AVAYA communication

# Intuity™ Messaging Solutions Integration with System 75, DEFINITY®

## Generics 1 & 3, and R5/6 Addendum: Centralized Voice Mail Installation

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- Routed to a recorded announcement that can be administered by the CPE user

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# 1

# Installing DEFINITY CVM – IMC

## Purpose

The purpose of this addendum is to provide basic information about DEFINITY® Centralized Voice Mail–Interswitch Mode Code (CVM–IMC), installation instructions, and administration instructions for integrating a Lucent Intuity™ Release 4 or Release 5 system into the network.

Throughout this document, you may see references to either Release 4 or Release 5 Lucent Intuity™ system procedures. If no difference is presented, assume that the information applies to both releases.

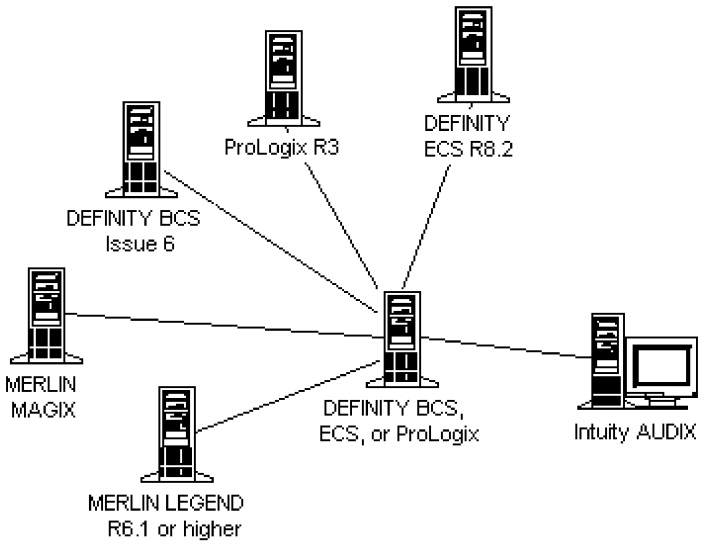
## Introduction

This section includes a description of the feature, requirements for the Lucent Intuity installation, and requirements of the feature.

### What is CVM–IMC?

Centralized Voice Mail–Interswitch Mode Code provides customers with the ability to network together a number of small switches that can share one Lucent Intuity voice mail system. The feature uses mode code protocol for call transfer and communications. The set of disparate switches are networked to one switch hub, which then provides call transfer ability to the Lucent Intuity.

**Figure 1-1. DEFINITY R8.3 Network Configuration Example**




The switches that can be integrated with DEFINITY R8.2 CVM–IMC include:

- DEFINITY ECS R8.2
- ProLogix™ R3
- DEFINITY BCS Issue 6

DEFINITY R8.3 CVM–IMC adds networking with these switches:

- MERLIN™ MAGIX
- MERLIN LEGEND® R6.0 or 7.1

You can network to a Lucent Intuity Release 4.4 or Release 5 system.

## Requirements

The CVM–IMC integration has these requirements:

- The system only operates with a DEFINITY ECS Release 8.2, ProLogix R3, or DEFINITY BCS Issue 6 as the hub or as endpoints. Release 8.3 will also support MERLIN LEGEND or MERLIN MAGIX systems as endpoints.
- The network maximum capacity is 10 switches and 450 mailboxes.
- The switch network must be set up using mode code transfers.

- The switch network must be set up in a star configuration. Linear or tandem connections are not supported.
- The switch network requires ISDN-PRI trunks with D-Channel between switches.
- The network must use uniform dialing plan (UDP).
  - — If the switch network is all DEFINITY systems, either 4 or 5 digit dial plans can be used.
  - — If MERLIN LEGEND or MERLIN MAGIX systems are used in a DEFINITY system network, a 4 digit dial plan is required.
- The Lucent Intuity system must be a MAP/5P Release 4.4 or Release 5.
- On the Lucent Intuity system, the last active port on each voice card must be reserved for the message waiting indicator (MWI) interface.
- MWI ports cannot be in the hunt group.

## Before You Start

Before starting to install the CVM–IMC, complete these items:

- Confirm that the Sales and Design Support Center (SDSC) has completed their design for the installation.
- Integrate the switch systems before starting the Lucent Intuity integration. The switch integrations must be working properly before the calls can be transferred to the Lucent Intuity system. See “Configure the Switch Network’’ on page 1-5 for a list of documents to use to set up the network.

# Installation Checklist

Follow the steps in Table 1-1 to complete the CVM–IMC installation.

**Table 1-1. CVM–IMC Installation Checklist**

| Task | Page | ✔ |
|---|---|---|
| 1. Configure the Switch Network. | page 1-5 | |
| 2. Reserve the Switch Voice Port for MWI | page 1-5 | |
| 3. Install the Lucent Intuity System. | page 1-6 | |
| 4. Verify Switch Settings on the Lucent Intuity System. | page 1-7 | |
| 5. Set the MWI Indicators. | page 1-8 | |
| 6. Determine the Active Channels to Reassign. | page 1-9 | |
| 7. Assign the Last Active Ports. | page 1-10 | |
| 8. Update Automated Attendant Routing | page 1-12 | |
| 9. Set the Dial Plan | page 1-13 | |
| 10. Test the Installation | page 1-14 | |
| 11. Troubleshooting: complete any adjustments that may be required. | page 1-15 | |

# Installation Tasks

This section includes the actual tasks to complete to install DEFINITY CVM–IMC. Follow these steps in order.

## Configure the Switch Network

The switch network must be working properly using a mode code integration before connecting the Intuity AUDIX system to the CVM–IMC network. Given the complexity of the configuration and the possible configuration options, any steps for completing the integration must come from the respective documentation. These documents include:

- DEFINITY ECS R8.2 Administration for Network Connectivity, 555-233-504
- DEFINITY ECS R8.2 Administrator's Guide, 555-233-506
- MERLIN LEGEND and MERLIN MAGIX Communications System, see the respective Network Reference

## Reserve the Switch Voice Port for MWI

A CVM-IMC integration uses mode code transfers. Since this method is slower than others, the last extension on each voice port circuit card on the switch must be reserved for MWI updates by excluding it from the hunt group. Otherwise, MWI updates must often wait for a port. Reserving one port on each card allows MWI updates to occur without delay.

Assign only the first five extensions of each voice port circuit card to a hunt group on the hub switch. If the last extension is not part of the hunt group, the switch will not use it to route traffic to the Intuity.

**Note:**
If a customer uses less than a full voice port circuit card, skip any unused ports and use the last port on that card for MWI updates.

For more information about assigning extensions in hunt groups, see the documentation for your switch listed in ‘‘Configure the Switch Network’’ above.

## Install the Lucent Intuity System.

If this is a new installation, follow existing documentation to install the Lucent Intuity system. Different documents exist for Release 4 and for Release 5.

For Release 4.4 systems, use any of these documents that you may find helpful:

- Intuity Messaging Solutions Release 4 MAP/5P System Installation (585-310-185)
- Intuity Integration with System 75 and DEFINITY Communications System Generic 1 and Generic 3 (585-310-214)
- Intuity Messaging Solutions Integration with System 75, DEFINITY Generics 1&3, and R5/6 (585-310-257)
- Intuity Messaging Solutions Integration with MERLIN LEGEND (585-310-255)

For Release 5 systems, use any of these documents that you may find helpful:

- Intuity Messaging Solutions Release 5Installation for New Systems (585-313-119)
- Intuity Messaging Solutions Getting Connected (585-313-703)
- Intuity Messaging Solutions Release 5 Documentation CD-ROM (585-313-803)
- Intuity Messaging Solutions Release 5 Documentation for Technicians (585-313-807)
- Intuity Messaging Solutions Integration with MERLIN LEGEND (585-310-255)
- Intuity Messaging Solutions Integration with System 75, DEFINITY Generics 1&3, and R5/6 (585-310-257)

## Verify Switch Settings on the Lucent Intuity System

This task confirms that the Lucent Intuity system is using the correct switch integration. Select the procedure for your system:

- "Intuity AUDIX Release 4.4'' on this page
- "Intuity AUDIX Release 5'' on page 1-7

### Intuity AUDIX Release 4.4

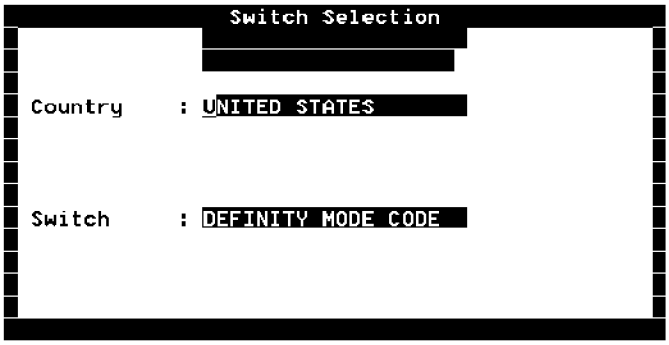
To verify the switch integration on an Intuity AUDIX 4.4 system:

1. Start at the Lucent Intuity Main Menu and select:

   ```
   Switch Interface Administration
     Switch Selection
   ```

   The system displays Figure 1-2.

   **Figure 1-2. Switch Selection Screen**

2. Confirm that "DEFINITY MODE CODE" is displayed in the Switch field, then do one of the following:

   - If DEFINITY MODE CODE is displayed, continue with "Set the MWI Indicators'' on page 1-8.
   - If another switch integration is displayed, contact the Remote Support Center.

     The existing integration must be unloaded and the SWINset Serial-Inband Switch Integration must be loaded. After this work is completed, continue with "Set the MWI Indicators''.

### Intuity AUDIX Release 5

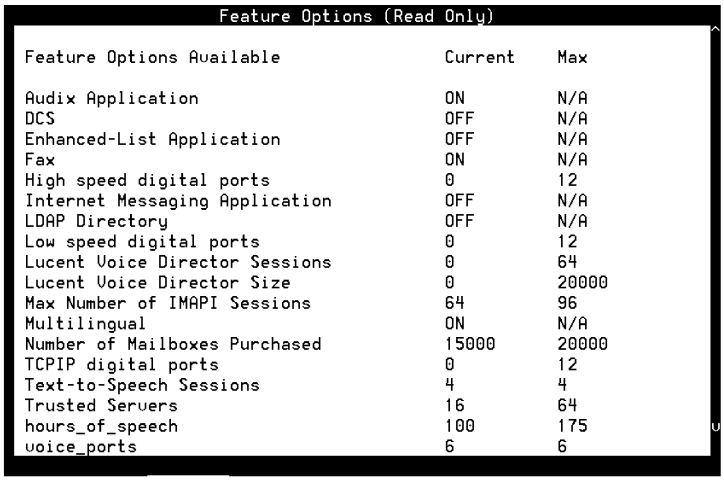
To verify the switch integration on an Intuity AUDIX 5 system:

1. Start at the Lucent Intuity Main Menu and select:

   ```
   Feature Options
   ```

   The system displays Figure 1-3.

**Figure 1-3. Feature Options Screen**



Feature Options (Read Only)

| Feature Options Available | Current | Max |
|---|---|---|
| Audix Application | ON | N/A |
| DCS | OFF | N/A |
| Enhanced-List Application | OFF | N/A |
| Fax | ON | N/A |
| High speed digital ports | 0 | 12 |
| Internet Messaging Application | OFF | N/A |
| LDAP Directory | OFF | N/A |
| Low speed digital ports | 0 | 12 |
| Lucent Voice Director Sessions | 0 | 64 |
| Lucent Voice Director Size | 0 | 20000 |
| Max Number of IMAPI Sessions | 64 | 96 |
| Multilingual | ON | N/A |
| Number of Mailboxes Purchased | 15000 | 20000 |
| TCPIP digital ports | 0 | 12 |
| Text-to-Speech Sessions | 4 | 4 |
| Trusted Servers | 16 | 64 |
| hours_of_speech | 100 | 175 |
| voice_ports | 6 | 6 |

2. Press F1 Acknowledge to clear the message on the screen.

3. Press F7 Switch Select.

   The system displays Figure 1-2.

4. Confirm that "DEFINITY MODE CODE" is displayed in the Switch field, then do one of the following:

   - If DEFINITY MODE CODE is displayed, continue with ''Set the MWI Indicators''.
   - If another switch integration is displayed, contact the Remote Support Center.

     The existing integration must be unloaded and the SWINset Serial-Inband Switch Integration must be loaded. After this work is completed, continue with ''Set the MWI Indicators''.

## Set the MWI Indicators

The message waiting indicators must be set correctly on the Lucent Intuity system to work with the switch integration.

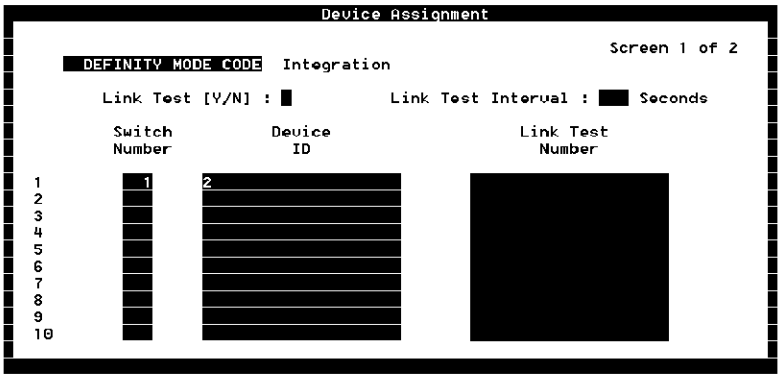
To set the MWI indicators:

1. Start at the Lucent Intuity Main Menu and select:

   ```
   Switch Interface Administration
     Call Data Interface Administration
       MWI Administration
         Device Assignment
   ```

   The system displays Figure 1-4.

**Figure 1-4. Device Assignment Screen**




2. Enter **1** in the `Switch Number` field.
3. Enter **3** in the `Device ID` field.
4. Press F3 Save.
5. Press F6 Cancel twice.
6. Continue with "Determine the Active Channels to Reassign".

## Determine the Active Channels to Reassign

The last active channel on each voice circuit card must be assigned to a separate group for use by the message waiting indicator. Use this procedure to determine which channels to reassign.

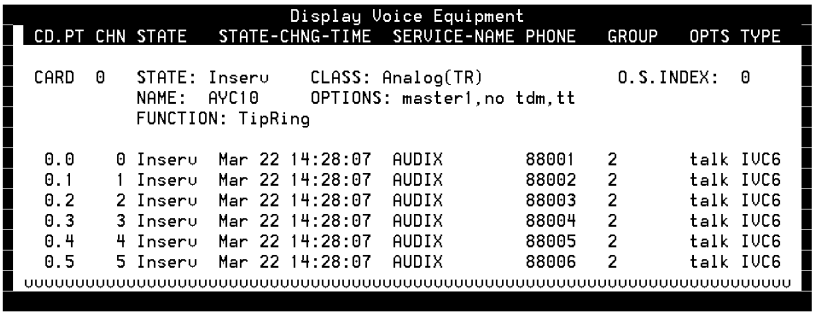
To determine the active channels to reassign:

1. Start at the Lucent Intuity Main Menu and select:

   ```
   Voice System Administration
     Voice Equipment
   ```

   The system displays Figure 1-5.

**Figure 1-5. Display Voice Equipment Screen**



2. Check the `CD.PT` column for the number of voice port circuit cards.

   The voice port circuit card numbering starts at zero and increments by one through to five. For example, if a system has two voice port circuit cards, the first card's ports would be numbered 0.0, 0.1, 0.2, 0.3, 0.4, and 0.5. The second card's ports would be numbered 1.0, 1.1, 1.2, 1.3, 1.4, and 1.5.

   The last active port on each card must be reassigned from group 2 to group 3 for use as the MWI port.

3. Record the card, port and group information in Table 1-2.

**Table 1-2. MWI Port Old and New Group Assignments**

| Card | Last Active Port | Old Group | New Group |
|---|---|---|---|
| 1 | | | 3 |
| 2 | | | 3 |
| 3 | | | 3 |

4. Continue with "Assign the Last Active Ports".

## Assign the Last Active Ports

After determining the ports to reassign, use this procedure to complete the reassignment.

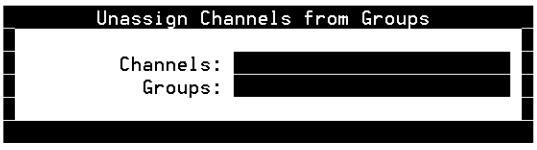
To reassign the last active ports:

1. On the Display Voice Equipment Screen (Figure 1-5), press F8 Actions, then select:

   ```
   Unassign
     Channels from Groups
   ```

   The system displays Figure 1-6.

**Figure 1-6. Unassign Channels from Groups Screen**




2. Select the group to change from Table 1-2.

3. In the `Channels` field, enter **5** (or the number for the last active channel on this voice port circuit card).
4. In the Groups field, enter **2**.
5. Press F3 Save.

   The system displays the message:

   ```
   Channel X deleted from equipment group(s) 2
   Hit acknowledge key to continue
   ```

   Where *X* is the last active channel on the voice port circuit card.
6. Press F1 Acknowledge.
7. Press F6 Cancel twice.
8. From the Actions menu, select:

   ```
   Assign/Change
     Channels to Groups
   ```
9. In the Channels field, enter the same channel number as in Step 3.
10. In the Groups field, enter **3**.
11. Press F3 Save.

    The system displays the message:

    ```
    Channel X is assigned to equipment group 3
    Hit acknowledge key to continue
    ```

    Where *X* is the last active channel on the voice port circuit card.
12. Press F1 Acknowledge.
13. Press F6 Cancel three times.
14. Verify that the last active channel is changed to `3`.
15. Determine the next step:

    - If there are more channels to reassign, go back to step 2 for the next channel.
    - If there are no more channels to reassign, continue with step 16.
16. Press F6 Cancel twice to return to the Intuity Main Menu.
17. Continue with “Update Automated Attendant Routing” on page 1-12.

## Update Automated Attendant Routing

Use this procedure if the switch network includes a MERLIN LEGEND or MERLIN MAGIX. If the network includes only DEFINITY systems, skip to “Set the Dial Plan’’ on page 1-13.

Normally, automated attendant routing does not require any modifications from default settings. However, CVM–IMC requires that the extension length be changed from the default Merlin Legend length to four digits, so the Intuity AUDIX auto-attendant routing table must be updated to include the changed trunk numbering.

To update the auto-attendant routing table:

1. Start at the Lucent Intuity Main Menu and select:

   `AUDIX Administration`

2. At the command line, enter:

   `change auto-attendant-routing routing-table`

   The system displays Figure 1-7.

**Figure 1-7. Auto-Attendant Routing Table**

```
change auto-attend-routing routing-table                        Page 1 of 2
                        AUTO-ATTENDANT ROUTING TABLE
                        Routing Table Administration

  Incoming Called      Business  Holiday    Day        Night      Alternate
      Number           Schedule  Schedule   Service    Service    Service
                                            Mailbox    Mailbox    Mailbox
_____________________  ________  ________  _________  _________  _________
_____________________  ________  ________  _________  _________  _________
_____________________  ________  ________  _________  _________  _________
_____________________  ________  ________  _________  _________  _________
_____________________  ________  ________  _________  _________  _________
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_____________________  ________  ________  _________  _________  _________
_____________________  ________  ________  _________  _________  _________
_____________________  ________  ________  _________  _________  _________

Command aborted

enter command: change auto-attend-routing routing-table
```

3. Update the auto-attendant routing table to include the MERLIN LEGEND dialing plan and other system settings.

For more information about administering the auto-attendant routing screen, see:

- Lucent Intuity Release 5 systems, “Administration” on R5 Documentation CD (585-313-803)
- INTUITY Messaging Solutions Release 4 Administration, 585-310-564, Issue 2

4. Continue with “Set the Dial Plan”.

## Set the Dial Plan

Verify that the range of Intuity AUDIX extensions is sufficient to include all subscribers on all switches in the network.

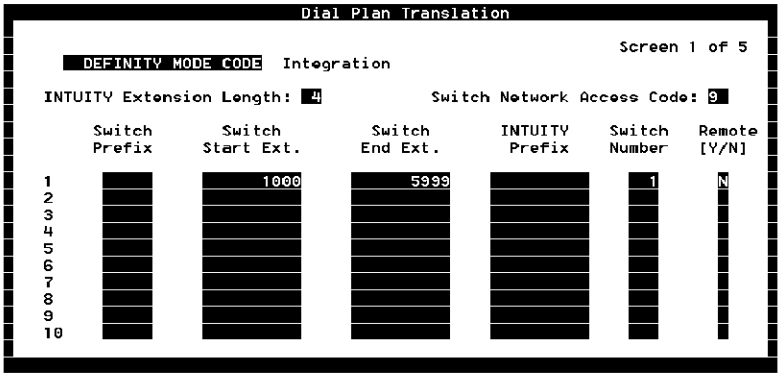
To assign the channels:

1. Start at the Lucent Intuity Main Menu and select:

   ```
   Switch Interface Administration
     Call Data Interface Administration
       System Translation Administration
         Dial Plan Administration
   ```

   The system displays Figure 1-8.

**Figure 1-8. Dial Plan Administration Screen**




2. Verify that the `Switch Start Ext.` and `Switch End Ext.` fields range from zeros to nines for the extension length of the CVM–IMC network.

   For example, if the `Intuity Extension Length` is 4, then the range of extensions would be 0000 to 9999.

   Some customers may require that specific extension ranges be used instead of one range that includes all extensions. This

method will also work properly, but is not necessary for this integration.

**CAUTION:**
If the customer requires that specific extension ranges be entered, the Switch Number must be "1" for every range. Any range with a switch number other than 1 will not have calls transferred to it.

3. Do one of the following:

   - If the range is not correct, tab to the respective fields and change the entries.
   - If the range is correct, continue with "Test the Installation" on page 1-14.

## Test the Installation

Confirm that the installation is correct by placing test calls through the network to leave and retrieve messages.

In general, follow these steps:

1. Place a call from inside the network that goes to voicemail.
2. Place a call from outside the network that goes to voicemail.
3. Verify that the MWI lamp turns on.
4. Retrieve the in-network message.
5. Retrieve the out-of-network message.
6. Verify that the MWI lamp turns off.
7. Return to step 1 and follow the same procedure on each switch in the network.

## Troubleshooting

If testing shows that some aspect of the system isn't working correctly, use Table 1-3 to find possible solutions.

**Table 1-3. Possible Trouble Areas**

| Problem | Check if: | Action |
|---|---|---|
| Calls to station on hub switch do not cover to voicemail | Station has coverage path set up to voice mail. | Add coverage path. |
| | Station has mailbox on Intuity AUDIX system. | Add mailbox. |
| | Mode codes on DEFINITY hub match the Intuity AUDIX system. | Make codes on both switch hub and Intuity AUDIX match. |
| | Mode codes are being received on the Intuity AUDIX system. | Change ports on the hub from "2500" to "VMI". |
| Calls to remote system do not cover to correct mailbox. | ISDN-PRI trunk is set to "private." | Set trunk to private. |
| | Signaling group and trunk group between remote and hub are in-service and set to subscriber. | On the DS1 form on the switch hub, set the Interface field to "network". In the same field on the endpoint, set the field to "user". |
| | Remote site has correct Remote VMS Hunt group. | Add correct hunt group. |

**(1 of 2)**

**Table 1-3. Possible Trouble Areas**

| Problem | Check if: | Action |
|---|---|---|
| MWI not being updated for stations on the hub switch. | Messages still in mailbox. | Clear messages, then call back to leave another message. Confirm that the MWI is updated properly.<br>Check the activity log against the extension to see that the proper mode codes are being sent. |
| | LWC store and LWC cancel feature access codes match on the Intuity AUDIX. | Make the mode codes match. Check the mode codes on the switch and on the Intuity AUDIX. If necessary, change the entries on the Message Waiting Parameters screen on the Intuity AUDIX. |
| | Intuity AUDIX has an analog voice port that is assigned to MWI updates. | Dedicate the MWI port. See "Determine the Active Channels to Reassign" on page 1-9. |
| | MWI dedicated port is in the hunt group. | Remove the MWI port from the hunt group on the switch. See "Assign the Last Active Ports" on page 1-10. |
| | MWI access codes are being sent from the Intuity AUDIX. | Check the Switch Integration Log for whether the appropriate codes are being sent. |
| When the system is under load, some calls to Intuity AUDIX are un-integrated. | Switch is getting data to Intuity AUDIX before the call times out. | Contact the Remote Support Center. |
| | Mode codes are not defined properly. | Reselect the Switch and Country.<br>⚠ **CAUTION:**<br>Reselecting the switch and country clears any custom settings from the switch integration and requires that they be reentered. |

**(2 of 2)**