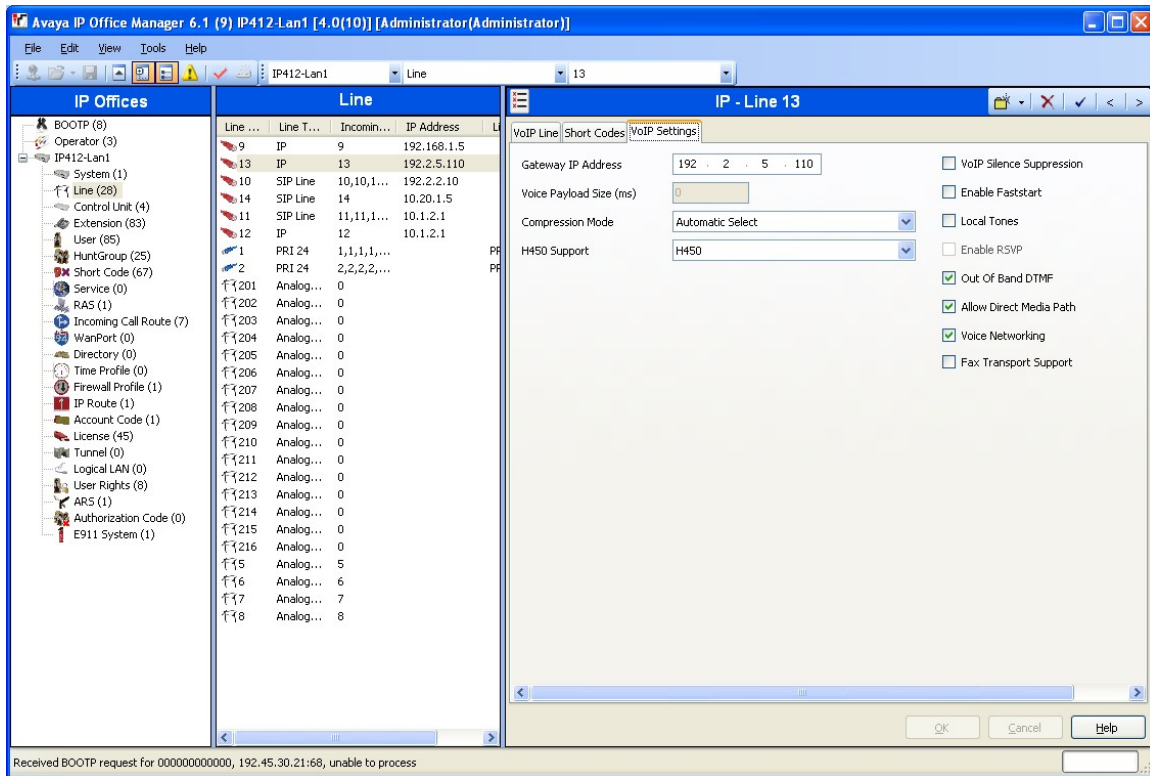
4. In the **Avaya IP Office Manager** window, go to the configuration tree in the left-hand panel and right-click **Line** and select **New → IP Line** (not shown). The screen below should display.

   In this case, the system automatically assigned **13** as the **Line Number** (this will vary). Place the value **13** in the **Incoming Group ID** and **Outgoing Group ID** fields on the **VoIP Line** tab. Click the **VoIP Settings** tab.

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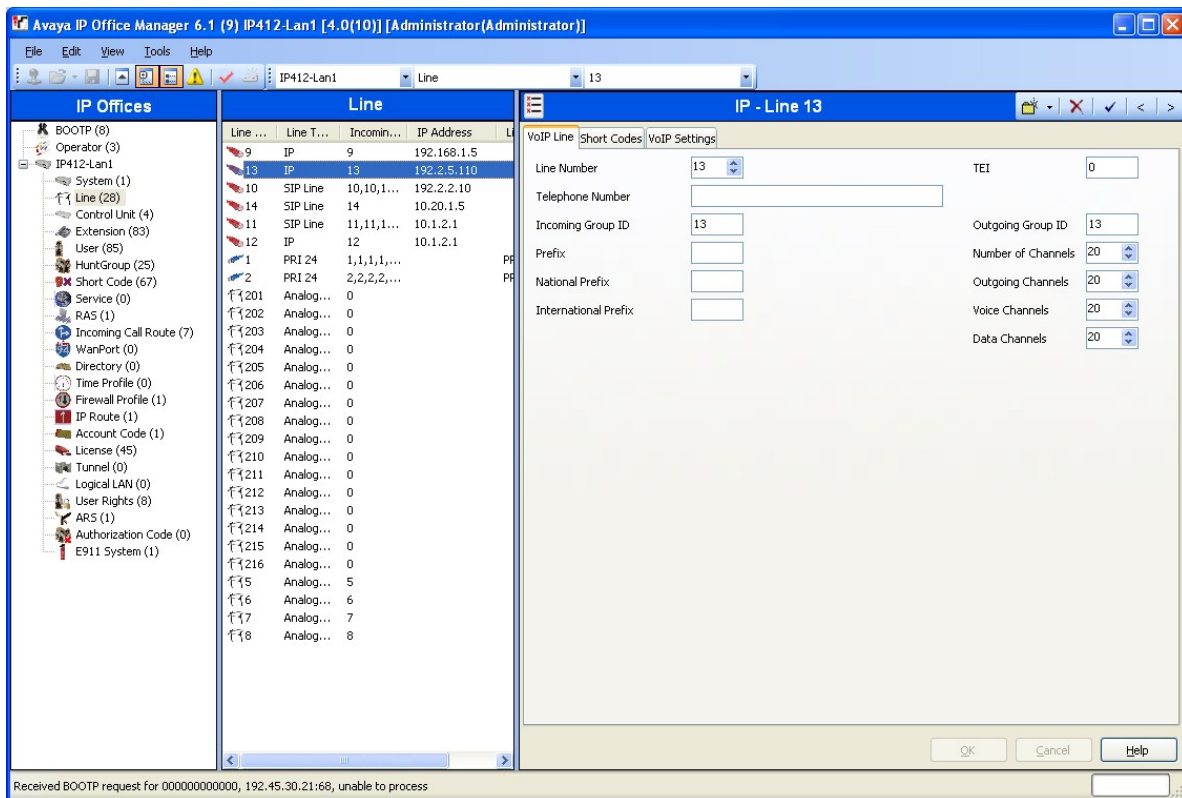
5. Set the **Gateway IP Address** to the IP address of the other Avaya IP Office (see **Figure 1**). Check the **Voice Networking** check-box. The **Voice Networking** parameter turns on SCN capabilities. Click **OK**.

   Note: The IP address will be different when administering the other Avaya IP Office.

6. In the **Avaya IP Office Manager** window, go to the Configuration Tree and double-click **User**. In the User list displayed, scroll down and select the analog user assigned to the IgeaCom device. In this case, extension **55233**. Assign a **Name** to this user. In this case, the **Name** is **Room 101**, which indicates when the button is pressed on the IgeaCom device, the endpoint party responding will see **Room 101** on the telephone display. Click **OK.**
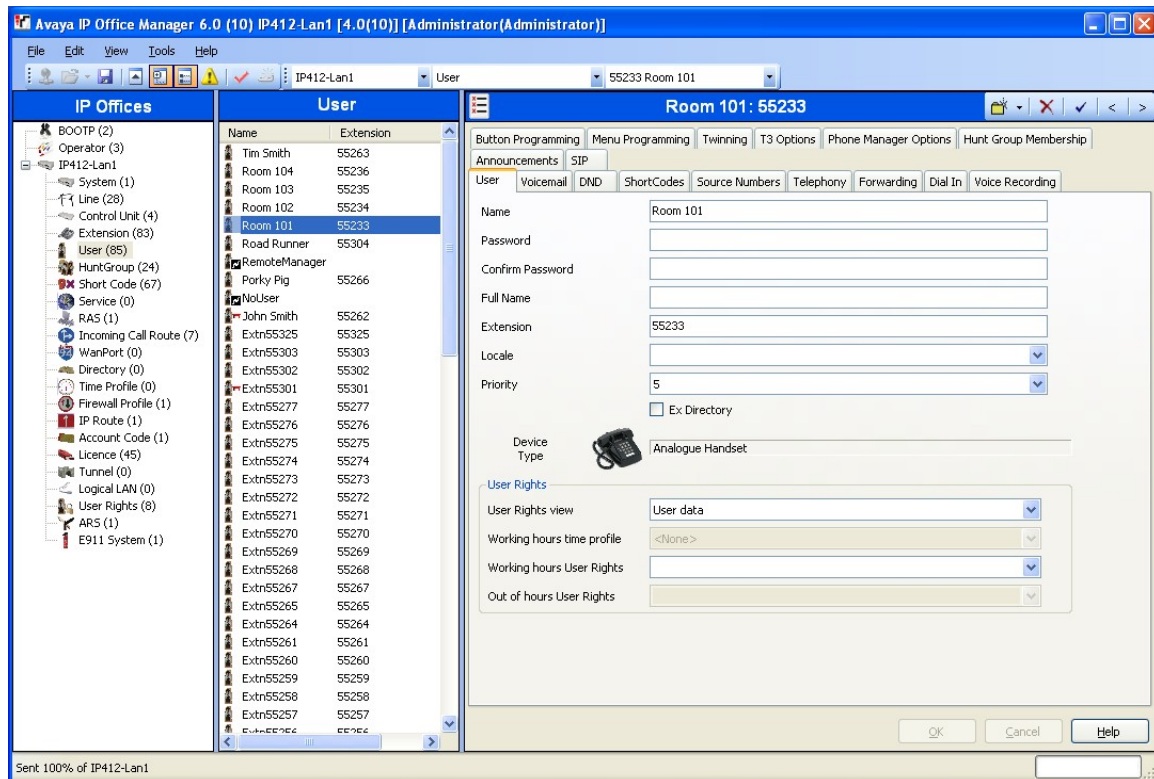
7. Repeat step 6 if additional IgeaCom devices are connected.

8. Check that the Advanced Small Community Networking license is installed by selecting **License** on the left panel Configuration Tree.   Note: A right-click on the middle panel allows a license key to be entered.

   Note: The compliance testing was performed over SCN trunks, where the dialplan and hunt groups were shared. If this SCN network functionality is not required, this license is not necessary.
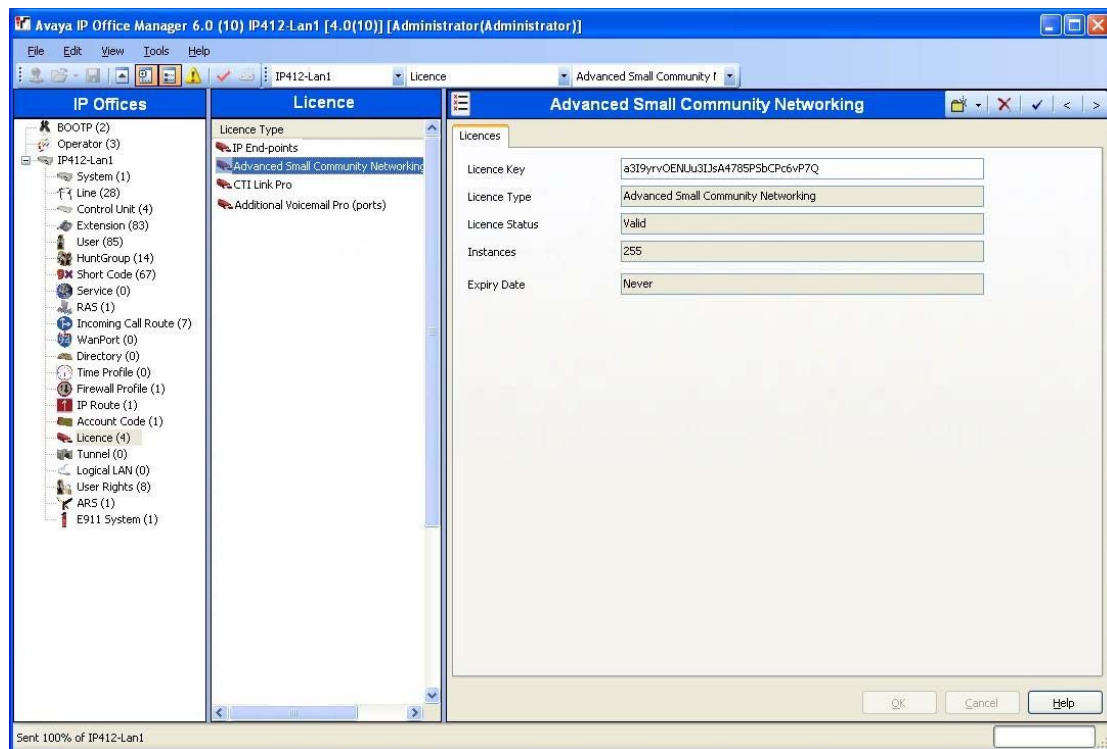
9. Select **HuntGroup** (HG) on the left panel Configuration Tree. Create hunt group names, numbers, and member extensions as described in the **Table 2** below.

IgeaCom Function	HG Name	HG Number and IgeaCom Phone#	HuntGroup Member Extension(s)
IgeaCom 500 device			
CALL	Call500	55451	55262
Pendant	Pend500	55454	55262, 55263
Wireless Pull Cord	Bath500	55453	55262, 55263, 55304
Call Cord	Bed500	55452	55262, 55263, 55304, 65210
Menu	Menu500	55455	55262, 55263, 55304, 65210, 65203
Activities	Act500	55456	55262, 55263, 55304, 65210, 65203,65204
IgeaCom 700 device			
Emergency	Emer700	55401	55262, 55263, 55304, 65210, 65203,65204
Pendant	Pend700	55404	55262, 55263, 55304, 65210, 65203
Wireless Pull Cord	Bath700	55403	55262, 55263, 55304, 65210
Bed	Bed700	55402	55262, 55263, 55304
Staff Assist	Staff700	55411	55262, 55263
Code Blue	Code700	55409	55262

Table 2

Each IgeaCom device has been compliance tested using six different button push functions.   Each hunt group represents one of the six IgeaCom functions and the associated extension number(s) notified when that function is activated.   The alerting extension(s) will see the analog extension **Name** (e.g. - Room 101) and the hunt group **Name** (e.g. – Emer700) displayed on the telephone.   **Note**: All hunt groups are set to **Collective** Ring Mode.

Create a hunt group by right-clicking on **HuntGroup** from the left-hand panel configuration tree and select **New** (not shown). On the right-hand panel, enter a **Name** for the hunt group as per **Table 2**. In the **Extension** field, enter the extension assigned to the hunt group as per **Table 2**. Click on the **Add…** button and select the members extension from the extension list (not shown) as per **Table 2**. In this case, the name of the hunt group is **Bed700**, the hunt group extension is **55402** and the member extensions are **55262**, **55263**, and **55304**. Click **OK.**
Note: Do not set up hunt groups on other Avaya IP Offices using SCN trunks.
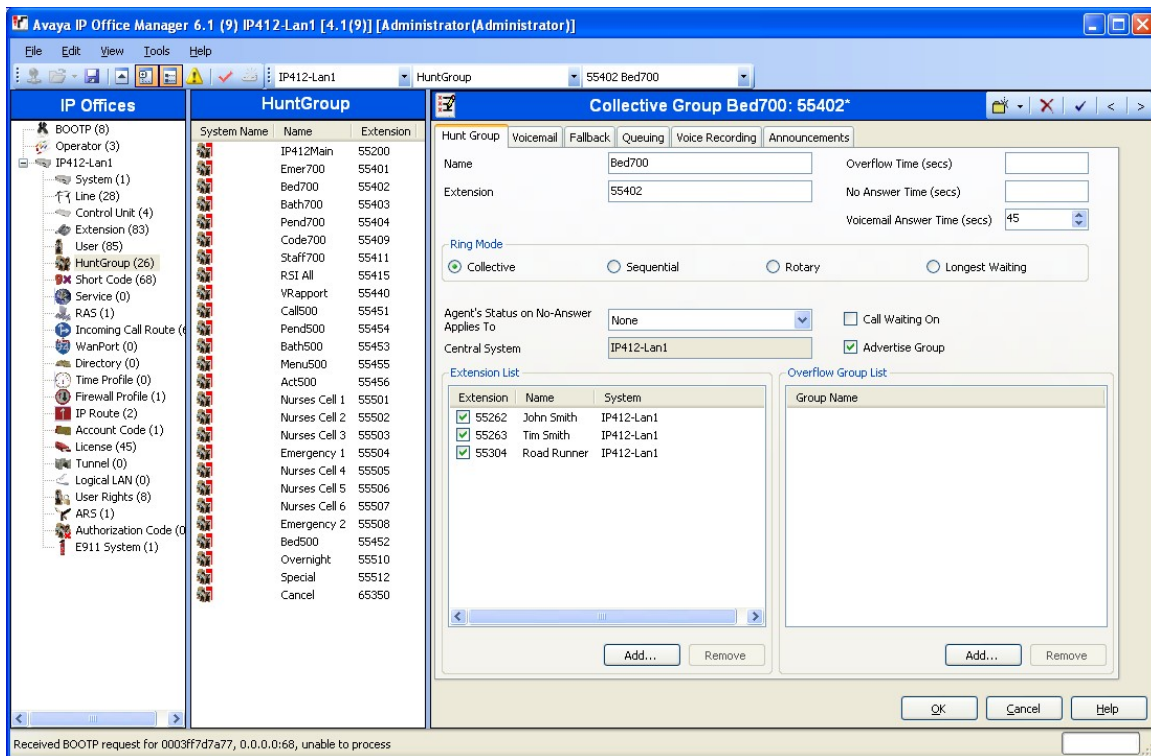
10. In the **Avaya IP Office Manager**, select **File → Save** to push the configuration to the IP Office and wait for the system to update. This completes configuration of Avaya IP Office.

11. Repeat **Steps 4 – 8** and **10** on the Avaya IP406 Office V2. This completes configuration of Avaya IP Office.

4. Configure IgeaCom

Each IgeaCom device must be programmed to reflect the dial plan of the Avaya IP Offices. In addition to the dialed number, the IgeaCom device provides many additional dialing parameters as well as supporting visual display indicators. Please see IgeaCare Systems Inc. documentation Reference [3] for more detail information regarding configuration capabilities.

4.1. IgeaCom Administration

The IgeaCom device programming tool software is installed by simply clicking on the setup.exe file on the installation disk.

1. Once the software is loaded, the application is activated at **Start → Programs → IgeaCare Systems Inc. → IgeaCare Systems Inc. – ACS**.   The application screen below should be displayed and is used to load the IgeaCom 700.

2. The above application must work in conjunction with a serial-port-connected **Infra-Red Programming Link** tool.   This Infra-red device is physically mounted on the IgeaCom 500 or IgeaCom 700 device, and is serially terminated on a PC COM port. The COM port used above is **COM1**.

3. To place the IgeaCom device in infra-red download (programming) mode, simultaneously press both **Volume** buttons for approximately 5 seconds or until three single beeps are heard. The device will beep approximately every 5 seconds while in

download mode. **Note:** To end infra-red download mode, press both **Volume** buttons until three single beeps are heard.

4. Configure the IgeaCom buttons as describe in **Table 2**. The numbers placed in the right **Phone #** field below are the Hunt Group numbers that will be dialed by the IgeaCom device when that function button is pressed.   Each function button can further be tuned with **Delay**, **Redial**, **Silent**, **Light**, and **Priority**. For additional information, see IgeaCom reference [2] and [3].

• **Phone** #: Enter the phone or hunt group number that the IgeaCom device should dial when the function button is pressed. The first **Phone #** is the primary contact and the second **Phone #** field is the rollover contact (not populated above).
• **Delay**: Enter the amount of time that IgeaCom device should wait before dialing the rollover phone number (in minutes).
• **Redial**: If the IgeaCom device should redial the primary and rollover number if no answer.

• **Silent**: Enable (Y) or disable (N) hearing the IgeaCom device dialing the primary or rollover number.

• **Light**: The IgeaCom device has an option to connect to dome light. This was not Compliance tested.

• **Priority**: Click on this field to set the priority on a scale of 1 to 6. The number 1 is the highest priority and the number 6 is the lowest priority.

5. Click on **Store into Device** to download the configuration parameters from the PC onto the IgeaCom device. Wait for a completion indication.
   - Click **Read from Device** to read the installed parameters back into the application.
   - Click **Verify** to compare the stored parameters on the right of the screen with those retrieved from the device on the left.
   - The **Store into Device, Read from Device**, and **Verify** buttons are displayed below.
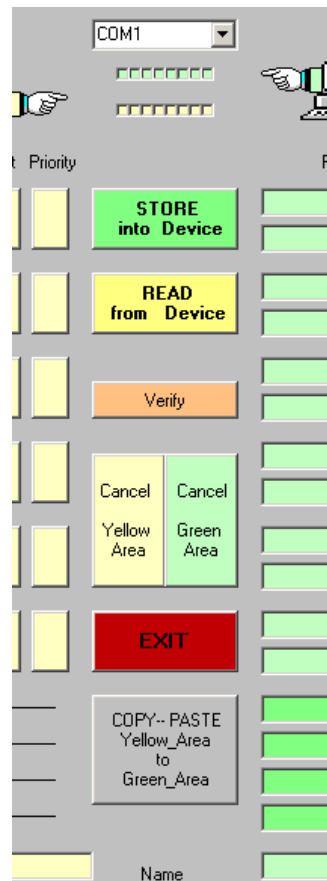
6. Install the IgeaCom 500 by activating **Start → Programs →IgeaCare Systems Inc. → IgeaCare Systems Inc.**. Repeat the **Steps 2 - 5** above for all the IgeaCom 500 devices using **Table 2** for telephone number information.

7. This completes the programming of the IgeaCom devices.

5. Interoperability Compliance Testing

Interoperability compliance testing evaluated the ability of IgeaCom devices to call various endpoints on a stand alone Avaya IP Office or multiple Avaya IP Offices configured using SCN trunks.

5.1. General Test Approach

The general test approach was to program the IgeaCom buttons when pushed to contact different Avaya IP Office members and hunt groups. Based on the button selected on the IgeaCom device, endpoints on either or both Avaya IP Offices were contacted displaying the IgeaCom location (Room) and number on the telephone.

Serviceability was conducted by unplugging/plugging the IgeaCom device from the Avaya POTS module port. In addition, resetting the Avaya IP Office as IgeaCom device buttons were being pressed.

5.2. Test Results

All functions of IgeaCom button pushing passed compliance testing and all test cases completed successfully.
- There were no issues with programming the IgeaCom devices
- There were no communications difficulties within the network.
- There were no performance or load tests performed.
- Serviceability compliance tests passed.

6. Verification Steps

The following steps may be used to verify the configuration:
- Verify that each button on the IgeaCom device contacts an endpoint or each member in a hunt group.
- Verify the display information is correct on the ringing endpoint.
- Verify two-way communication after endpoint answers call from IgeaCom device and that it terminates correctly.
- Verify serviceability of IgeaCom device by unplugging during button push, then reconnecting device without problems along with resetting Avaya IP Offices.

7. Support

Technical support for IgeaCare Systems Inc. can be obtained by contacting IgeaCare Systems Inc at:
- Phone: (905) 707-1669 or 1-866-361-6225
- E-mail: support@igeacare.com
- Web: http://www.igeacare.com

8. Conclusion

These Application Notes describe the steps for configuring the IgeaCare Systems Inc. IgeaCom devices with Avaya IP Offices.

Although not tested in compliance, the procedures in this document can be used for IgeaCom 300, 301, 501, MP501, 600, and 601 devices. The functionality may vary slightly between devices but the administration is identical.

9. References

The following Avaya product documentation can be found at http://support.avaya.com:

[1] Avaya IP Office 4.0 Installation Manual, Issue 15e (31st January 2007), 15-601042.

The following IgeaCom product documentation was used and referenced during the compliance test (http://igeacare.com/downloads1.htm):

[2] IgeaCom Acute Care User GuideV1.0, Part Number 9001001ACS.
[3] IgeaCom User GuideV8.0, Part Number 9001001.
[4] IgeaCom Software User Guide, V2.0 Part Number9001002.

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