**Avaya Solution & Interoperability Test Lab**

# Application Notes for IgeaCare igeacom with Avaya Aura® Communication Manager – Issue 1.0

## Abstract

These Application Notes describe the configuration steps required to integrate the IgeaCare igeacom with Avaya Aura® Communication Manager. IgeaCare igeacom is an emergency notification solution that provides two-way voice communication between monitoring stations (e.g., nursing staff) and residents. In the compliance testing, IgeaCare igeacom interfaces to Avaya Aura® Communication Manager via an analog interface. The igeacom500 and the igeamcom700 are covered in these Application Notes.

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 to integrate the IgeaCare igeacom with Avaya Aura® Communication Manager. IgeaCare igeacom is an emergency notification solution that provides two-way voice communication between monitoring stations (e.g., nursing staff) and residents. In the compliance testing, IgeaCare igeacom interfaces to Avaya Aura® Communication Manager via an analog interface. The igeacom500 and the igeamcom700 are covered in these Application Notes.

The igeacom nurse call devices are essentially analog speaker telephones that can be activated by resident users via multiple call points to reach the personnel at the monitoring stations (e.g., nurse staff). Each igeacom device is configured as an analog user on Avaya Aura® Communication Manager and each nurse's telephone is configured as members of a coverage answer group. By using a coverage answer group, all nurses within the group will receive the call at the same so that any available nurse may respond. The coverage answer group is then specified as a coverage point in a coverage path. In turn, the coverage path is specified in a station whose extension will be dialed by the igeacom device. The igeacom can be configured to call different stations for each call point, such that the nurse can use the display to identify both the name of the resident user and the specific call point. The nurse's telephone display will show the name of the resident user along with the name of the station. An Avaya SIP phone will only display the resident user name.

In the compliance testing, two types of igeacom nurse call devices were used – igeacom500 and igeacom700. The igeacom500 resident unit supports five different types of call points (red call button, wireless pendant, wired pull cord, wireless pull cord, and call cord), plus the menu and activity buttons. The igeacom700 patient unit is similar to the igeacom500, replacing the menu and activity buttons with the staff and code blue buttons respectively. The igeacom500 includes support for RF3 sensors, which was included in the compliance test.

The igeacom suite also includes the igeacom300 and the igeacom600. The igeacom300 is essentially the same as the igeacom500 without the support of wireless call points, and the igeacom600 is essentially the same as the igeacom700 without the support of wireless call points.

# 2. General Test Approach and Test Results

All tests were performed manually.

## 2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing. The feature testing focused on verifying the ability of the igeacom500 and igeacom700 to place calls to the proper nurse answer groups associated with various types of call points. The verification included proper display at the nurse telephone, connected two-way talk paths, proper call termination, and proper call escalations.

The serviceability testing focused on verifying the ability of igeacom500 and igeacom700 to recover from adverse conditions, such as disconnecting and reconnecting the analog line cable to the devices.

## 2.2. Test Results

All test cases were executed and passed.

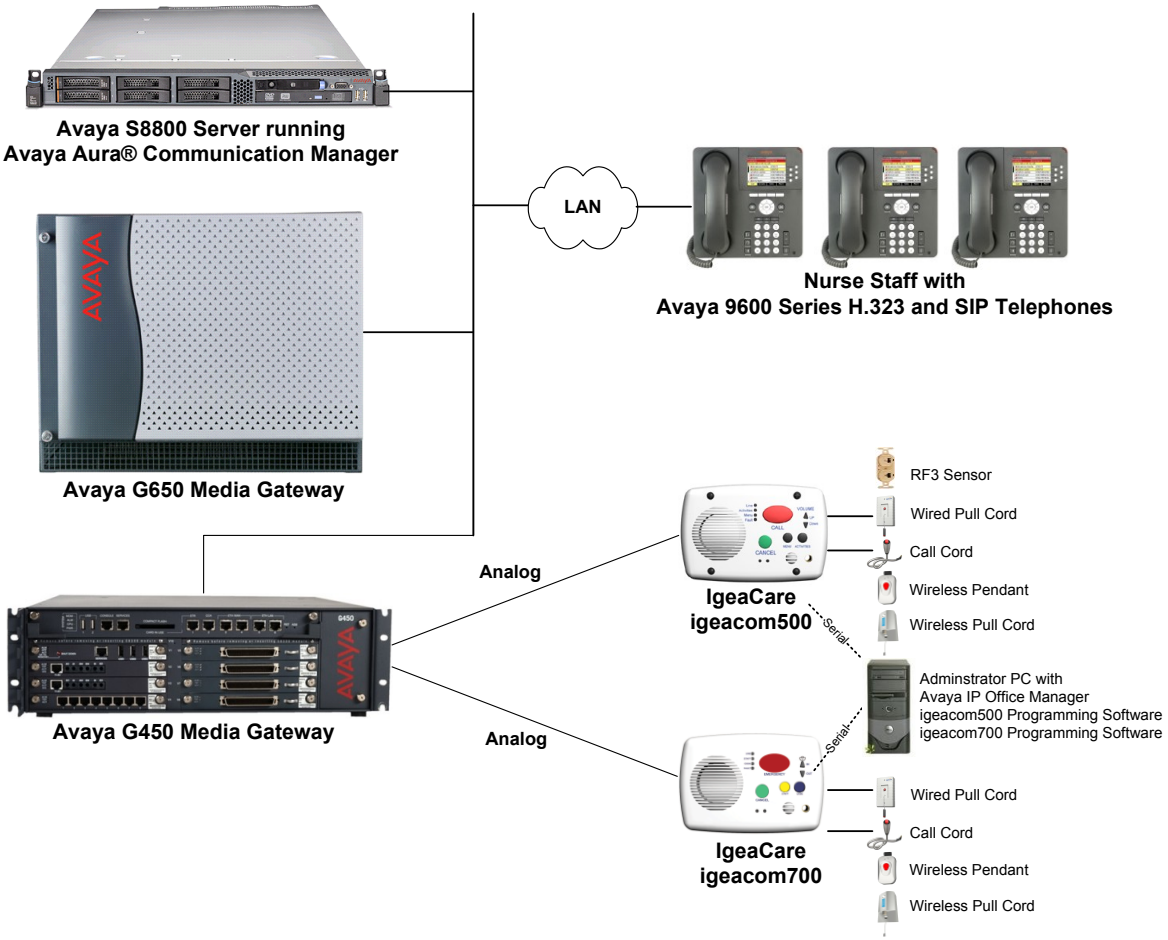
## 2.3. Support

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

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

# 3. Reference Configuration

As shown in the test configuration below, the igeacom solution consists of the emergency monitoring base unit and an analog line connection to Avaya Aura® Communication Manager. A PC with the igeacom programming software was used to configure and download the configurations to the igeacom devices. The S8800 Server running Avaya Aura® Communication Manager managed G650 and G450 Media Gateways. The igeacom devices used analog ports on the G450 Media Gateway for connectivity.



# 4. Equipment and Software Validated

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

| Hardware Component | Version |
|---|---|
| Avaya S8800 Servers and G650 and G450 Media Gateways | Avaya Aura® Communication Manager 6.0.1 SP 3 |
| Avaya 9600 Series IP Telephones | 3.101 (H.323)<br>2.6.4 (SIP) |
| IgeaCare igeacom500 | IC500-B2.6-U-1210-0155 |
| IgeaCare igeacom700 | IC700-B1.6-U-0211-0009 |
| igeacom500 Programming Software | 6.11 |
| igeacom700 Programming Software | 6.08.3 |

# 5. Configure Avaya Aura® Communication Manager

This section provides the procedures for configuring Communication Manager. The procedures fall into the following areas:

- Administer igeacom station
- Administer coverage answer groups for nurse staff
- Administer coverage paths for each coverage answer group
- Administer stations with coverage paths

Use the System Access Terminal (SAT) to configure Communication Manager and log in with the appropriate credentials.

## 5.1. Administer igeacom Station

Use the **add station** command to add a station for igeacom. Use *2500* for the station **Type**, specify an analog port, and provide the room number in the **Name** field (e.g., *Room 4000*). The station name will be displayed on the nurse's telephone display. Use the default values for the other fields.

```
add station 4000                                          Page   1 of   4
                                  STATION

Extension: 4000                        Lock Messages? n              BCC: 0
     Type: 2500                        Security Code:                 TN: 1
     Port: 001V201                   Coverage Path 1:                COR: 1
     Name: Room 4000                 Coverage Path 2:                COS: 1
                                     Hunt-to Station:              Tests? y
STATION OPTIONS
      XOIP Endpoint type: auto           Time of Day Lock Table:
               Loss Group: 1           Message Waiting Indicator: none
    Off Premises Station? n

          Survivable COR: internal
   Survivable Trunk Dest? y
                                           Remote Office Phone? n

Passive Signalling Station? n
```

## 5.2. Administer Nurse Coverage Answer Groups

For this solution, coverage answer groups were used to allow all nurses to receive the call simultaneously. An available nurse can then respond to the call. Two coverage answer groups were configured in order to create two escalation levels. If a nurse in the first answer group does not answer the call within a configured time interval, igeacom will place the call to the second coverage answer group.

Use the **add coverage answer-group** command to create an answer group comprised of nurse extensions. The following coverage answer group includes three nurse extensions, including an H.323, SIP, and 3631 wireless phone. When each of these phones received a call, the igeacom station name (or room number) was displayed.

```
add coverage answer-group 1                                   Page   1 of   1
                      COVERAGE ANSWER GROUP

                     Group Number: 1
                       Group Name: NURSE GROUP 1

GROUP MEMBER ASSIGNMENTS

    Extension       Name
 1: 77301           Nurse 77301
 2: 78005           Avaya 78005
 3: 71000           Wireless 71000
 4:
 5:
 6:
 7:
 8:
```

Below is the coverage answer group for the second escalation level.

```
add coverage answer-group 2                                   Page   1 of   1
                      COVERAGE ANSWER GROUP

                     Group Number: 2
                       Group Name: NURSE GROUP 2

GROUP MEMBER ASSIGNMENTS

    Extension       Name
 1: 77307           Head Nurse
 2: 77308           Asst Nurse
 3:
 4:
 5:
 6:
 7:
 8:
```

## 5.3. Administer Coverage Paths

This section covers two coverage paths corresponding to each coverage answer group configured in the previous section. The coverage answer groups, c1 and c2, are specified in the **Point 1** field of each coverage path, respectively.

The following coverage path directs the call to coverage answer group 1.

```
add coverage path 1                                          Page   1 of   1
                               COVERAGE PATH

                  Coverage Path Number: 1
     Cvg Enabled for VDN Route-To Party? n        Hunt after Coverage? n
                       Next Path Number:          Linkage

COVERAGE CRITERIA
    Station/Group Status    Inside Call     Outside Call
             Active?            n              n
               Busy?            y              y
       Don't Answer?            y              y         Number of Rings: 2
                All?            n              n
 DND/SAC/Goto Cover?            y              y
   Holiday Coverage?            n              n


COVERAGE POINTS
    Terminate to Coverage Pts. with Bridged Appearances? n
  Point1: c1             Rng:    Point2:
  Point3:                        Point4:
  Point5:                        Point6:
```

The following coverage path directs the call to coverage answer group 2.

```
add coverage path 2                                          Page   1 of   1
                               COVERAGE PATH

                  Coverage Path Number: 2
     Cvg Enabled for VDN Route-To Party? n        Hunt after Coverage? n
                       Next Path Number:          Linkage

COVERAGE CRITERIA
    Station/Group Status    Inside Call     Outside Call
             Active?            n              n
               Busy?            y              y
       Don't Answer?            y              y         Number of Rings: 2
                All?            n              n
 DND/SAC/Goto Cover?            y              y
   Holiday Coverage?            n              n


COVERAGE POINTS
    Terminate to Coverage Pts. with Bridged Appearances? n
  Point1: c2             Rng:    Point2:
  Point3:                        Point4:
  Point5:                        Point6:
```

## 5.4. Administer Stations with Coverage Paths

This section covers stations that cover to a nurse answer group. There will be a primary and secondary station configured for each call point type. Having a primary and secondary station provides two escalation levels. If a nurse in the primary answer group doesn't answer, igeacom can call a secondary nurse answer group.

The following phantom station will forward the call to coverage answer group 1, consisting of nurses in the first escalation level, as specified by **Coverage Path 1**. This station will be called by igeacom when a resident user presses the call button.

```
add station 29501                                        Page   1 of   5
                                   STATION

Extension: 29501                       Lock Messages? n               BCC: 0
     Type: 6408D+                      Security Code:                  TN: 1
     Port: X                         Coverage Path 1: 1               COR: 1
     Name: Call Button               Coverage Path 2:                 COS: 1
                                     Hunt-to Station:
STATION OPTIONS
                                          Time of Day Lock Table:
             Loss Group: 2          Personalized Ringing Pattern: 1
           Data Module? n                     Message Lamp Ext: 29501
         Speakerphone: 2-way                Mute Button Enabled? y
       Display Language: english

         Survivable COR: internal               Media Complex Ext:
  Survivable Trunk Dest? y                            IP SoftPhone? n
                                                Remote Office Phone? n
                                                           IP Video? n
```

The following phantom station will forward the call to coverage answer group 2, consisting of nurses in the second escalation level, as specified by **Coverage Path 2**. igeacom will call this station to escalate to the next level.

```
add station 29601                                        Page   1 of   5
                                   STATION

Extension: 29601                       Lock Messages? n               BCC: 0
     Type: 6408D+                      Security Code:                  TN: 1
     Port: X                         Coverage Path 1: 2               COR: 1
     Name: Call Button               Coverage Path 2:                 COS: 1
                                     Hunt-to Station:
STATION OPTIONS
                                          Time of Day Lock Table:
             Loss Group: 2          Personalized Ringing Pattern: 1
           Data Module? n                     Message Lamp Ext: 29601
         Speakerphone: 2-way                Mute Button Enabled? y
       Display Language: english

         Survivable COR: internal               Media Complex Ext:
  Survivable Trunk Dest? y                            IP SoftPhone? n
                                                Remote Office Phone? n
                                                           IP Video? n
```

Repeat this section to add a station for every call point type, including a primary and secondary station, if desired. The stations that were used for the compliance testing are shown below.

| Station Extension | Name | Used by igeacom500 | Used by igeacom700 |
|---|---|---|---|
| 29501 | Call Button | X | X |
| 29502 | Bed Cord | X | X |
| 29503 | Wired Cord | X | X |
| 29504 | Pendant | X | X |
| 29505 | Wireless Pull | X | X |
| 29506 | Smoke Detector RF3 | X | |
| 29507 | Code Blue | | X |
| 29508 | Staff Assist | | X |

The stations for the second escalation level are listed below. This may or not be required depending on customer requirements.

| Station Extension | Name | Used by igeacom500 | Used by igeacom700 |
|---|---|---|---|
| 29601 | Call Button | X | X |
| 29602 | Bed Cord | X | X |
| 29603 | Wired Cord | X | X |
| 29604 | Pendant | X | X |
| 29605 | Wireless Pull | X | X |
| 29606 | Smoke Detector RF3 | X | |
| 29607 | Code Blue | | X |
| 29608 | Staff Assist | | X |

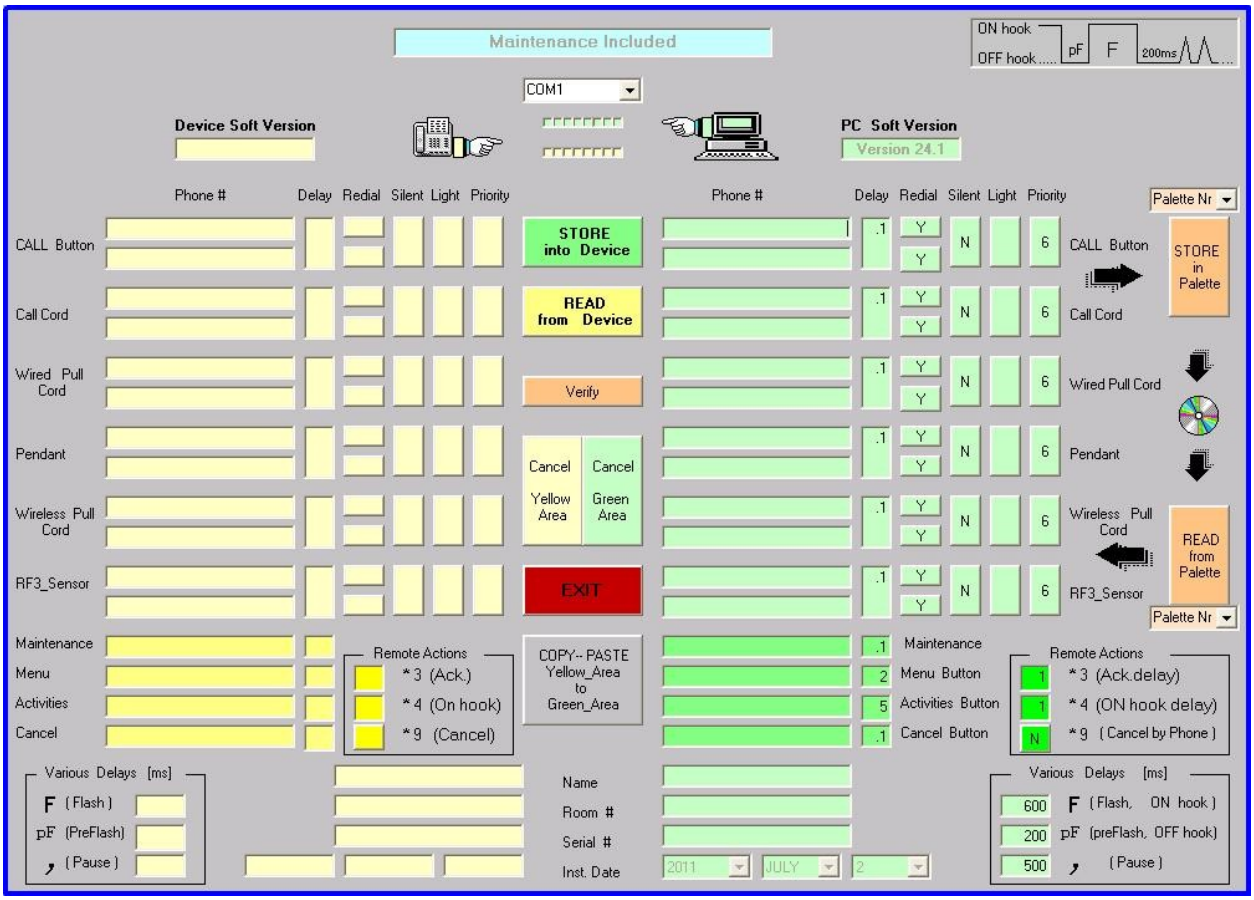
# 6. Configure IgeaCare igeacom500

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

## 6.1. Launch igeacom500 Programming Software

From a 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 System Inc → IgeaCare System Inc.** from the PC. The screen below is displayed.

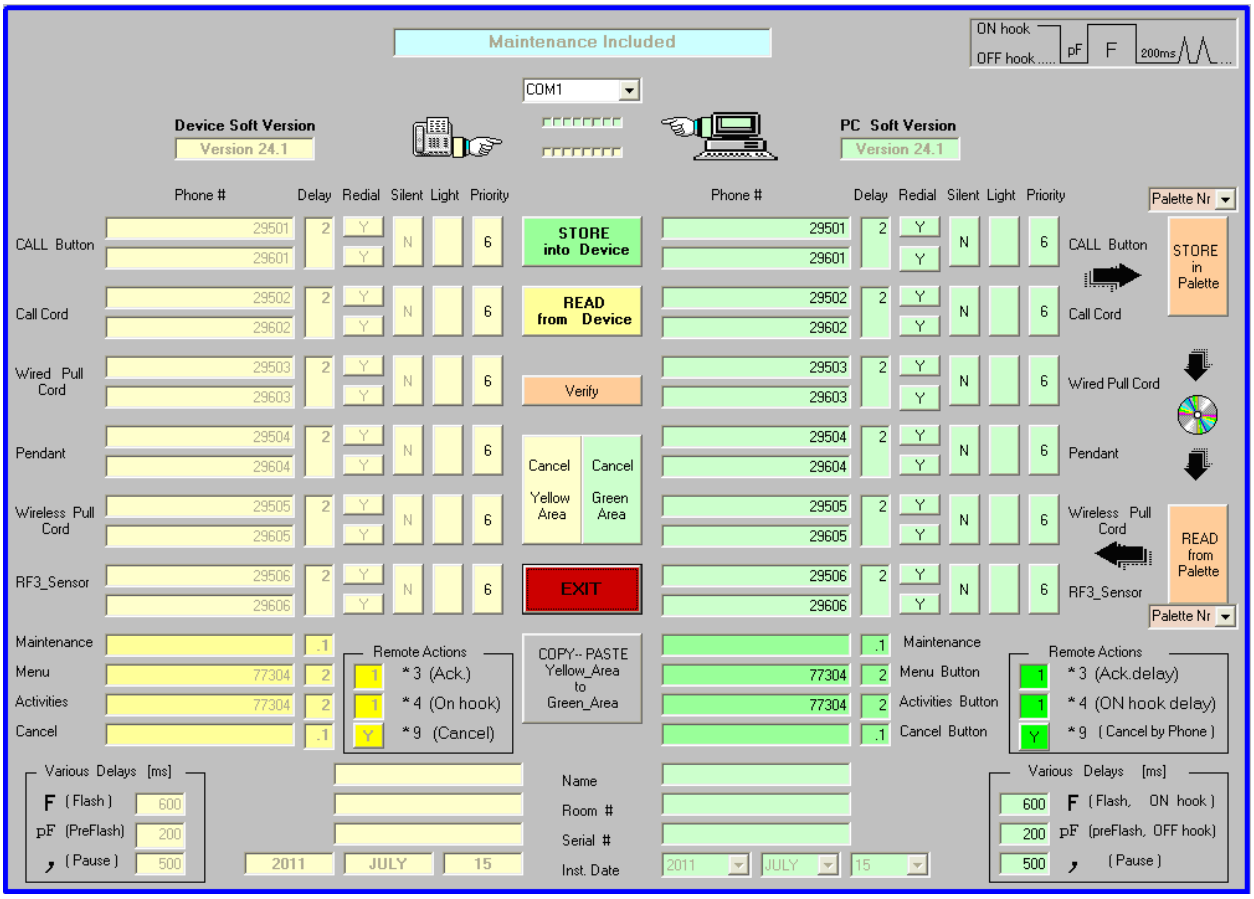


## 6.2. Administer Call Point Destinations

Configure igacom500 using the station extensions associated with each applicable call point type from **Section 5.4.** As shown below, each call point can have up to two **Phone #** as primary and rollover destinations. Update the remaining fields associated with each call point type as desired.

For **Menu button** and **Activities button**, enter the desired destinations, which are typically messaging extensions on Communication Manager. In the compliance testing, extension "77304" was used. Enter desired values in the associated **Delay** field.

Follow [3] to configure the other fields as desired and store the resultant configuration to igeacom500.



# 7. Configure IgeaCare igeacom700

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

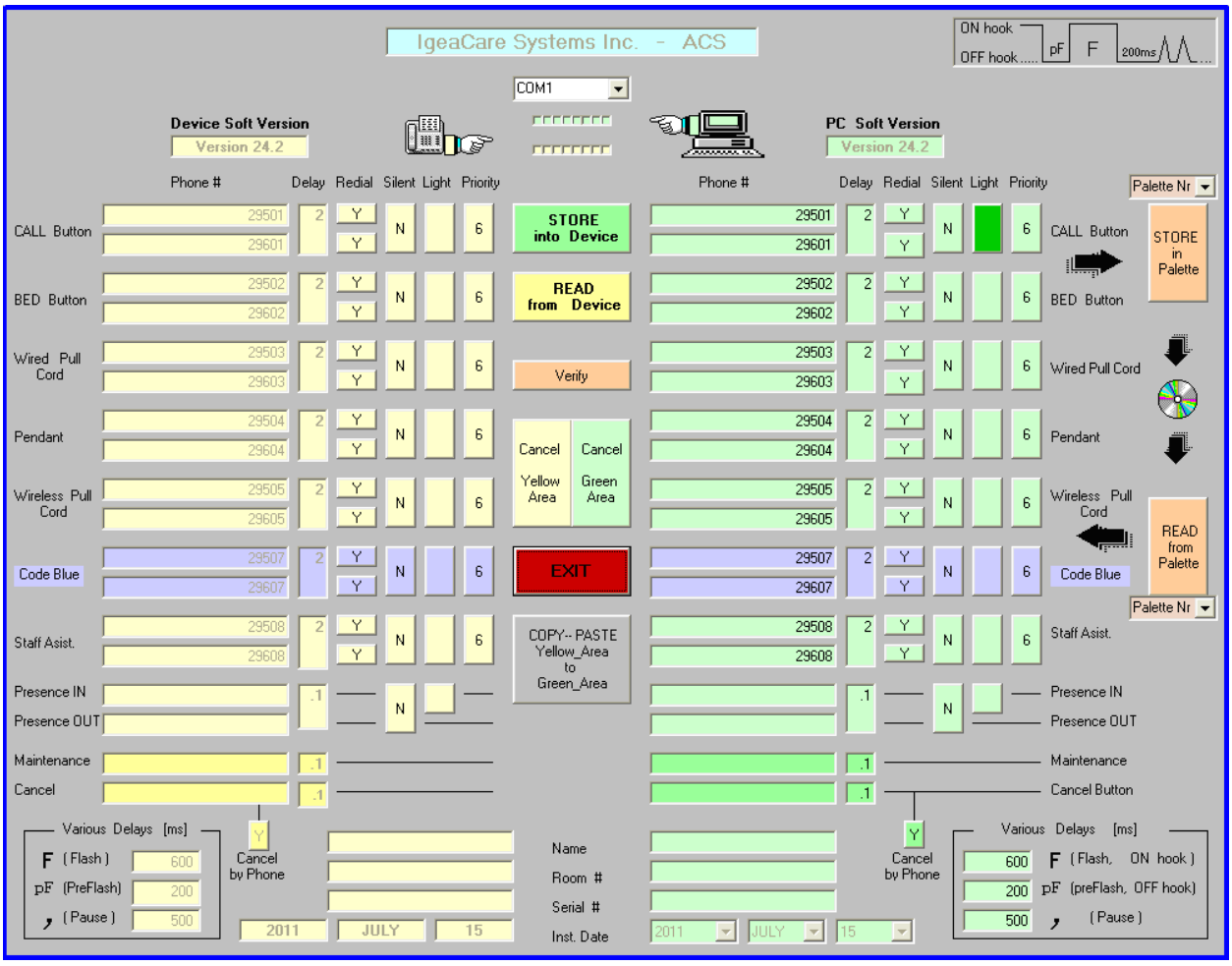
- Launch igeacom700 programming software
- Administer call point destinations

## 7.1. Launch igeacom700 Programming Software

From a 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 System Inc → IgeaCare System Inc. – ACS** from the PC.

## 7.2. Administer Call Point Destinations

Follow the steps in **Section 6.2** to similarly configure the igeacom700. The screenshot below shows the settings used in the compliance testing.



# 8. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya Aura® Communication Manager and IgeaCare igeacom500 and igeacom700.

From a call point, activate a call to the nurse answer group (such as pulling the cord or pressing the button, depending on the type of call point). Verify that the call is ringing at the nurse stations, and that the nurse's telephone display shows the name of the resident user associated with the igeacom device, and the name of the station associated with the call point type. An Avaya SIP phone will not display the station name, just the resident user's name. Answer the call at the nurse's telephone, and verify for connected two-way talk paths.

# 9. Conclusion

These Application Notes describe the configuration steps required for IgeaCare igeacom to interoperate with Avaya Aura® Communication Manager. All feature and serviceability test cases were completed successfully.

# 10. Additional References

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


[1] *Administering Avaya Aura® Communication Manager*, June 2010, Release 6.0, Issue 6.0, Document Number 03-300509.
[2] *IgeaCare Resident Unit Installation Guide*, Release 2, available at http://www.igeacare.com.
[3] *IgeaCare 600-700 igeacom Installation Guide*, available at http://www.igeacare.com.
[4] *Resident Unit Specification Sheet*, Release 4, available at http://www.igeacare.com.
[5] *Patient Unit Specification Sheet,* Release 3, 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 devconnect@avaya.com.