Lucent Technologies
Bell Labs Innovations

# INTUITY™
## Integration with DMS-100 and SL-100

585-310-223
Comcode 107857062
Issue 2.0
March 1997

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| | |
|---|---|
| EMC Directive | 89/336/EEC |
| Low-Voltage Directive | 73/23/EEC |

CE The "CE" mark affixed to the equipment means that it conforms to the above directives.

This document was prepared by the Product Documentation Development, Lucent Technologies, Columbus, OH.

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# About This Book

## Purpose

This book, *INTUITY™ Integration with DMS-100 and SL-100,* 585-310-223, contains information needed to integrate a Lucent INTUITY system with a Nortel DMS-100 or SL-100.

## Intended Audience

This book is intended for system administrators, on-site technicians, and remote maintenance center personnel supporting the Lucent INTUITY system.

## How This Book Is Organized

This book is organized into the following chapters:

- About This Book

  This preface describes the book's purpose, intended audiences, organization, conventions, trademarks and service marks, and related resources. This preface also explains how to make comments about the book.

- Chapter 1, "Overview of DMS-100/SL-100 Switch Integration"

  This chapter describes the overall integration, provides an installation checklist, lists DMS-100 switch functions not supported by the Lucent INTUITY system, and describes the Call Request Retrieval access code feature available for INTUITY AUDIX subscribers with the DMS-100 and SL-100 switch.

- Chapter 2, "Planning the Integration"

  This chapter lists information needed to prepare for the integration, including hardware and software requirements and site-specific information needed for the central office.

- Chapter 3, "DMS-100/SL-100 Switch Requirements and Administration"

  This chapter contains software and hardware requirements for the DMS-100 and SL-100 and lists information the customer must provide to and obtain from the central office.

- Chapter 4, "Setting the 202T Modem"

  This chapter describes how to set the switch options on the 202T modem.

- Chapter 5, "Installing the Hardware for Integration"

  This chapter describes the hardware connections required to integrate the INTUITY system with the DMS-100 switch.

- Chapter 6, "Administering the Lucent INTUITY System for Integration"

  This chapter describes how to administer the necessary screens on the INTUITY system to support DMS-100/SL-100 switch integration.

- Appendix A, "Alarms"

  This appendix describes the alarms that may be generated by the integration.

- Appendix B, "Installing DMS-100/SL-100 Software on the INTUITY System"

  This appendix contains procedures for installing the DMS-100/SL-100 software on the INTUITY system.

  **NOTE:**
  These are alarms for Release 3 systems. For Release 4 systems, see *INTUITY Messaging Solutions Release 4 Alarm and Log Messages,* 585-310-566.

- Appendix C, "Switch Administration for Lucent INTUITY Lodging"

  This appendix contains information about installing the Lucent INTUITY Lodging application.

- Abbreviations

  This section provides a list of abbreviations and acronyms used in Lucent INTUITY documentation.

- Glossary

  The Glossary provides a definition of terms and acronyms used in Lucent INTUITY documentation.

- Index

  The Index provides an alphabetical listing of principal subjects covered in this book.

## Conventions Used

The following conventions were used in this book:

- Rounded boxes represent keyboard keys that you press.

  For example, an instruction to press the enter key is shown as follows:

  Press ENTER.

- Square boxes represent phone pad keys that you press.

  For example, an instruction to press zero on the phone pad is shown as follows:

  Press 0.

- The word *enter* means to type a value and press the ENTER key.

  For example, an instruction to type y and press ENTER is shown as

  Enter **y** to continue.

- Two or three keys that you press at the same time (that is, you hold down the first key while pressing the second and/or third key) are shown as a rounded box that contains two or more words separated by hyphens. For example, an instruction to press and hold ALT while typing the letter d is shown as

  Press ALT-d

- Commands and text you type or enter appear in bold.

- Values, instructions, and prompts that you see on the screen are shown as

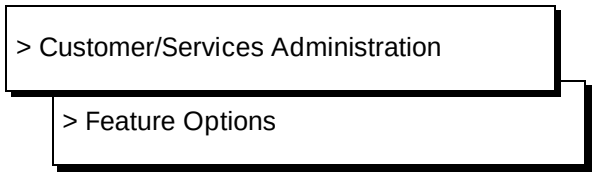
  `Press any key to continue.`

- Variables that the system supplies or that you must supply are shown in *italics*. For example, an error message including a filename is:

  `The file` *filename* `is formatted incorrectly`

- The sequence of menu options that you must select to display a specific screen is shown as follows:

  Starting at the Lucent INTUITY Administration screen or the INTUITY Main Menu select:



In this example, you would:

1. Access the Lucent INTUITY Administration screen.
2. Select the Customer/Services Administration option to display the Customer/Services Administration screen.
3. Select the Feature Options option to display the Feature Option screen.

## Trademarks and Service Marks

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## Related Resources

In addition to this book, you may need the following books.

For Release 3 systems:

- *INTUITY Installation Checklist*, 585-310-161
- *INTUITY Software Installation for Release 3.0*, 585-310-160
- Hardware installation manual:
  - *INTUITY MAP/5 Hardware Installation*, 585-310-146
  - *INTUITY MAP/40 Hardware Installation*, 585-310-138
  - *INTUITY MAP/100 Hardware Installation*, 585-310-139
- *INTUITY Platform Administration and Maintenance for Release 3.0*, 585-310-557
- *INTUITY AUDIX Release 3.3 Administration and Feature Operations*, 585-310-552

For Release 4 systems:

- Installation manual:
  - *INTUITY Messaging Solutions Release 4 MAP/5P System Installation*, 585-310-185
  - *INTUITY Messaging Solutions Release 4 MAP/40 and MAP/40s System Installation*, 585-310-169
  - *INTUITY Messaging Solutions Release 4 MAP/100 System Installation*, 585-310-173
- Maintenance manual:
  - *INTUITY Messaging Solutions Release 4 MAP/5P Maintenance*, 585-310-186
  - *INTUITY Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance*, 585-310-171
  - *INTUITY Messaging Solutions Release 4 MAP/100 Maintenance*, 585-310-174
- *INTUITY Messaging Solutions Release 4 Administration*, 585-310-564
- *INTUITY Messaging Solutions Release 4 Alarm and Log Messages,* 585-310-566

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585-310-223

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# Overview of DMS-100/SL-100 Switch Integration

# 1

*Switch integration* refers to sharing information between a voice messaging system and a switch to provide a seamless interface to callers and subscribers. A fully integrated voice messaging system uses information from the switch to answer each incoming call correctly.

The INTUITY system interfaces with the Nortel DMS-100 or SL-100 switch using simplified message service interface (SMSI) over an RS-232 link. The SMSI link transfers digital call information, such as called party and calling party information, to the Lucent INTUITY system. A 202T modem completes the SMSI link. The 202T modem can be connected to a multi-port circuit card on any Lucent INTUITY multi-application platform (MAP) or to the serial port 1 connector (COM1) on a Lucent INTUITY MAP/5.

The Lucent INTUITY system exchanges analog voice information with the switch through analog telephone lines. Voice links connect callers from a compatible switch port to a Lucent INTUITY voice port. Internal or external callers are directed through the switch to a hunt group of analog ports associated with the INTUITY system. These ports connect the callers to the appropriate extension on the INTUITY voice ports. A Lucent INTUITY system may have up to 64 voice ports. These ports are connected to an equivalent number of analog ports on the switch and administered as a uniform call distribution (UCD) group.

## DMS-100/SL-100 Integration Checklist

Integrating the Lucent INTUITY system with a DMS-100/SL-100 includes several tasks. These tasks are described in the following table, with a reference to documentation providing instructions:

**NOTE:**
This checklist assumes that the DMS-100/SL-100 software is already installed on the system. If you need to install the DMS-100/SL-100 software, see Appendix B, ''Installing DMS-100/SL-100 Software on the INTUITY System''.

**Table 1-1. Checklist for DMS-100/SL-100 Integration**

| Task # | Task Description | Reference | ✓ |
|---|---|---|---|
| 1. | Administer the DMS-100 or SL-100. | Chapter 3, ''DMS-100/SL-100 Switch Requirements and Administration'', in this book. | |
| 2. | Release 3 systems:<br>Complete the hardware installation checklist through Step 11 for the hardware platform you are using.<br>Release 4 systems:<br>Complete Chapters 1 through 4 to "Powering Up the System" | Release 3:<br>Chapter 1 in one of the *INTUITY Integration Checklist*, 585-310-160<br>Release 4:<br>Chapters 1 through 4 in the system installation book | |
| 3. | Set the switch options on the 202T modem.<br><br>**NOTE:**<br>The 202T is not required for distances less than or equal to 50 feet (RS232 standard). | Chapter 4, ''Setting the 202T Modem'', in this book. | |
| 4. | Install the integration hardware. | Chapter 5, ''Installing the Hardware for Integration'', in this book. | |
| 5. | Complete the remainder of the hardware installation checklist or Chapter 4. | For Release 3:<br>Chapter 1 in the *INTUITY Installation Checklist*, 585-310-160<br>For Release 4:<br>Chapter 4, "Powering Up the System" in the system installation book | |

***Continued on next page***

**Table 1-1. Checklist for DMS-100/SL-100 Integration — *Continued***

| Task # | Task Description | Reference | ✓ |
|---|---|---|---|
| 6. | Complete the software installation checklist up to the task "Administer the Switch" for Release 3 systems; for Release 4 systems, up to "Administering the Switch Link" in Chapter 6 | For Release 3:<br>Chapter 2 the *INTUITY Installation Checklist*, 585-310-160<br>For Release 4:<br>Chapters 5 and 6 in the system installation book | |
| 7. | Administer the Lucent INTUITY integration screens. | Chapter 6, ''Administering the Lucent INTUITY System for Integration'', in this book. | |
| 8. | Ensure that the DMS-100 switch has been administered by the CO to perform acceptance tests for the 2 test subscribers. | Chapter 3, ''DMS-100/SL-100 Switch Requirements and Administration'', in this book. | |
| 9. | Return to the software installation checklist at the task, "Map Channels to Switch Extensions," and complete all tasks up to "Administer Switch for Cut-to-Service" for Release 3 systems; for Release 4 systems, return to Chapter 6 in the system installation book and complete all required tasks through Chapter 14 | Release 3:<br>Chapter 2 the *INTUITY Installation Checklist*, 585-310-160<br>Release 4:<br>Chapter 6 through 14 in the system installation book | |
| 10. | Verify that the switch link is working correctly, remove the data link test number from the Switch Link Administration screen, and then stop and restart the voice system. | Chapter 6, ''Administering the Lucent INTUITY System for Integration'', in this book. | |
| 11. | Cut-to-service by notifying the CO or your project manager to change the subscribers' coverage path to Lucent INTUITY system | None | |
| 12. | Return to the INTUITY Software Installation Checklist and complete any remaining tasks. | Release 3:<br>Chapter 2 the *INTUITY Installation Checklist*, 585-310-160<br>Release 4: No remaining tasks | |

## DMS-100/SL-100 Capabilities Not Supported

The following DMS-100/SL-100 capabilities are *not* supported by integration with the Lucent INTUITY system:

- Leave word calling (LWC)
- Port logins and logouts (in service/out of service)
- Day/night service change
- High speed digital networking

## Additional Subscriber Features

In addition to the standard procedure for retrieving mailbox messages, INTUITY AUDIX subscribers using a DMS-100 or SL-100 integration can use the Call Request Retrieval access code feature. Some Call Request Retrieval interactions are listed below:

- *Call Request Activate (CRA)*: When a switch user with Call Forwarding active requests CRA through a feature button or access code, the switch places a "please call" message in the Call Request Retrieve queue. The message might be from the INTUITY AUDIX system (if the system has new messages) or from another switch user (if another user places the CRA call).
- *Call Request Retrieve (CRR)*: When an entry is placed in the CRR queue, the subscriber's message waiting indicator (MWI) is activated. To retrieve the message, the user dials an access code and the switch places a call to the first entry in the queue — either the INTUITY AUDIX system or another switch user, depending on the origination of the entry. (Multiple INTUITY AUDIX system messages create only one *please call* request for the INTUITY AUDIX system in the queue.) When the last CRR queue is accessed, the subscriber's MWI is turned off. If a user has no entries in the queue and dials a CRR access code, the switch returns a fast-busy signal.
- *Call Request Delete All (CRDA)*: A user can dial an access code to erase all entries in the Call Request Retrieval queue and turn the message waiting indicator (MWI) off. In this case, a subscriber's MWI will turn off as requested, even if the INTUITY AUDIX system has new messages for that subscriber. A new CRA message or an MWI update from the AUDIX system will turn the MWI back on.

# Planning the Integration

# 2

This chapter contains information needed to plan the integration of the Lucent INTUITY system with the DMS-100 or SL-100 switch. To integrate the Lucent INTUITY system with the DMS-100/SL-100 switch, additional hardware and software must be installed on the system. Customers must provide information for a successful integration. Customers receiving service from a central office (CO) must work closely with the CO to ensure that the switch is properly administered, to obtain information needed during the integration process, and to provide site-specific information to the CO.

Review this chapter before the installation as a part of the planning process.

## General Considerations

Consider the following information before the on-site installation of the DMS-100/SL-100 integration hardware:

- The DMS-100 or SL-100 can be integrated with any Lucent INTUITY multi-application platform (MAP). If you are using a Lucent INTUITY MAP/40, MAP/40s, or MAP/100, you are required to purchase a multi-port circuit card for the integration. If you are using a Lucent INTUITY MAP/5 or MAP/5P, you have the option of purchasing a multi-port circuit card or connecting to COM1. Before the installation, determine which system and hardware you will be using. See Chapter 5, ''Installing the Hardware for Integration'' for information about cabling configurations.
- The DMS-100/SL-100 allows INTUITY AUDIX subscribers to use an additional feature — the Call Request Retrieval access code feature. Determine if your subscribers will be using this feature and inform them about the feature's capabilities. For more information about this feature, see Chapter 1, ''Overview of DMS-100/SL-100 Switch Integration''.

- You may use multiple hunt groups with the Lucent INTUITY system. If you wish to use multiple hunt groups, complete the last section in this chapter, ''Planning for Multiple Hunt Groups (Release 3 Systems)''.

  **NOTE:**
  At the time of publication, the multiple hunt group feature is only available for Release 3 systems.

## Planning for Central Office Requirements

Site-specific information for the integration includes:

- The type of message waiting indicator (MWI) used by the majority of INTUITY AUDIX subscribers (for example, flashing light or stutter dial tone). This information must be provided to the CO.
- The extension numbers of the two test phones for acceptance testing. This information must be provided to the CO.
- The address ranges for extension numbers and the public network number(s) provided by the CO. This information is needed when you fill out the Lucent INTUITY administration screens.

Customers working with a CO must provide site-specific information to the CO. The CO must also provide information needed to complete the integration to the customer. For complete DMS-100/SL-100 switch requirements, see Chapter 3, ''DMS-100/SL-100 Switch Requirements and Administration''.

## Preparing the Installation Site

To prepare for installation of the DMS-100/SL-100 integration hardware, consider the physical characteristics of the installation site, the prerequisites and operating environment.

**NOTE:**
Lucent Technologies personnel are not responsible for installing or administering any hardware or software beyond the indicated demarcation point. Anything beyond this point is the responsibility of the CO or the customer.

## Prerequisites

Before the DMS-100/SL-100 integration hardware is installed, ensure that:

- All necessary DMS-100/SL-100 switch requirements and administration are complete.
- All hardware necessary for the installation is on site.
- The options on the 202T modem are set. For these option settings, see Chapter 4, ''Setting the 202T Modem''.

**NOTE:**
The DMS-100/SL-100 integration does not require the installation of a 202T modem if the distance between the Lucent INTUITY system and the switch is less than or equal to 50 feet (RS232 standard). If the distance is greater than 50 feet, use a 202T modem.

## Operating Environment

Consider the following information for the installation site:

- The electrical system supplying the power to the Lucent INTUITY system must meet the standard electrical requirements and local building codes.

  Outlets should be grounded in accordance with the local and National Electrical Codes (NEC). Ground AC units to a solid, stable, single point ground via the third wire of a three-prong grounded receptacle that is free from random connections to foreign unstable ground current surges.

  When you are connecting to a AC outlet, note the following precautions:

  — Do not use an extension cord to connect a device to an outlet.

  — Do not use an outlet connected to a wall switch or an outlet that experiences scheduled outages.

- The 202T modem, if in use, requires a power outlet easily accessible to the modem. This outlet should not share power with other electrical devices that may cause noise and should not be under the control of a switch. For further information about the operating environment for the 202T modem, see *User's Manual 202T Modem*, 999-102-1421S, or the equivalent for the shipped modem.

# Planning for Multiple Hunt Groups (Release 3 Systems)

The multiple hunt group feature for Release 3 systems allows the Lucent INTUITY system to recognize and use the Simplified Message Desk Interface (SMDI) protocol Message Desk Number (MDN) field. MDNs are also referred to as:

- Message Service Center Numbers
- Multi-Line Hunt Group (MLHGs)
- Hunt – Multi-Lines (HMLs)

An MDN is a series of digits, from 001 to 999, that is transmitted by the switch as part of the call information to the Lucent INTUITY system. Each hunt group number (also referred to as the leading number of the hunt) is associated with an MDN. The Lucent INTUITY system may support a maximum of 16 MDNs.

Installing the Lucent INTUITY system with multiple hunt groups requires:

- Identity of the MDN and starting channels (2 worksheets)
- A telephone to place test calls. This telephone should be placed so that the installer can view the system monitor while placing the calls. If this is a new system installation, one of the two test telephones for the INTUITY AUDIX application or the test telephone for the Lucent INTUITY Lodging application may be used.
- The extension numbers to call to test the system and the MDN mapping (1 worksheet)

Before the installation, review with your project manager the extent of your responsibilities and when the switch-side administration will be performed. Complete the worksheet that will be needed for installation.

## Record the Channel Mapping and Associated MDNs

If you are installing a new system or adding the feature to an existing Release 3 system and changing the channel mapping (assigning different channels to the Lucent INTUITY ports), go to Page 2-6 and complete the worksheet for Channel Mapping and MDN test. On this worksheet, CD.PT is the voice card port and CHN is the channel on the Lucent INTUITY system.

If you are adding the feature to an existing system and you will be using existing channel mapping, you may use the screens on the system to provide current information. To record the channel mapping, display the Voice Equipment screen:

1. Login as **sa**
2. Press ENTER to accept the AT386 default.

3. Starting at the Lucent INTUITY (TM) Administration screen, select:

> Voice System Administration

> Voice Equipment

The system responds with the Voice Equipment screen (Figure 2-1).

```
Voice System Administration
 System Monitor
 Traffic Report
›Voice Equipment
 Fax Print Queue
                                Voice Equipment


 Card  0 is IVC6   O.S.Index:  0        Function: TipRing
                   State: Inserv
 CD.PT CHN STATE   STATE-CHNG-TIME  SERVICE-NAME PHONE   GROUP   TYPE
  0.0  0   Inserv  Jan 09 11:17:29  *DNIS_SVC    3001    2       IVC6
  0.1  1   Inserv  Jan 09 11:17:29  *DNIS_SVC    3002    2       IVC6
  0.2  2   Inserv  Jan 09 11:17:29  *DNIS_SVC    3003    2       IVC6
  0.3  3   Inserv  Jan 09 11:17:29  *DNIS_SVC    3004    2       IVC6
  0.4  4   Inserv  Jan 09 11:17:29  *DNIS_SVC    3005    2       IVC6
  0.5  5   Inserv  Jan 09 11:17:29  *DNIS_SVC    3006    2       IVC6

 Card  1 is IVC6   O.S.Index:  1        Function: TipRing
                   State: Inserv
```

**Figure 2-1. Example Voice Equipment Screen**

4. Record the PHONE extension for the card and port (CD.PT) on the worksheet below. The PHONE column is the fifth from the left on the Voice Equipment screen. In the worksheet, the channel number is listed first and then the voice equipment card and port number. For example, a listing of **CD.PT 1.4 CHN 10** indicates the 11th channel connected to the system through the second tip/ring circuit card, the 5th port on the card.

   **NOTE:**
   The switch numbers its channels starting with 1. The Lucent INTUITY system starts with 00.

5. When you have finished recording the channel numbers, press CANCEL (F6) three times to return to the Voice System Administration screen.
6. Record the MDN(s) for the channels.
7. Continue with the next section, “Obtain the MDN and Starting Channel Information (Optional).”

**Table 2-1. Worksheet for Channel Mapping and MDN Test**

| Associated MDN | CD.PT | CHN | PHONE | Associated MDN | CD.PT | CHN | PHONE |
|---|---|---|---|---|---|---|---|
| | 0.0 | 00 | | | 5.2 | 32 | |
| | 0.1 | 01 | | | 5.3 | 33 | |
| | 0.2 | 02 | | | 5.4 | 34 | |
| | 0.3 | 03 | | | 5.5 | 35 | |
| | 0.4 | 04 | | | 6.0 | 36 | |
| | 0.5 | 05 | | | 6.1 | 37 | |
| | 1.0 | 06 | | | 6.2 | 38 | |
| | 1.1 | 07 | | | 6.3 | 39 | |
| | 1.2 | 08 | | | 6.4 | 40 | |
| | 1.3 | 09 | | | 6.5 | 41 | |
| | 1.4 | 10 | | | 7.0 | 42 | |
| | 1.5 | 11 | | | 7.1 | 43 | |
| | 2.0 | 12 | | | 7.2 | 44 | |
| | 2.1 | 13 | | | 7.3 | 45 | |
| | 2.2 | 14 | | | 7.4 | 46 | |
| | 2.3 | 15 | | | 7.5 | 47 | |
| | 2.4 | 16 | | | 8.0 | 48 | |
| | 2.5 | 17 | | | 8.1 | 49 | |
| | 3.0 | 18 | | | 8.2 | 50 | |
| | 3.1 | 19 | | | 8.3 | 51 | |
| | 3.2 | 20 | | | 8.4 | 52 | |
| | 3.3 | 21 | | | 8.5 | 53 | |
| | 3.4 | 22 | | | 9.0 | 54 | |
| | 3.5 | 23 | | | 9.1 | 55 | |
| | 4.0 | 24 | | | 9.2 | 56 | |
| | 4.1 | 25 | | | 9.3 | 57 | |
| | 4.2 | 26 | | | 9.4 | 58 | |
| | 4.3 | 27 | | | 9.5 | 59 | |

*Continued on next page*

**Table 2-1. Worksheet for Channel Mapping and MDN Test — *Continued***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **4.4** | **28** | | | **10.0** | **60** | |
| | **4.5** | **29** | | | **10.1** | **61** | |
| | **5.0** | **30** | | | **10.2** | **62** | |
| | **5.1** | **31** | | | **10.3** | **63** | |

## Determine the MDN and Starting Channel Information (Optional)

Determine the MDNs and the ports to which the first line (LTN 1) of the hunt is connected.

The configuration rules for assigning MDNs and Lucent INTUITY ports (starting channels) on the Hunt Group Administration screen are:

- MDNs may be entered into the Lucent INTUITY system in any order. For example, you may enter 200, 311, 647, 112.
- MDNs may not be split into multiple groups of channels. For example, you cannot administer MDNs 200 (channels 1 through 6), MDN 311 (channels 1 through 4), and MDN 200 (channels 7 through 11).
- The system will support a maximum of 16 MDNs.
- An MDN may contain any number of channels.

  For example, 1 MDN may have 12 channels and another 2.
- Each MDN group of channels must start with a Logical Terminating Number (LTN) of 1 as the first number (starting channel) in the hunt group.

  For example, an MDN may support a channels range with LTNs of 1 to 32. The range must start with 1. An MDN administered on the Lucent INTUITY system may not support a range of channels from 11 to 32 with 11 as the first LTN in the group.
- Switch channels within the MDN must be administered and wired to the Lucent INTUITY in order. For example, you may use channels:

  MDN 200: 1, 2, 3, 4, 5 MDN 220: 1, 2, 3, 4

  to Lucent INTUITY ports 0 through 8. You may not use channels:

  MDN 200: 1, 5, 4, 2, 3 MDN 220: 3, 4, 2, 1

  or,

  MDN 200: 2, 3, 4, 5, 6 MDN 220: 7, 8, 9

- The first channel on the Lucent INTUITY system begins with 00. Therefore, the first MDN administered must be mapped to Lucent INTUITY Channel 0 even though the switch LTN is 1. For example, MDN 200, starting with switch channel 1 would be entered into the table below and the Lucent INTUITY Hunt Group Administration screen as:

| # | MDN | Starting Channel |
|---|---|---|
| 1 | ***200*** | ***00*** |

  The first channel in the hunt group with an MDN of 200 would be physically wired to Lucent INTUITY port 0.0, the first port on the first voice card.

Refer to Figure 2-2. The valid configuration on the left side of the figure follows the above rules and will allow the Lucent INTUITY system will operate.

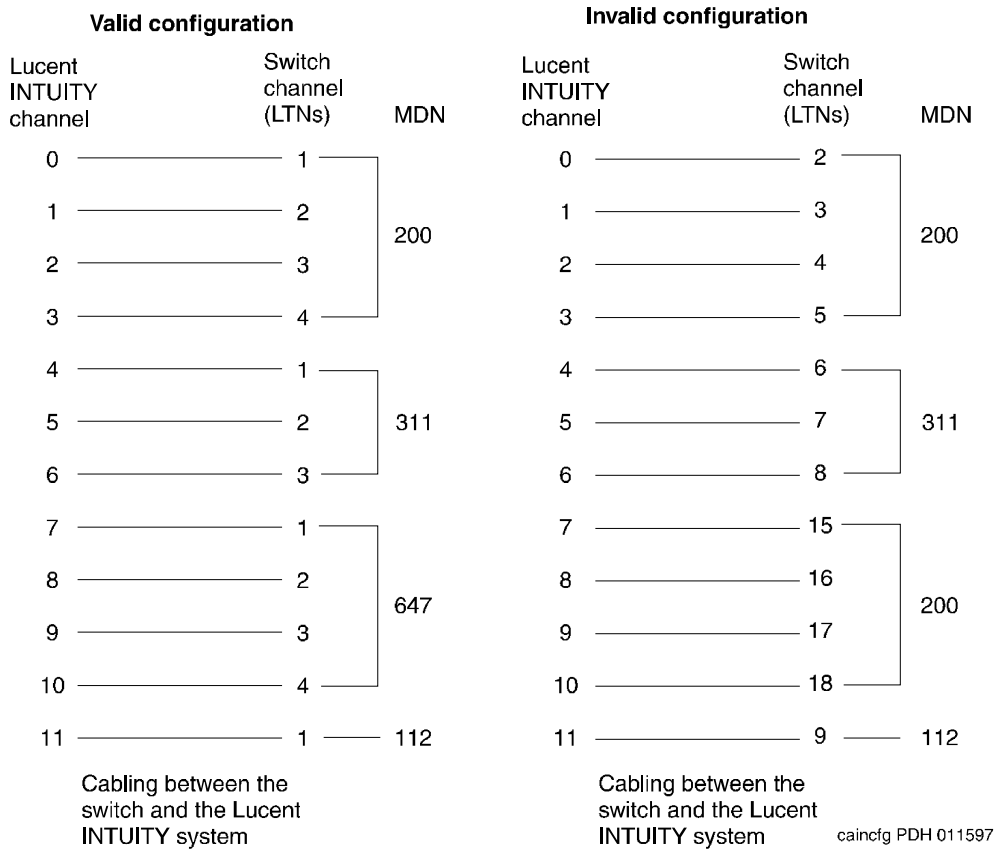



**Figure 2-2. Valid and Invalid Configurations**

Figure 2-2 shows the invalid configuration on the right side. This configuration fails for each of the following reasons. Any single one of these reasons would cause the Lucent INTUITY Multiple Hunt Group feature to fail:

- Lucent INTUITY Channel 0 is mapped to a channel with an LTN other than 1.
- The second MDN group begins with an LTN of 6 instead of 1.
- MDN 200 is split and inconsecutive.
- MDN 112 begins with a channel with an LTN other than 1.

Complete the table below to show the MDNs and associated Lucent INTUITY channels. This table matches the Multiple Hunt Group Administration screen in the system. This information must be entered in order for the Lucent INTUITY system to operate.

The fields for the table below are:

- **#**

  The number of the MDN. This field is for record-keeping purposes only.

- **MDN**

  The message desk number (MDN) from the switch.

- **Starting Channel**

  The port on the Lucent INTUITY system to which the switch channel with an LTN of 1 is wired. This is the channel that has the first member of the hunt group with an MDN.

Refer to the worksheet with the cards and ports information above. Leave any of the fields not in use blank. For example, if your worksheet contained the following information:

**NOTE:**
This information is the same as in the Valid Configuration shown in Figure 1, above.

**Table 2-2. Example Worksheet for Channel Mapping and MDN Test**

| Associated MDN | CD.PT | CHN | PHONE | Associated MDN | CD.PT | CHN | PHONE |
|---|---|---|---|---|---|---|---|
| 200 | **0.0** | **00** | 6427 | | **5.2** | **32** | |
| 200 | **0.1** | **01** | 6428 | | **5.3** | **33** | |
| 200 | **0.2** | **02** | 6429 | | **5.4** | **34** | |
| 200 | **0.3** | **03** | 6430 | | **5.5** | **35** | |
| 311 | **0.4** | **04** | 5900 | | **6.0** | **36** | |
| 311 | **0.5** | **05** | 5901 | | **6.1** | **37** | |
| 311 | **1.0** | **06** | 5902 | | **6.2** | **38** | |
| 647 | **1.1** | **07** | 6350 | | **6.3** | **39** | |
| 647 | **1.2** | **08** | 6351 | | **6.4** | **40** | |
| 647 | **1.3** | **09** | 6352 | | **6.5** | **41** | |
| 647 | **1.4** | **10** | 6354 | | **7.0** | **42** | |
| 112 | **1.5** | **11** | 6678 | | **7.1** | **43** | |

You would need to enter:

**Table 2-3. Hunt Group Administration Screen Fields**

| # | MDN | Starting Channel | # | MDN | Starting Channel |
|---|---|---|---|---|---|
| 1 | **200** | **00** | 9 | | |
| 2 | **311** | **04** | 10 | | |
| 3 | **647** | **07** | 11 | | |
| 4 | **112** | **11** | 12 | | |
| 5 | | | 13 | | |
| 6 | | | 14 | | |
| 7 | | | 15 | | |
| 8 | | | 16 | | |

The lines connected to Lucent INTUITY Ports 0, 4, 7, and 11 must all carry an LTN of 1 and be the first member of the hunt group.

Complete the following worksheet:

**Table 2-4. Hunt Group Administration Screen Fields**

| # | MDN | Starting Channel | # | MDN | Starting Channel |
|---|---|---|---|---|---|
| 1 | | | 9 | | |
| 2 | | | 10 | | |
| 3 | | | 11 | | |
| 4 | | | 12 | | |
| 5 | | | 13 | | |
| 6 | | | 14 | | |
| 7 | | | 15 | | |
| 8 | | | 16 | | |

## Determine the Telephone Numbers for Test

Determine the telephone numbers for the acceptance test. There should be 1 telephone number for each MDN.

**NOTE:**
If the administration will not be done on the switch at the time of installation, installation will be unable to test.

**Table 2-5. Extension Numbers for Test**

| Telephone Number Type | Associated MDN | Telephone Number(s) |
|---|---|---|
| **Message Retrieval Number(s)** | | |
| **Call Answer Number(s)** | | |
| **Automated Attendant Number(s)** | | |
| **Other(s)** | | |

# DMS-100/SL-100 Switch Requirements and Administration

# 3

This chapter includes hardware and software requirements for administering the Nortel DMS-100 or SL-100.

## Hardware Requirements for the DMS-100/SL-100 Switch

The following are DMS-100 hardware requirements for integration with the Lucent INTUITY system.

**NOTE:**
The DMS-100/SL-100 integration does not require the installation of a 202T modem if the distance between the Lucent INTUITY system and the switch is less than or equal to 50 feet (RS232 standard). If the distance is greater than 50 feet, use a 202T modem.

- A 202T modem at the switch
- A 3002 data circuit between the two modems (for example, an 829 channel interface unit, OMNI port, or other equivalent)
- If an 829 channel interface unit is used, an appropriate cable (such as a B25 A) between the unit and the modem in the CO
- The DMS-100 switch nt1x67fa terminal card or the nt1x89 enhanced protocol controller card

**CAUTION:**
*Do not use the nt1x67bc or the nt1x67bd cards. They are not compatible with the Lucent INTUITY system.*

## Software Requirements for the DMS-100/SL-100 Switch

The following are DMS-100/SL-100 software requirements for integration with the INTUITY system:

- BCS24 through BCS28 and BCS32 or later software releases required on the DMS-100 switch in order to support the Lucent INTUITY system SMSI data link. (Northern Telecom calls this link the simplified message desk interface (SMDI) link.)
- The following SMSI feature packages:
  - NTX100: Meridian Digital Centrex — Basic (IBN)
  - NTX101: Meridian Digital Centrex — enhanced business services (IBN)
  - NTX119: Message Service
  - NTX730: ASCII Driver
  - NTX732: Simplified Message Desk Interface (SMDI)
  - POTS Users: In order for Plain Old Telephone Service (POTS) customers to use the message desk, either NTX220 (Vertical Services I) or NTX806 (Enhanced Call Forwarding — POTS) packaging must be available *in addition* to the packages listed previously.

**NOTE:**
NTX100 and NTX101 contain the uniform call distribution (UCD) features required for basic message-desk operation. NTX119 allows the Lucent INTUITY system to request message-waiting updates. NTX730 and NTX732 enable the DMS-100/SL-100 to send call-setup information to the Lucent INTUITY system.

# DMS-100/SL-100 Administration

The following switch translations must be made on the switch *prior* to installation:

- Uniform call distribution (UCD) group lines and Centrex line (including UCD group extension and subscriber extensions).
- Individual UCD agents with the capability to originate calls (for transfer, Outcalling, AMIS Analog Networking, and Message Delivery).
- Queuing on the UCD group (at least one slot for every port on the UCD group member).
- Individual stations translated for Busy Forward and No Answer Forward.
- The access code translated to set the station for All Calls Forwarded. (This is an optional feature.)
- Data link baud rate set to 1200 if the nt1x67fa terminal card in place or 12 or 2400 if the nt1x89 is used.
- Data bit set to 7, stop bit set to 1, and even parity.
- Automatic cutoff on disconnect. (Timing is normally about 400 milliseconds.)
- Loop start analog lines.
- Two phones set up for testing the Lucent INTUITY system. These phones must be connected through the switch and should match the majority of phones that the customer will be using on the system. If the MWI will be a flashing light, the test phones must also be equipped with a flashing light. If the MWI is a stutter, the test phones must be able to give the stutter notification.

  For the system to be tested and cut-to-service, the customer must provide the CO with two test subscriber extensions and all subscriber extensions on the system. Once the integration is complete, the CO must perform acceptance tests for the two test subscribers. The following two tasks must be performed:

  — Administer the coverage path

  — Administer the test subscriber stations

- Administer the TERMDEU table on the switch to contain an entry for the SMDI link to the Lucent INTUITY system. Be sure to set the following fields:

  TERMTYPE = SMDI

  BAUDRT = B1200

  INTYP = EIA

  EQPEC = 1x67fa or 1x89

  MODEM = NONE

- Administer the SLLNKDEV table on the switch to contain an entry for the SMDI link to the Lucent INTUITY system. Be sure to set the following:

  XLATION = NONE

  PROTOCOL = NONE

  DIRECTION = INOUTLK

- The phone lines that form the UCD group to the Lucent INTUITY system need to have the following options set. This list of options is not complete, and there may be others involved, but these are required for proper operation of the Lucent INTUITY system:

  — COD, for CUTOFF_ON_DISC enabled. Verify that the system setting on the switch for COD is greater than 200 ms. The default setting on the Nortel switches is usually COD = 80, which is 800 ms.

  — T, for transfer enabled

  — 3WC, for 3-way calling enabled

  — UCD, for associated the line with a UCD

  — SMDI, for associating the line with a particular SMDI link

- For the subscriber extensions which will be receiving voice mail messages on the Lucent INTUITY system, enable the option MWT for Message Waiting Tone, or MWL for Message Waiting Lamp. Configure the subscriber extensions to define the Call Forward Busy number as the lead UCD number, and the Call Forward No-Answer number to the UCD.

# Setting the 202T Modem

# 4

This chapter describes how to set the switch options on the 202T modems and how to assemble the unit.

**NOTE:**
The DMS-100/SL-100 integration does not require the installation of a 202T modem if the distance between the Lucent INTUITY system and the switch is less than or equal to 50 feet (RS232 standard). If the distance is greater than 50 feet, use a 202T modem.

**NOTE:**
The 202T modem is only capable of 1200 baud. To use the 202T modem, verify that the SMDI link is configured for 1200, as specified in Chapter 3, ''DMS-100/SL-100 Switch Requirements and Administration''.

## 202T Modem Types

You will need to install one of two 202T modem types:

- Version 1 – the AT&T dataphone 202T modem
- Version 2 – the Motorola 202T modem

The manufacturer's name appears on the faceplate of the unit.

## Setting the Options for Version 2: The 202T Motorola Modem

The 202T Motorola modem contains 14 jumpers that must be correctly set.

1. Remove the top cover from the Motorola 202T modem:

> **NOTE:**
> Installers in Canada may need to use a screw driver to remove a screw through the top rear panel or to remove tabs located between the cover latch and the bottom plate.

a. Turn the modem on its side.

b. Place your thumbs on the blue tabs and your fingers on the edge of the cover (Figure 4-1, #1).

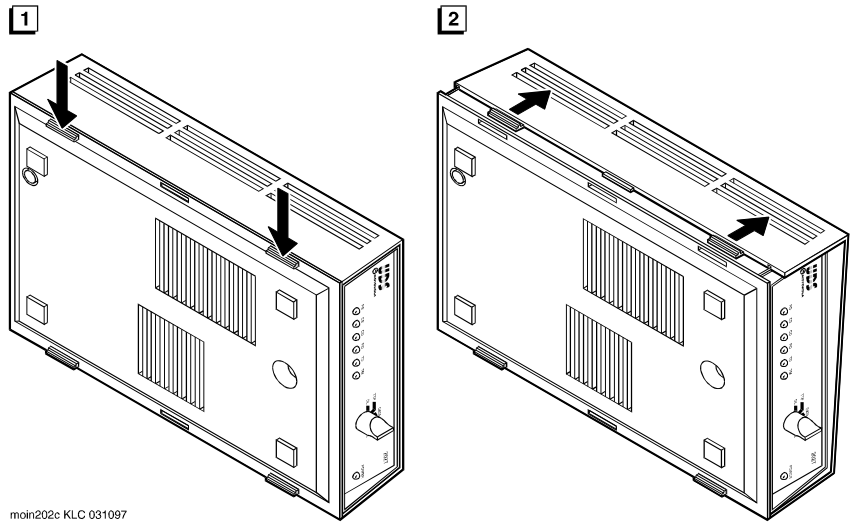



**Figure 4-1. Removing the Top Cover: Releasing the First Set of Latches**

c. Press the tabs down and toward the modem (Figure 4-1, #2). Use your fingers to gently push the top cover away from the body. ***Do not remove the top cover.***

d. Turn the modem so that the opposite side faces you.

e. Gently push above the latches to release the other side of the cover.

f. Pull the released cover off.

2. Verify the settings. Use Figure 4-2 to locate the jumpers in the modem. Use Figure 4-3 to verify the jumpers. Correct any as necessary.

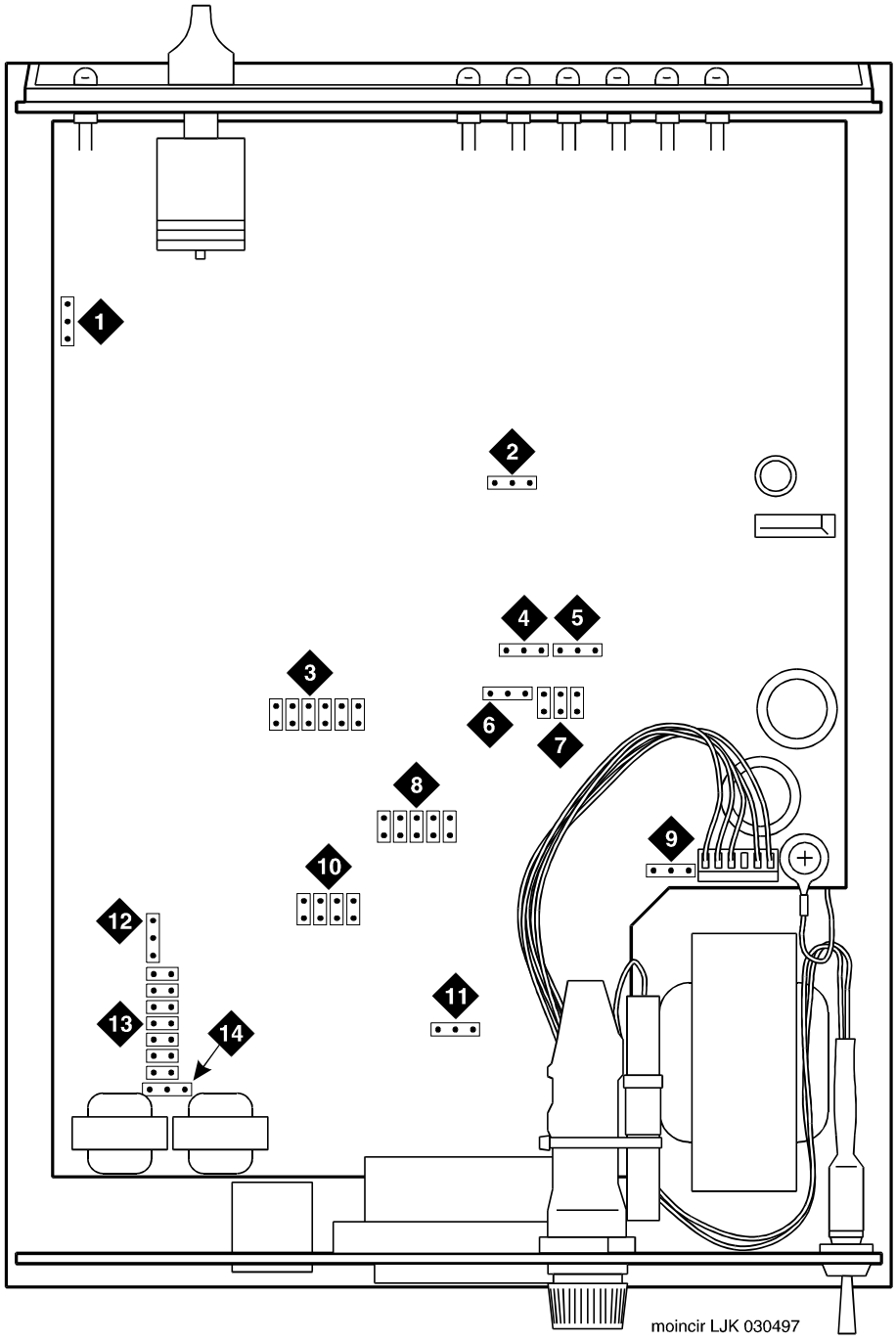



**Figure 4-2. Modem Circuit Board and Jumper locations**

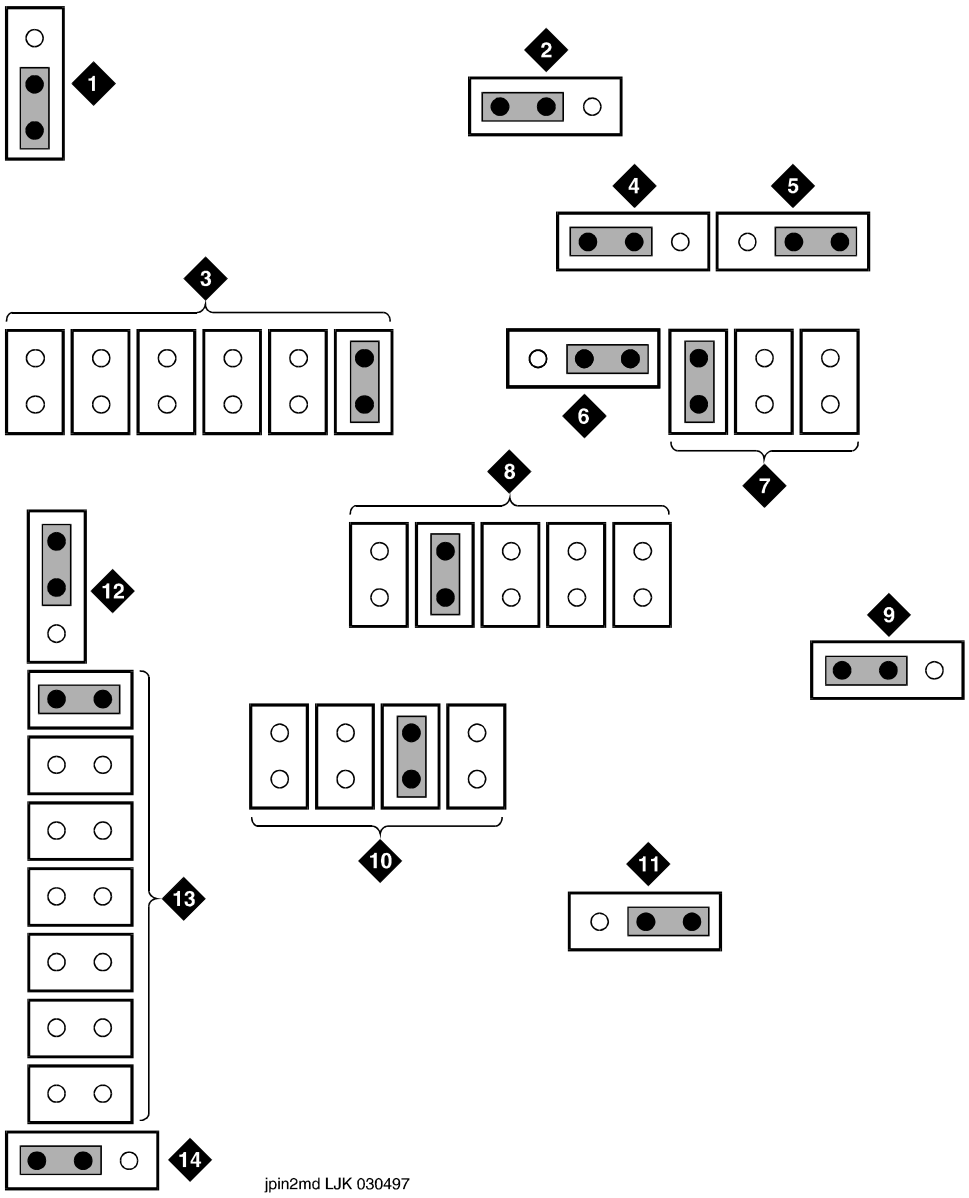



**Figure 4-3. Motorola Default Jumper Settings**

Table 4-1 provides the identity of the jumper settings.

**Table 4-1. Motorola 202T Jumper Identities and Settings**

| Drawing # | Jumper Identity | Setting for the Lucent INTUITY System |
|---|---|---|
| **1** | Carrier Detect Level | –45 dBm Level<br>(0 and –45 strapped) |
| **2** | Carrier Detect Delay | 6 ms<br>(6 and P strapped) |
| **3** | Anti-Streaming Option | Out<br>(6 strapped) |
| **4** | Local Copy Squelch | Out – No local copy<br>(Out and P strapped) |
| **5** | Call Turnaround Squelch | Call Turnaround Squelch set to out<br>(P and O strapped) |
| **6** | Turnaround Squelch Time | 8.3 ms squelch<br>(P and 8.3 strapped) |
| **7** | Soft Carrier Turnoff | 0 – Do Not Send Soft Carrier<br>(0 strapped) |
| **8** | Test Generator Baud Rate Select | 18 bps<br>(Option 4 is strapped) |
| **9** | Chassis/System Ground Option | Out<br>(Out and P strapped) |
| **10** | RTS/CTS Delay | RTS/CTS Delay 33 ms<br>(33 strapped) |
| **11** | Transmit Carrier | Strapped for terminal control of carrier by exercising the RTS Input Line<br>(TC and P strapped) |
| **12** | 2-Wire/4-Wire Option | 4-Wire Option<br>(4W and P strapped) |
| **13** | Transmit Level Option | 0<br>(-0 strapped) |
| **14** | 2-Wire/4-Wire Option | 4-Wire Option<br>(4W and P strapped) |

3. Replace the top cover:

   a. Line up the guides with the font and back panels.

   **NOTE:**
   The guide for the front panel is slightly farther from the edge of the cover.

   b. Slide the cover into place. The cover will click when the latches are secure.

   **NOTE:**
   Installers in Canada should replace the screw or the locking tabs.

4. Set the front dial to “DATA” (Figure 4-4).

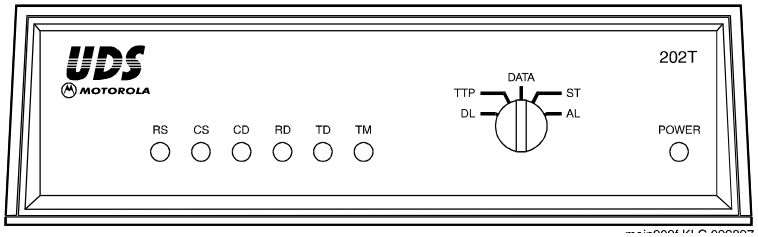



**Figure 4-4. Location of the Setting for Data**

5. Continue with Chapter 5, ‘‘Installing the Hardware for Integration’’.

## Setting the Options for Version 1: The AT&T Dataphone 202T Modem

The 202T modem contains three switches — S2, S3, and S4 — that you must set before installing the integration hardware. Refer to for the location of these switches on the 202T modem.

1. Remove the front of the data mounting.
2. Pull out the circuit card.
3. Verify the option switch settings for S2, S3, and S4. See Figure 4-5 for the position of the option switch and use the tables to set the switches.

**NOTE:**
In the tables, *the X* indicates a closed switch rocker (down on the numbered side of the switch). *0* indicates an open switch rocker (up on the numbered side of the switch). An asterisk (*) indicates a setting that is factory furnished.

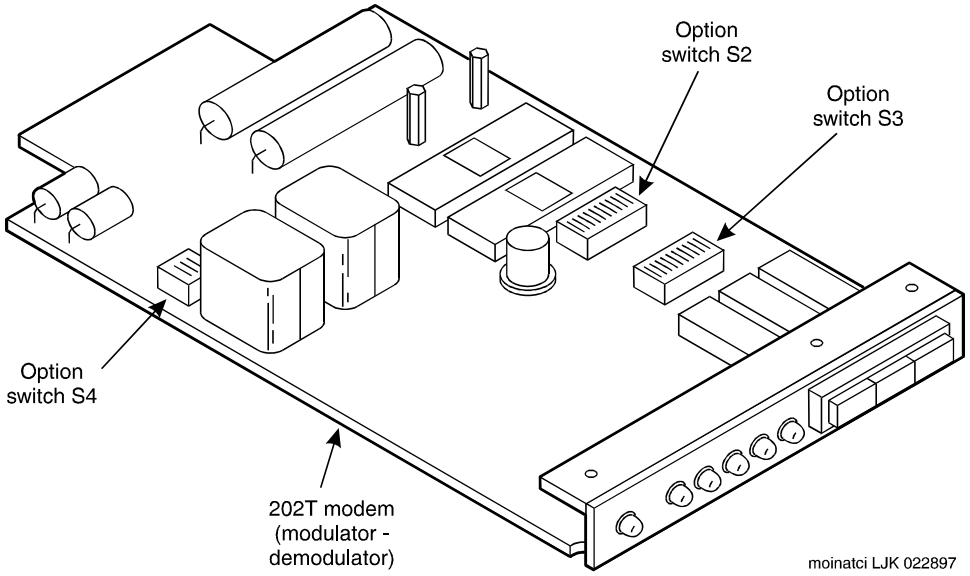



**Figure 4-5. 202T Modem with Option Switches**

**NOTE:**
Figure 4-6 shows an example of a switch on the 202T modem. In this sample switch, options 1 through 5 are closed, indicated by rockers down on the numbered side of the switch. Options 6 through 10 are open, indicated by rockers up on the numbered side of the switch.

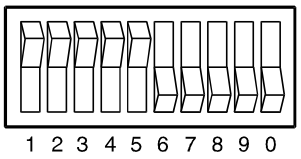



**Figure 4-6. Sample 202T Modem Option Settings**

The following tables show the option settings for each of the 202T modem switches.

**Table 4-2. Switch S2 — Option Settings on the 202T Modem**

| Segment | Position | Feature | Option | Description |
|---|---|---|---|---|
| 1 | X | 4-Wire Operation | ZK* | |
| 2 | X | Soft turnoff and squelch intervals | Z | 0 (soft turnoff)<br>0 (squelch) |
| 3 | X | Fast carrier detection | N | Out (normal mode) |
| 4 | 0 | clear-to-send interval | M* | 8ms |
| 5 | 0 | | | |
| 6 | 0 | soft turnoff and squelch intervals | Z | 0 (soft turnoff)<br>0 (squelch) |
| 7 | X | soft turnoff and squelch intervals | Z | 0 (soft turnoff)<br>0 (squelch) |
| 8 | 0 | soft turnoff and squelch intervals | Z | 0 (soft turnoff)<br>0 (squelch) |
| 9 | X | | | |
| 0 | 0 | clear-to-send interval | M* | 8ms |

**Table 4-3. Switch S3 — Option Settings on the 202T Modem**

| Segment | Position | Feature | Option | Description |
|---|---|---|---|---|
| 1 | 0 | 4-wire operation | ZK* | |
| 2 | 0 | compromise delay equalization | ZU* | Maximum |
| 3 | 0 | Channel condition | ZY* | Basic |
| 4 | 0 | 4-wire operation | ZK* | |
| 5 | 0 | compromise amplitude equalization | ZW* | Maximum |
| 6 | X | 4-wire operation | ZK* | |
| 7 | X | 4-wire operation | ZK* | |
| 8 | X | 4-wire operation | ZK* | |
| 9 | X | 4-wire operation | ZK* | |
| 0 | X | 4-wire operation | ZK* | |

**Table 4-4. Switch S4 — Option Settings on the 202T Modem**

| Segment | Position | Feature | Option | Description |
|---|---|---|---|---|
| 1 | X | Continuous Carrier | ZN | In |
| 2 | 0 | Carrier detector reset | ZM* | Out |
| 3 | X | State of CC (data set ready) during analog loopback | YB | On |

4. Insert the circuit card in the modem data mounting.
5. Replace the front of the data mounting.

# Installing the Hardware for Integration

# 5

The Lucent INTUITY system interfaces with the DMS-100/SL-100 switch using the simplified message service interface (SMSI) over an RS-232 link. A 202T modem completes the link for distances greater than 50 feet. The 202T modem can be connected to a multi-port circuit on any multi-application platform (MAP) or to the serial port 1 connector (COM1) on a Lucent INTUITY MAP/5 or MAP/5P.

This chapter describes the hardware connections required to integrate the Lucent INTUITY system with the DMS-100/SL-100 switch, including:

- 202T modem

  **NOTE:**
  The DMS-100/SL-100 integration does not require the installation of a 202T modem if the distance between the Lucent INTUITY system and the switch is less than or equal to 50 feet (RS232 standard). If the distance is greater than 50 feet, use a 202T modem.

- Connecting to the multi-port circuit card (any MAP)
- Connecting to COM1 (MAP/5 or MAP/5 only)
- Cabling the voice ports

## Drawings

This section contains drawings for both versions of the 202T modem. Refer to these drawings when installing the DMS-100 integration hardware.

### Version 2: Motorola 202T Modem

The following figures illustrate the front and back of Version 2.

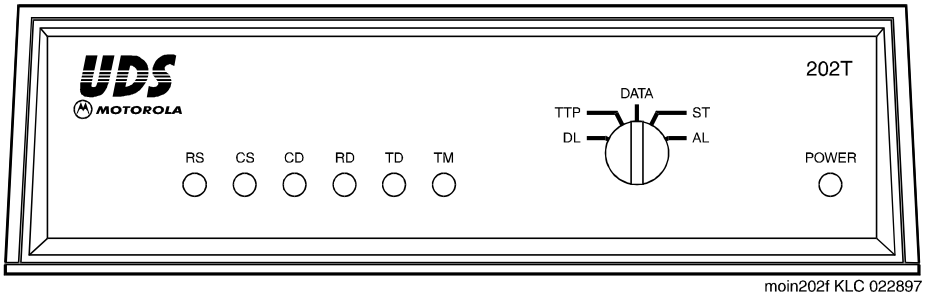



**Figure 5-1. Motorola 202T Modem (Front View)**

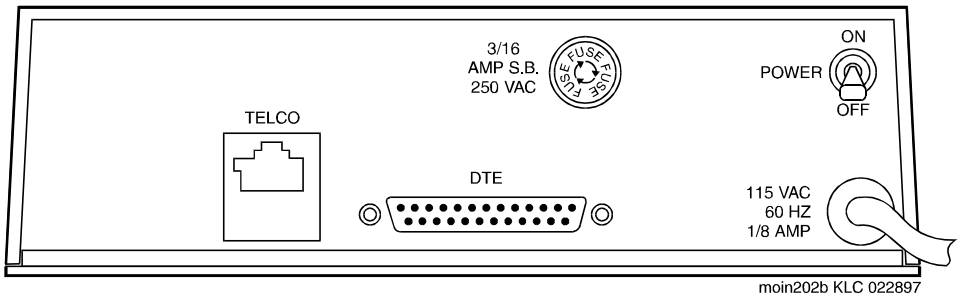



**Figure 5-2. Motorola 202T Modem (Back View)**

## Version 1: AT&T 202T Dataphone

The following figures illustrate the front and back of Version 1.

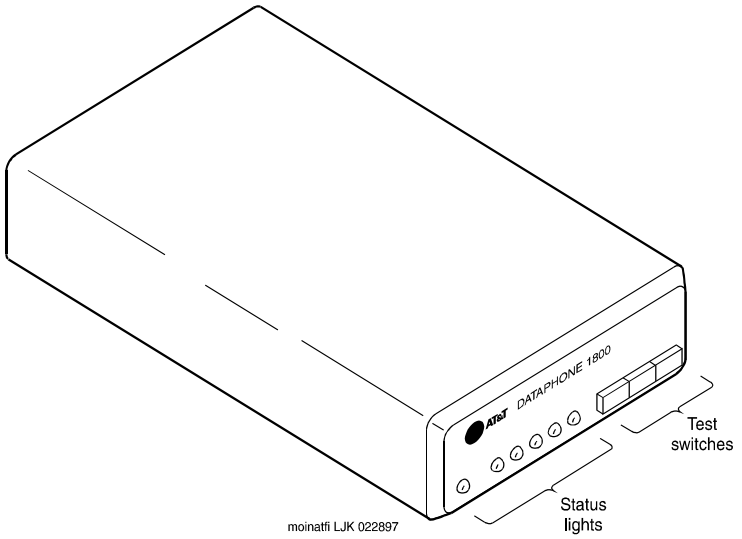



**Figure 5-3. 202T Modem (Front View)**

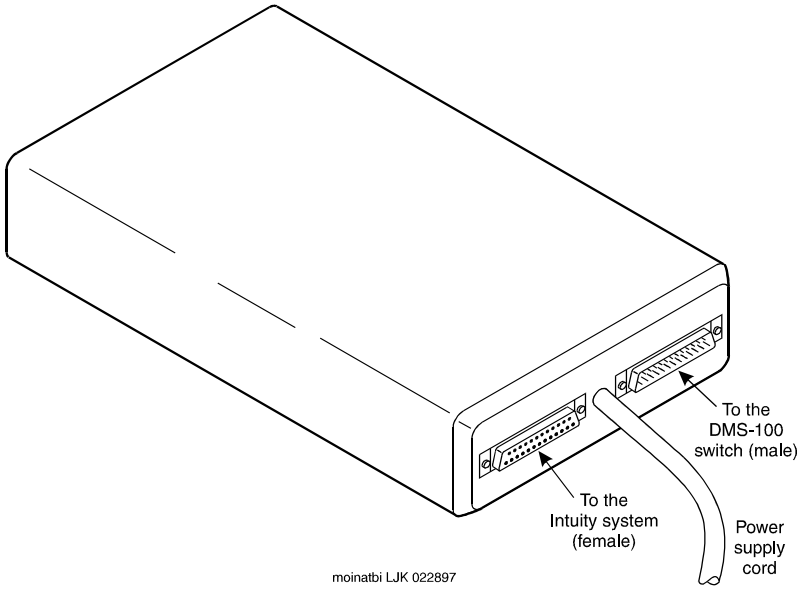



**Figure 5-4. 202T Modem (Back View)**

# Connecting to the Multi-Port Circuit Card (Any MAP, Distances Less Than 50 Feet)

If the Lucent INTUITY system is being installed at a distance of less than 50 feet from the switch, do no use a 202T modem.

## Hardware Required

Use the following hardware for this configuration:

- Multi-port circuit card installed in the MAP
- 14 ft. modular 6-wire cable (provided with multi-port circuit card)
- RS-232 6-25 pin terminal/printer adapter (DTE)

**NOTE:**
Connection may require punching, depending upon the service provider's requirements.

# Connecting to the Multi-Port Circuit Card (Any MAP, Distances Greater Than 50 Feet)

The following figure shows the configuration for the DMS-100/SL-100 integration when the 202T modem is connected to the multi-port circuit card on a Lucent INTUITY MAP/5, MAP/5P, MAP/40, MAP/40s, or MAP/100.

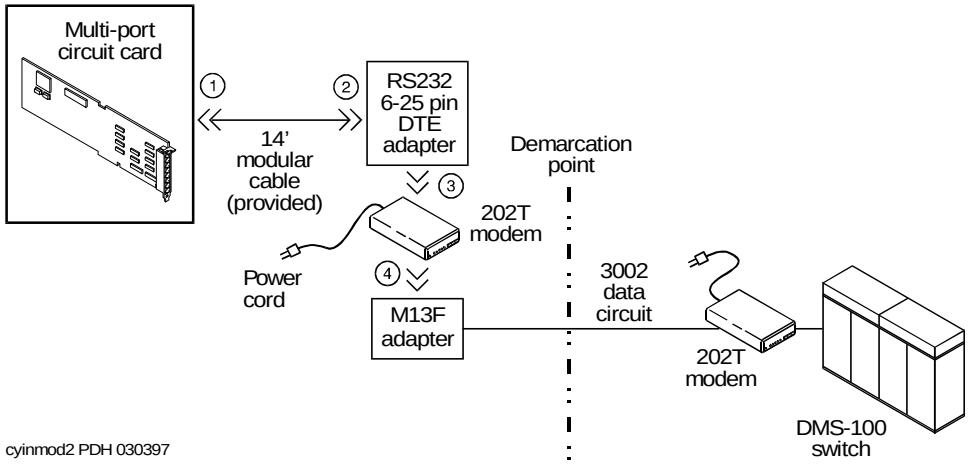



**Figure 5-5. Connecting from the Multi-Port Circuit Card on the Lucent INTUITY System to the DMS-100/SL-100 Switch**

## Hardware Required

Use the following hardware for this configuration:

**NOTE:**
Before installing the integration hardware, set the switch options on the 202T modem. See Chapter 4, ''Setting the 202T Modem''.

- Multi-port circuit card installed in the MAP
- 14 ft. modular 6-wire cable (provided with multi-port circuit card)
- RS-232 6-25 pin terminal/printer adapter (DTE)
- 202T modem (required for distances greater than 50 feet)
- M13F adapter for integrations using an AT&T 202T (**not** needed for the Motorola connection through the Telco port)

## Hardware Installation Procedure

To configure the hardware for the DMS-100 integration when connecting to the multi-port circuit card on the Lucent INTUITY system, use the following procedure. See Figure 5-5.

**NOTE:**
Connection may require punching, depending upon the service provider's requirements.

1. Attach one end of the 14 ft. modular 6-wire cable into the connector being used on the multi-port circuit card in the Lucent INTUITY system (Figure 5-5, Labeled 1).

   **NOTE:**
   The port used must correspond with the port indicated in the serial port field on the Switch Link Administration screen. For more information about this screen, see Chapter 6, ''Administering the Lucent INTUITY System for Integration''.

2. Attach the other end of the 6-wire cable into the RS-232 6-25 pin DTE adapter (Figure 5-5, Labeled 2)
3. Attach the RS-232 adapter into the female connector in the back of the 202T modem (Figure 5-5, Labeled 3)
4. Plug the power supply cord for the 202T modem into an AC electrical outlet.
5. Determine your next step:
   a. AT&T Dataphone 202T modem:
      1. Attach one end of the M13F adapter to the male connector in the back of the AT&T Dataphone 202T modem (Figure 5-5, Labeled 4).
      2. Attach the other end of the M13F adapter to the connection leading to the DMS-100/SL-100 switch.
      3. For information about possible connections from the 202T modem to the DMS-100/SL-100 switch, see *User's Manual 202T Modem* (999-102-1421S).

   b. Motorola 202T modem: Continue with "Connecting the Motorola 202T Modem Telco Port," Page 5-9. Do not use the M13F adapter.

# Connecting to COM1 (MAP/5 Only)

The following figure shows the configuration for the DMS-100/SL-100 integration when the 202T modem is connected to COM1 in a Lucent INTUITY MAP/5:

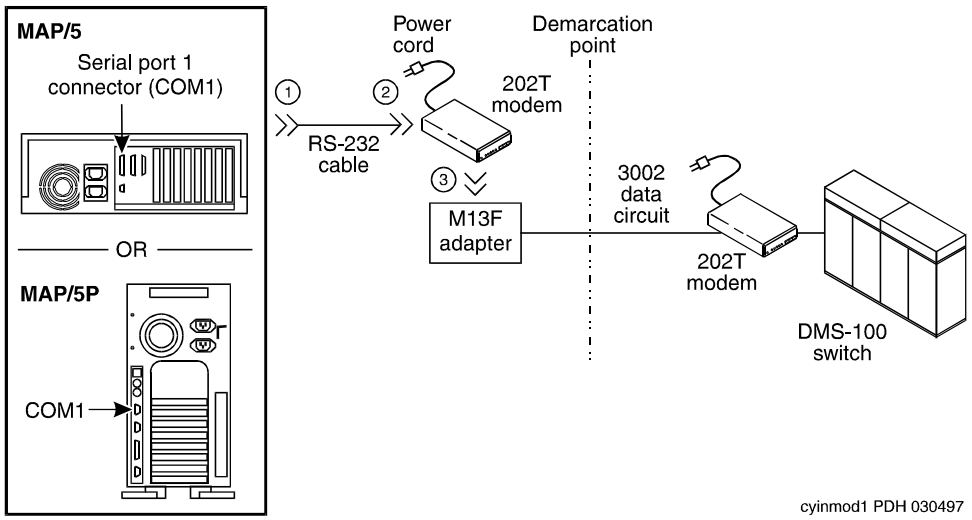



**Figure 5-6. Connecting from COM1 on a Lucent INTUITY MAP/5 to the DMS-100/SL-100 Switch**

## Hardware Required

Use the following hardware for this configuration:

- RS-232 cable
- 202T modem (required for distances greater than 50 feet)
- M13F adapter (**not** needed for the Motorola connection through the Telco port)

**NOTE:**
Before installing the integration hardware, set the switch options on the 202T modem. See Chapter 4, ''Setting the 202T Modem''.

## Hardware Installation Procedure

To configure the hardware for the DMS-100/SL-100 integration when connecting to COM1 on the Lucent INTUITY MAP/5 or MAP/5P, use the following procedure. See Figure 5-6.

**NOTE:**
Connection may require punching, depending upon the service provider's requirements.

1. Attach the female end of the RS-232 cable into COM1 in the Lucent INTUITY MAP/5. (Figure 5-6, Labeled 1)
2. Attach the male end of the RS-232 cable into the female connector in the back of the 202T modem (Figure 5-6, Labeled 2)
3. Plug the power supply cord for the 202T modem into an AC electrical outlet.
4. Attach one end of the M13F adapter to the male connector in the back of the 202T modem (Figure 5-6, Labeled 3).
5. Determine your next step:
    a. AT&T Dataphone 202T modem:
        1. Attach one end of the M13F adapter to the male connector in the back of the AT&T Dataphone 202T modem (Figure 5-6, Labeled 4).
        2. Attach the other end of the M13F adapter to the connection leading to the DMS-100/SL-100 switch.
        3. For information about possible connections from the 202T modem to the DMS-100/SL-100 switch, see *User's Manual 202T Modem* (999-102-1421S).
    b. Motorola 202T modem: Continue with "Connecting the Motorola 202T Modem Telco Port," Page 5-9. Do not use the M13F adapter.

## Connecting the Motorola 202T Modem Telco Port

Use the following diagram to connect the Motorola 202T telco port.

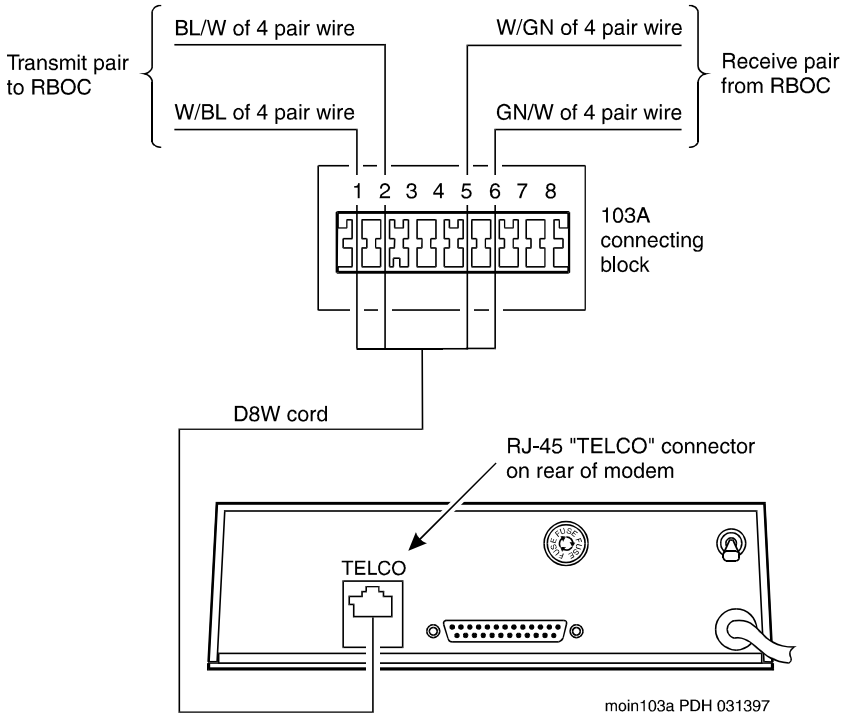



**Figure 5-7. Connection Diagram for the Motorola 202T Telco Port**

## Cabling the Voice Ports

All voice cables come out into two 25-pair cables that hook directly into the customer wall field. The following 2 types of connections are possible:

- 66 type hardware (RJ21)
- 110 type hardware

For information about cabling the voice ports to the IVC6 card, see the hardware installation or general installation book for the Lucent INTUITY hardware platform you are using installing.

# Administering the Lucent INTUITY System for Integration

# 6

This chapter describes how to administer the Lucent INTUITY system for integration with the DMS-100/SL-100 switch. To integrate with the DMS-100/SL-100 switch, the Lucent INTUITY system requires specific information about integration set up, such as the serial port and baud rate being used.

To administer the Lucent INTUITY system, fill out the following screens:

- Switch Link Administration screen
- System Translation screen
- Hunt Group Administration screen (optional)

For a list of the information needed to fill out these screens, see Chapter 2, ‘‘Planning the Integration’’.

# Administering the Switch Link Administration Screen

The Switch Link Administration screen is initially filled out when the DMS-100/SL-100 software is installed at the factory.

To view this screen:

1. Login as **craft**.
2. Press ENTER to accept the AT386 default.

   The system displays the Lucent INTUITY(TM) Administration screen.
3. Starting at the Lucent INTUITY(TM) Administration screen or INTUITY Main Menu select:

> Switch Interface Administration

> Switch Link Administration

The system displays the Switch Link Administration screen (Figure 6-1).

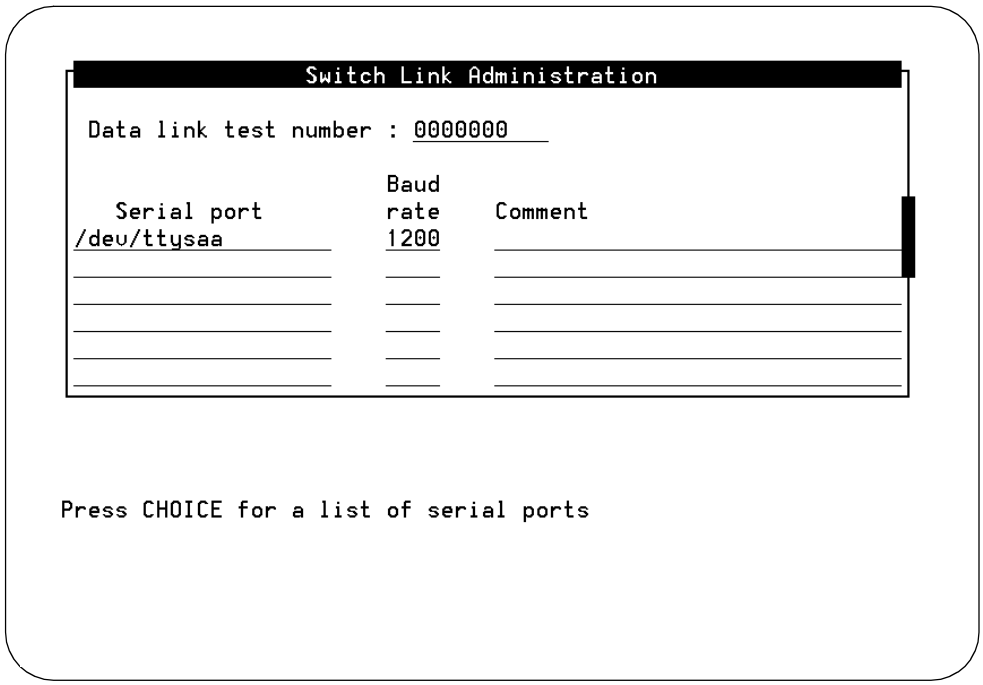



**Figure 6-1. Switch Link Administration Screen**

4. Fill out or verify the entries in the fields on this screen. Use the TAB key and the up and/or down arrow keys to move the cursor to the field. Use the table below to determine the settings.

| Field | Description |
|---|---|
| Data link test number | Indicates the test number sent to the switch to verify whether the switch is active. If the switch is active, it sends back a message saying that this number is not in-service.<br><br>Setting: A 7-digit number that is *not* an in-service extension number. The test number is needed only during initial testing of the switch link. After the link is established, remove the number and leave this field blank. It is recommended that you use the setting *0000000* for the initial testing of the switch link.<br><br>**⚠ WARNING:**<br>*Be sure to leave this field blank once the switch link is established. Otherwise, the DMS-100/SL-100 switch may go down.* |
| Serial port | Indicates the port being used on the Lucent INTUITY system to connect to the 202T modem.<br><br>Setting: If you are connecting to COM1, use the setting */dev/tty00*.<br><br>If you are connecting to the multi-port circuit card, settings are in the format */dev/ttysax,* where *x* is a letter a - h representing a port on the circuit card (from right to left). Press CHOICES (F2) to choose from a menu of available ports. It is recommended that you use port */dev/ttysaa*. |
| Baud rate | Indicates the rate at which the 202T modem and the Lucent INTUITY system communicate.<br><br>Setting: Use a baud rate of 1200 for the 202T modem. |
| Comment | A comment you write of up to 30 characters. In your comment, you cannot use double quotation marks (“) or SHIFT + backslash (\). |

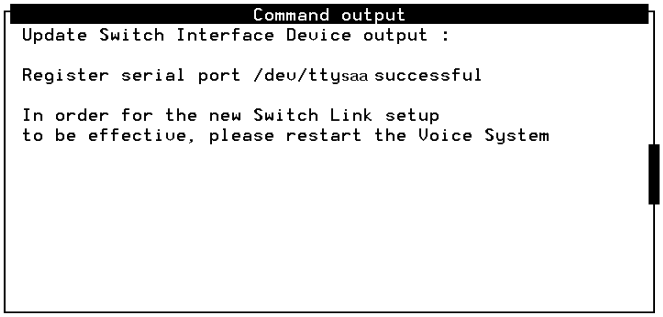
5. Determine your next step:

   a. If you did not need to make changes to this screen, press CANCEL (F6) once to return to the Switch Interface Administration screen.

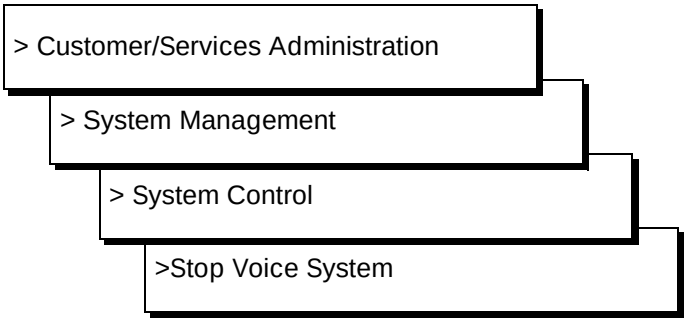
   b. If you made changes to the screen, continue with Step 6.

6. Press SAVE (F3).

   The system displays the Command Output screen, indicating that the serial port was registered successfully and that you need to stop and restart the voice system:




7. Press CANCEL (F6) three times to return to the INTUITY(TM) Administration screen.
8. Starting at the INTUITY(TM) Administration screen, and select:




   The system displays the following message:

   ```
   Enter y to continue, n to quit.
   ```

9. Enter **y** to continue.

   The system will wait until all calls in progress disconnect before stopping the voice system. You will see a series of messages while the system is disconnecting calls.

   When the process is finished, you will see the following messages:

   ```
   The Voice System has stopped
   Press ENTER to continue...
   ```

10. Press ENTER.

    The system displays the System Control screen.

11. From the System Control menu, select Start Voice System.

    You will see messages that the voice system is being restarted. When the process is finished, you will see the following messages:

```
Startup of the Voice System is complete
Press ENTER to continue...
```

12. Press ENTER.

    The system displays the System Control screen.

13. Press CANCEL until you reach the Lucent INTUITY(TM) Administration screen.

## Administering the System Translation Screen

To administer the System Translation screen:

1. Starting at the Lucent INTUITY(TM) Administration screen or INTUITY Main Menu select:

> Switch Interface Administration

> System Translation

The system displays the System Translation screen (Figure 6-2).

```
                        System Translation
 Switch link type: SMSI
 Host type: DMS100
 Host link ID: 1
 Extension length: 4

 Address Ranges:  first      / last       public network number
                1. 0000       / 5000       8600000
                2. 5999       / 9999       8685999
                3. _____      / _____      _____
                4. _____      / _____      _____
                5. _____      / _____      _____
                6. _____      / _____      _____
                7. _____      / _____      _____
                8. _____      / _____      _____

The length of public network number must be equal or greater than 4
```

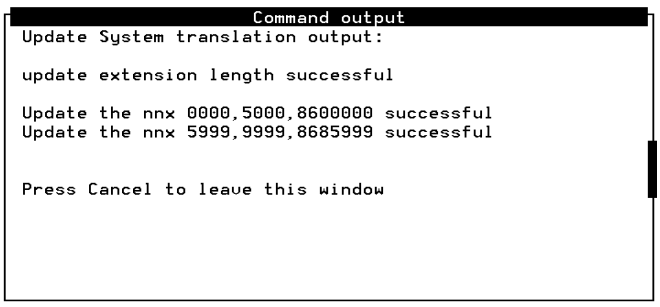
**Figure 6-2. System Translation Screen**

2. Fill out the fields on this screen, as described in the following table:

| Field | Description |
|---|---|
| Switch link type | Displays the current switch link type. You cannot change this setting. |
| Host type | Displays the current host switch type. You cannot change this setting. |
| Host link ID | Displays the current host link ID. You cannot change this setting. |
| Extension length | Indicates the number of digits allowed for each extension in the address range.<br><br>Setting: A number of digits from 3 to 10. |
| Address Ranges: first<br>Address Ranges: last<br>Address Ranges: public network number | Indicates the first and last extension numbers in a range of INTUITY AUDIX subscriber extension numbers that is mapped to a public network number. Address ranges and public network numbers are obtained from the central office.<br><br>Setting: Up to 8 address ranges, one for each public network number provided. These ranges cannot overlap.<br><br>Extension numbers contain the number of digits indicated in the Extension length field. The public network number is a 7-digit number, ending with the digits of the first extension number in the address range. For an example, see Figure 6-2. |

3. Press SAVE (F3).

   The Command Output screen is displayed, indicating that the new settings were updated successfully:



4. Press CANCEL (F6).

   The system displays the System Translation screen.

5. Continue pressing CANCEL (F6) to return to the Lucent INTUITY(TM) Administration screen.

# Administering the System for Multiple Hunt Groups (Release 3 Systems)

Use the following instructions to perform the initial administration or alter the current administration on the Lucent INTUITY system. This feature is available on Release 3 systems.

If you are installing a new system and performing the administration for the first time, continue with "Administering the Lucent INTUITY System to Accept Multiple Hunt Groups," Page 6-9.

If you are making changes or using the Multiple Hunt Group feature for the first time on an existing system:

1. Stop the voice system
2. Remap the channels
3. Administer the Lucent INTUITY System to Accept Multiple Hunt Groups
4. Restart the voice system
5. Test the channel mapping
6. Verify the MDN mapping

**CAUTION:**
*Use care in applying this procedure. If the system is incorrectly administered, it will answer with the wrong information or fail to answer.*

## Stopping the Voice System

The following procedure describes how to stop the voice system.

**NOTE:**
A Lucent INTUITY system with a stopped voice system will not display the AUDIX screens.

**CAUTION:**
*This procedure removes the system from service. The system will stop accepting telephone calls. Use this procedure only during periods of low traffic.*

1. Starting at the Customer/Services Administration screen select:

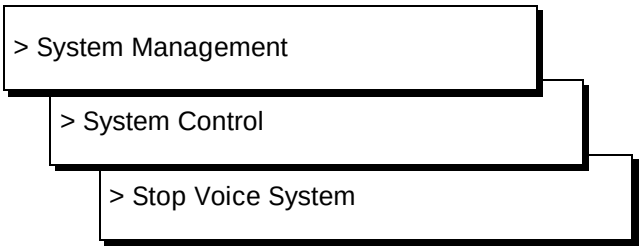



Figure 6-3 shows the path the stop the voice system.

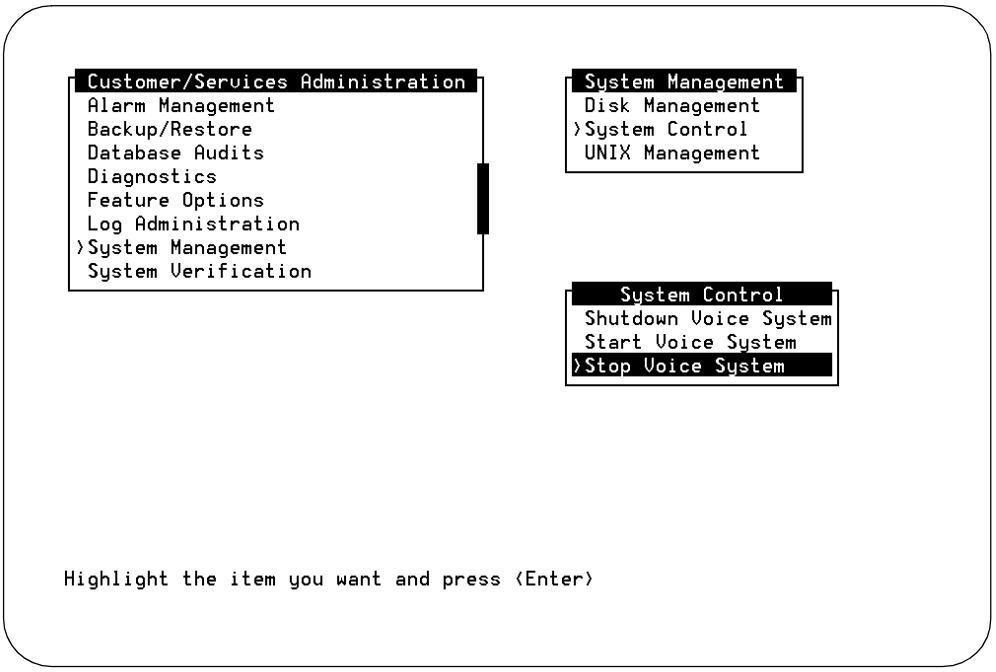



**Figure 6-3. System Control Screen**

The system responds:

```
Enter y to continue, n to quit.
```

2. Enter **y** to continue.

The system responds:

```
The Voice System is now stopping.

Initiating request to clear all calls in the next 180 seconds.

Orderly idling of system succeeded.
```

```
The AUDIX(R) module is being stopped. Please wait.
.............................................
Networking module shutdown in progress....
.Networking Module shutdown.
.........................
AUDIX(R) module stopped.

After the Voice System has completely stopped, use the
"Start Voice System" choice from the System Control menu to
restart the voice system.

INIT : New run level : 3

The Voice System has stopped

Press ENTER to continue.
```

3. Press ENTER to return to the screens.
4. Press CANCEL (F6) once to return to the System Management screen.
5. Continue with "Install the Switch Integration Package."

## Remapping the Channels (Optional)

If implementation of the multiple hunt groups required a change in the physical wiring or in the extensions used for the channels, adjust the system's channel mapping. You may also need to define *DNIS_SVC."

For Release 3, see *INTUITY Software Installation for Release 3.0* (585-310-160), Chapter 3, for instructions.

For Release 4, see the installation book for the MAP, Chapter 6, for instructions.

## Administering the Lucent INTUITY System to Accept Multiple Hunt Groups

To administer the Lucent Intuity system for multiple hunt groups:

1. Begin at the INTUITY(TM) Administration screen or INTUITY Main Menu select:

```
> Switch Interface Administration
    > Hunt Group Administration
```

The system displays the Hunt Group Administration screen (Figure 6-4).

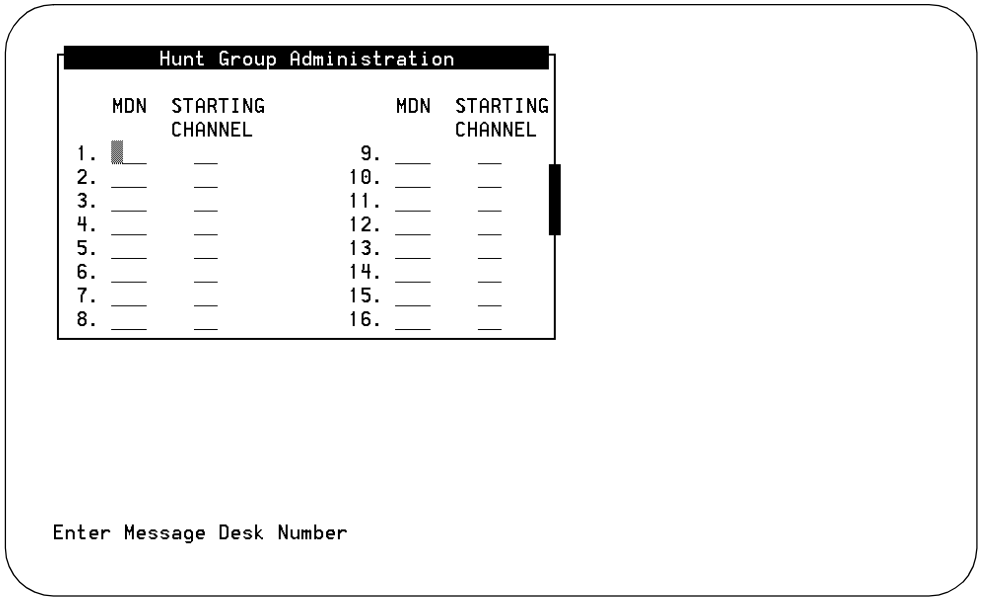


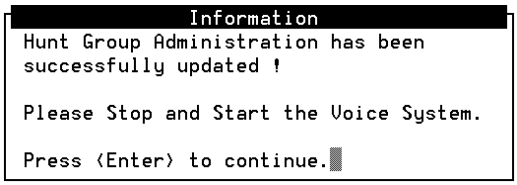

**Figure 6-4. Hunt Group Administration Screen**

2. Enter the Message Desk Number (MDN).
3. Press TAB to move the cursor to the Starting Channel field. The channels are also referred to as message desk terminal or member numbers.
4. Enter the Starting Channel number for the channel on the Lucent INTUITY system.

   **NOTE:**
   You must enter the channel numbers in consecutive order. For example, the system will accept groups 00 to 05 followed by 06 to 011. It will not accept groups 06 to 011 followed by 00 to 05.

   **NOTE:**
   The Lucent INTUITY system begins channel numbering with 00. The switch may begin with 1.
5. Repeat Step 2 through Step 4 for each hunt group, using the TAB key to move to the next field. Use the arrow keys to move to a previous field if you need to make a correction.
6. Press SAVE (F3) to save the information to the system.

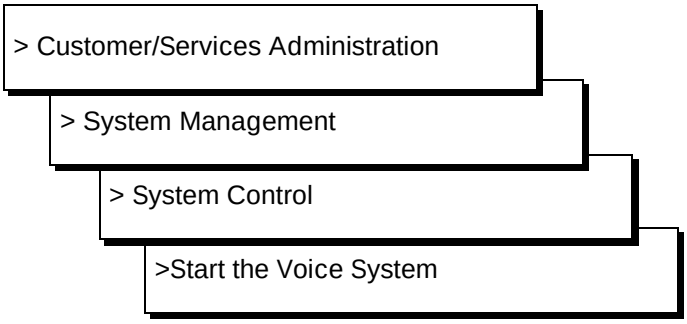
The system responds with an Information screen:




7. Press ENTER to return to the Hunt Group Administration screen.
8. Press CANCEL (F6) twice to return to the INTUITY(TM) Administration screen.

## Restarting the Voice System

1. Starting at the Lucent INTUITY(TM) Administration screen select:




   You will see messages that the voice system is being restarted. When the process is finished, you will see the following messages:

```
Startup of the Voice System is complete
Press ENTER to continue...
```

2. Press ENTER.

   The system displays the System Control screen.

3. Press CANCEL (F6) three times until the INTUITY(TM) Administration screen is displayed.
4. Continue with the next task, “Test the Channel Mapping.”

## Testing the Channel Mapping

To test the channel mapping, you will need to display the system monitor and call each channel. To display the system monitor:

1. Starting at the Voice System Administration screen select:

```
> System Monitor
```

   The system responds with the System Monitor - Voice Channels screen (Figure 1).

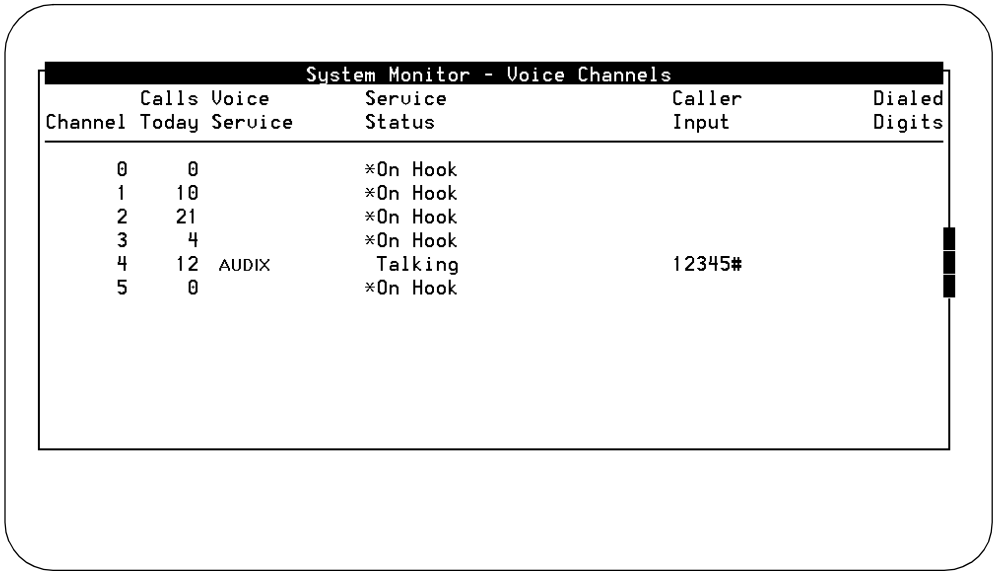



**Figure 1. Example System Monitor Screen**

2. Press CHG-KEYS (F8).
3. Press CHG-RATE (F1).

   The system displays the Change Refresh Rate screen.
4. Enter **1** to change the refresh rate to every 1 second.
5. Press SAVE (F3).

6. Refer to the worksheet from above. Call each phone number on the worksheet and verify that the correct channel answers by viewing the system monitor. When the system answers, the system monitor will change the service status for the channel.

   If any of the channels fail to answer when the extension is dialed and the system lists the channel as "INSERV," the channel is probably improperly mapped on the Lucent INTUITY system or the switch is not processing the call correctly.

7. Continue with the next task, "Verify the MDN Mapping." Leave the system monitor display on the console.

## Verifying the MDN Mapping

Verify that the correct MDN is associated with the correct channel(s). To do this, call the hunt group number (leading number of the hunt) and watch the system answer on the System Monitor screen.

**NOTE:**
In order for this test to work, the switch must have been provisioned to support the multiple hunt groups.

1. Refer to the worksheet with the telephone numbers for test. Place a call using one of the hunt group numbers or one of the extensions that should go to coverage.
2. View the System Monitor screen. Verify that one of the channels associated with the MDN answers. The system should answer in one of the following ways:
   - For an MDN used for INTUITY AUDIX call coverage, the system will play either the "Your call is being answered by AUDIX" or the subscriber's personal greeting.
   - For an MDN associated with INTUITY AUDIX message retrieval, the system will play the message retrieval greeting:

     Welcome to AUDIX. For help at anytime, press star H. Please enter extension and pound sign.

   - For an MDN associated with an Automated Attendant, the system will play the Automated Attendant's greeting.
   - For an MDN associated with another application such as Lodging or an INTUITY Intro Voice Response application, the system should answer with the application's greeting.

If the system answers with the wrong prompt or with a request for the extension number for the person for whom you wish to leave a message, the test failed. This usually indicates one of the following:

- The channel numbers have changed and the channels have not been re-mapped or the channel has been improperly mapped on the Lucent INTUITY system.
- The physical connection is incorrect or loose.
- The MDN or the channels on the switch may be improperly administered.
- The MDN(s) and the channel have been improperly mapped on the Lucent INTUITY Hunt Group Administration screen.

3. Repeat Steps 1 and 2 for each hunt group, and verify that you receive the correct response.
4. Press CANCEL (F6) twice to reach the INTUITY (TM) Administration screen or three times to logout.

# Alarms

# A

This appendix contains the alarms generated by the integration with the DMS-100 switch. For more information about Lucent INTUITY Release 3 alarms, see *INTUITY Platform Administration and Maintenance,* 585-310-557.

**NOTE:**
These are alarms for Release 3 systems. For Release 4 systems, see *INTUITY Messaging Solutions Release 4 Alarm and Log Messages,* 585-310-566.

# SOFTWARE

| **Application: SW** | **Alarm Code: 1** |
|---|---|
| Alarm Level: | MAJ |
| Problem Resource/Loc: | SW |
| Description: | Failed to receive message, failed to send message, or failed to convert dip to qkey. |
| Repair Action: | This alarm requires remote maintenance center intervention. |

| **Application: SW** | **Alarm Code: 11** |
|---|---|
| Alarm Level: | MAJ |
| Problem Resource/Loc: | SW |
| Description: | File open failed, file write failed, or file is badly formatted. |
| Repair Action: | This alarm requires remote maintenance center intervention. |

| **Application: SW** | **Alarm Code: 12** |
|---|---|
| Alarm Level: | MAJ |
| Problem Resource/Loc: | SW |
| Description: | SMDI link status is down, all device ports failed to open, or failed to write to device. |
| Repair Action: | This alarm requires remote maintenance center intervention. |

| **Application: SW** | **Alarm Code: 111** |
|---|---|
| Alarm Level: | MIN |
| Problem Resource/Loc: | SW |
| Description: | Reader has invalid parameters. |
| Repair Action: | This alarm requires remote maintenance center intervention. |

| Application | Problem Resource/Loc | Event ID | Description | Alarm Code |
|---|---|---|---|---|
| SW | SW | SMDI001 | Failed to receive message | 1 |
| SW | SW | SMDI002 | Failed to send message | 1 |
| SW | SW | SMDI003 | Failed to convert dip to qkey | 1 |
| SW | SW | WTR003 | SMDIWTR process starts up | 1 |
| SW | SW | WTR000 | File open failed | 11 |
| SW | SW | WTR001 | File write failed | 11 |
| SW | SW | WTR002 | File is badly formatted | 11 |
| SW | SW | WTR004 | SMDI link status is down | 12 |
| SW | SW | WTR005 | All device ports failed to open | 12 |
| SW | SW | WTR006 | Failed to write to device | 12 |
| SW | SW | RDR000 | Reader has invalid parameters | 111 |

# SMDI_LINK

| **Application: SW** | **Alarm Code: 1** |
|---|---|
| Alarm Level: | MIN |
| Problem Resource/Loc: | SW |
| Description: | SMDI serial port failed, reader starts up, or SMDI serial port has no response. |
| Repair Action: | This alarm requires remote maintenance center intervention. |

| Application | Problem Resource/Loc | Event ID | Description | Alarm Code |
|---|---|---|---|---|
| SW | SW | SMDI004 | SMDI serial port failed. | 1 |
| SW | SW | RDR001 | Reader starts up. | 1 |
| SW | SW | RDR002 | SMDI serial port has no response. Link may be down. | 1 |

# Installing DMS-100/SL-100 Software on the INTUITY System

# B

This appendix provides procedures for installing the DMS-100/SL-100 software on the Lucent INTUITY system.

**NOTE:**
Before you install the DMS-100/SL-100 software, make sure that the voice system and maintenance software are installed. If the DMS-100/SL-100 software is already installed, you do not have to remove any software. If another switch integration software is already installed, remove the other package before installing the DMS-100/SL-100 software.

To install the DMS-100 software:

1. Stop the voice system.
2. Load the DMS-100 software.
3. Start the voice system.
4. Turn on the INTUITY AUDIX transfer feature.

Each of these tasks is described in the following sections.

## Requirements

Before you install the DMS-100 software, note the following requirements:

| | |
|---|---|
| Login: | craft |
| Materials: | DMS-100/SL-100 Switch Integration Software (2 floppy diskettes) |

## Task 1: Stop the Voice System

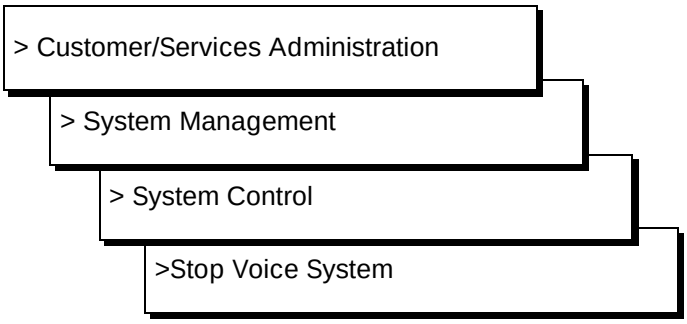
Before you can load the DMS-100 software, you must stop the voice system.

**CAUTION:**
*All calls in progress will be disconnected.*

To stop the voice system, use the following procedure:

1. Login as **craft**.
2. Press ENTER to accept the AT386 default.

   The system displays the Lucent INTUITY Administration(TM) screen.
3. Starting at the Lucent INTUITY(TM) Administration screen or INTUITY Main Menu, select:




   The following message is displayed:

   ```
   Enter y to continue, n to quit.
   ```
4. Enter **y** to continue.

   The system will wait until all calls in progress disconnect before stopping the voice system. You will see a series of messages while the system is disconnecting calls.

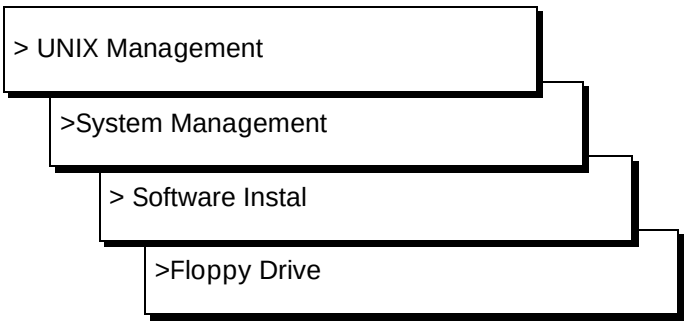
   When the process is finished, you will see the following messages:

   ```
   The Voice System has stopped
   Press ENTER to continue...
   ```
5. Press ENTER.

   The system displays the System Control screen.
6. Press CANCEL (F6) to return to the System Management screen.
7. Continue with the next task, "Task 2: Load the DMS-100/SL-100 Integration Software".

# Task 2: Load the DMS-100/SL-100 Integration Software

1. Starting at the Lucent INTUITY(TM) Administration screen or the INTUITY Main Menu, select:




   The system responds:

```
Insert a diskette into Floppy Drive 1.
Type [go] when ready
    or [q] to quit: (default: go)
```

2. Insert DMS-100/SL-100 Switch Integration Package Disk 1 of 2 into the 3.5” floppy diskette drive.
3. Press ENTER to install the software.

   The system responds:

```
Installation in progress. Do not remove the diskette.

The following pkgs are available:
    1  dms100   Intuity DMS100 Switch Integration Package
                  (486) 1.0-16

Select package(s) you wish to process (or ‘all’ to process all
packages). (default: all)  [?, ??, q]
```

4. Press ENTER to accept the default of all.

   You will see a series of messages indicating that the software is being installed. After installing the software, the system responds:

```
READY TO PROCESS:

Package: Intuity DMS100 Switch Integration Package (dms100)
diskette 2 of 2

Insert diskette 2 of 2 into Floppy Drive 1.
Type [go] when ready
    or [q] to quit: (default: go)
```

5. Remove Disk 1 of 2 from the floppy diskette drive.
6. Insert Disk 2 of 2 into the floppy diskette drive.
7. Press ENTER to install.

The system displays a series of messages indicating that the software is being installed. It then displays, the Switch Link Administration screen:

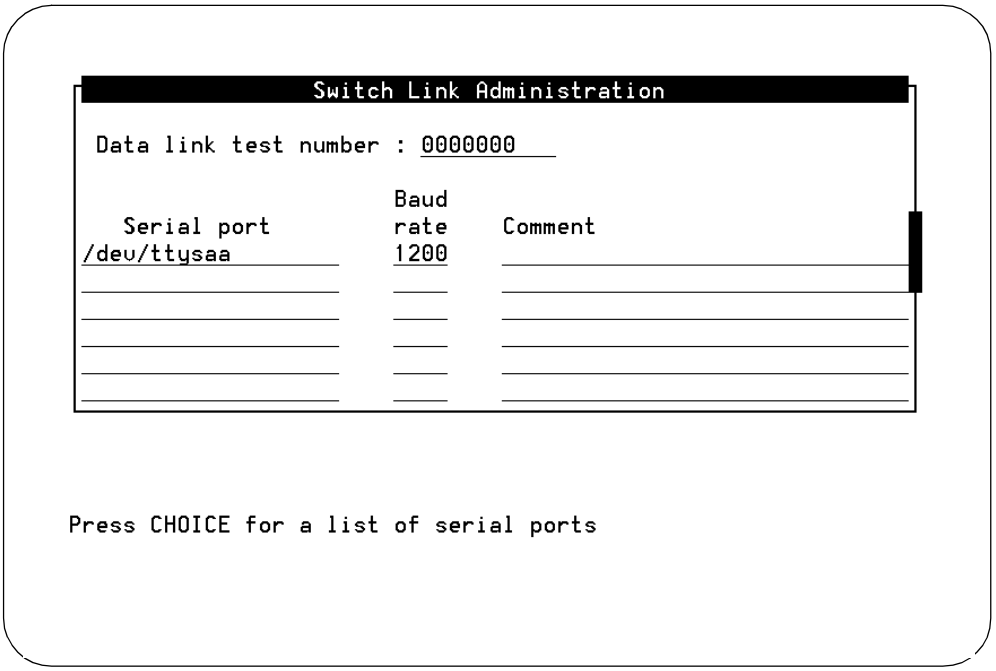



**Figure B-1. Defaults for Switch Link Administration Screen**

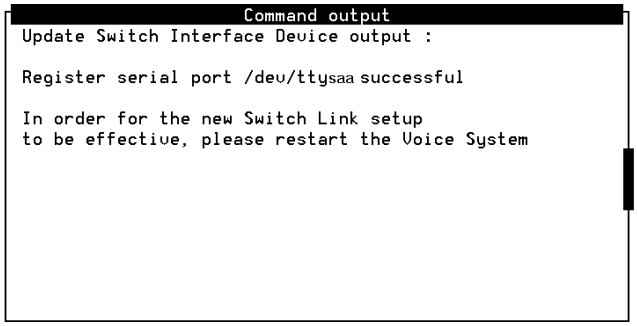
**NOTE:**
If you are re-installing the software on a system that has not lost a disk or upgrading the switch integration software to the next release, press CANCEL (F6) and continue with Step 12. You do not need to administer this information. If you are unsure, perform the administration, continuing with the next step.

8. Fill out the fields on this screen:

| Field | Description |
|---|---|
| Data link test number | Indicates the test number sent to the switch to verify whether the switch is active. If the switch is active, it sends back a message saying that this number is not in-service.<br><br>Setting: A 7-digit number that is *not* an in-service extension number. The test number is needed only during initial testing of the switch link. After the link is established, remove the number and leave this field blank. It is recommended that you use the setting *0000000* for the initial testing of the switch link.<br><br>**⚠ WARNING:**<br>*Be sure to leave this field blank once the switch link is established. Otherwise, the DMS-100/SL-100 switch may go down.* |
| Serial port | Indicates the port being used on the Lucent INTUITY system to connect to the 202T modem.<br><br>Setting: If you are connecting to COM1, use the setting */dev/tty00*.<br><br>If you are connecting to the multi-port circuit card, settings are in the format */dev/ttysax,* where *x* is a letter a - h representing a port on the circuit card (from right to left). Press CHOICES (F2) to choose from a menu of available ports. It is recommended that you use the setting */dev/ttysaa*. |
| Baud rate | Indicates the rate at which the 202T modem and the Lucent INTUITY system communicate.<br><br>Setting: It is recommended that you use a baud rate of 1200. |
| Comment | A comment you write of up to 30 characters. In your comment, you cannot use double quotation marks (") or SHIFT + backslash (\). |

9. Press SAVE (F3).

   The following screen is displayed, indicating that the serial port was registered successfully and that you need to restart the voice system:




10. Press CANCEL (F6).

    The system displays the Switch Link Administration screen.

11. Press CANCEL (F6).

    You will see messages indicating the installation is still running. When the installation is complete, you see the following messages:

```
Installation of Intuity DMS100 Switch Integration Package
(dms100) was successful.

Insert diskette into Floppy Drive 1.
Type [go] when ready
    or [q] to quit: (default: go)
```

12. Remove Disk 2 of 2 from the floppy diskette drive.
13. Enter **q** to quit.

    The system displays the Software Install screen.

14. Press CANCEL (F6) twice to display the UNIX Management screen.
15. Continue with the next task, "Task 3: Start the Voice System".

## Task 3: Start the Voice System

You must restart the voice system for the Lucent INTUITY system to accept and process calls. To start the voice system, use the following procedure:

1. Starting at the System Control screen, select:

   > Start Voice System

   You will see messages that the voice system is being restarted.

   When the process is finished, you will see the following messages:

   ```
   Startup of the Voice System is complete
   Press ENTER to continue...
   ```

2. Press ENTER.

   The System Control menu is redisplayed.

3. Press CANCEL (F6) until you reach the Lucent INTUITY(TM) Administration screen or the INTUITY Main Menu.

## Task 4: Turn on Transfer Feature

After you install the DMS-100 software and restart the voice system, you need to turn on the transfer feature in INTUITY AUDIX. For Release 3 systems, see *INTUITY AUDIX Administration*, 585-310-552. For Release 4 systems, see *INTUITY Messaging Solutions Release 4 Administration*, 585-310-564.

Set the transfer type field to *basic.*

# Switch Administration for Lucent INTUITY Lodging

# C

## Introduction

This chapter describes the switch administration you need to complete if you have INTUITY Lodging. Read the information and configure your switch as required.

## Hunt Group Administration

A hunt group is a set of extension numbers assigned to another phone number. When a call is received by this number, a programmed search of the hunt group is made and the call is forwarded to a member of the hunt group that is not busy. For example, when two calls are made to the designated phone number, both are forwarded to two free extensions in the hunt group. Hunt groups are a commonly-used switch feature. Your switch probably has some hunt groups already assigned.

In order to configure a hunt group for calls being received by the INTUITY system you must:

1. Administer your switch to create a hunt group for your INTUITY system.
2. Have the switch ports that terminate the hunt group extensions wired to the voice ports on the INTUITY platform. Wire them as described in one of the following documents, depending on your system:
   - INTUITY™ MAP/5 Hardware Installation, 585-310-146
   - INTUITY™ MAP/40 Hardware Installation, 585-310-138
   - INTUITY™ MAP/100 Hardware Installation, 585-310-139

# Message Retrieval Administration

The message retrieval number is the telephone number that subscribers call to retrieve voice mail messages. Like other calls to the INTUITY system, message retrieval calls are ultimately forwarded to the INTUITY hunt group.

## Message Retrieval in Lodging Systems without AUDIX

Provide the INTUITY system's message retrieval number to your subscribers.

## Message Retrieval in Systems Shared with AUDIX

There must be two message retrieval numbers in a shared system, one to retrieve from the AUDIX application, and one to retrieve from the Lodging application.

### Retrieval from the AUDIX Application

Provide the INTUITY system message retrieval number to your subscribers for the AUDIX application.

### Retrieval from the Lodging Application

1. Administer on your switch an extension number *not* associated with a switch port. (These are often called *phantom* or *dummy* numbers.) This number becomes the Lodging message-retrieval number for your system.
2. Configure the Lodging message retrieval number so that the INTUITY hunt group covers all calls.
3. Provide the Lodging message retrieval number to your subscribers for the Lodging application.

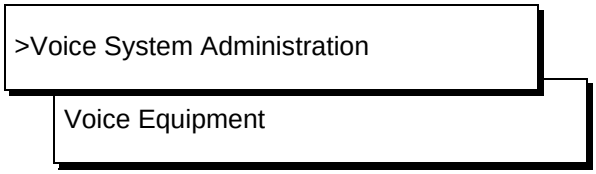
## Alternate Message Retrieval Method

Guests can also be allowed to log on from a remote phone to any mailbox for which they have a password. A guest will call a number to access this service then enter an extension number and a password to retrieve messages in the mailbox.

**NOTE:**
For Release 4 systems, see the administration book or Chapter 6 in the system installation manual for instructions to access the Voice Equipment screen.

To provide this service:

1. Administer on your switch a phantom number. This is the message retrieval number used from a remote phone.
2. Configure the phantom number so the Lucent INTUITY system hunt group covers all calls.
3. If your switch has password capability, assign a password to the new extension.
4. Assign to the new extension, the service: “ldg_ni_vm.”
    a. Log on to the Lucent INTUITY system as sa or craft.
    b. From the Lucent INTUITY Administration screen or the INTUITY Main Menu select:




    c. From the Voice Equipment screen, press CHG-KEYS (F8) then ASSIGN (F3).
    d. Select Services to Called Numbers from the Assign menu.
    e. Press CHOICES (F2) and select ldg_ni_vm.
    f. Enter the called number that was administered on the switch for this purpose.
    g. Press SAVE (F3). A command-output screen appears confirming your choice.
    h. Press CANCEL (F6) three times to exit to the Voice Equipment screen.
5. If the phantom extension is to be accessed from outside your system, assign the extension to a Direct-Inward-Dialing number.
6. Provide the Lodging message retrieval number to your subscribers for the Lodging application.

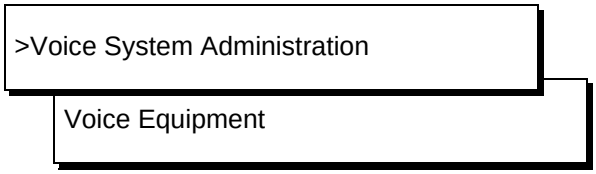
## Voice Mail Administration

Voice mail is enabled when the switch sends a guest's call to a coverage path. The following procedure, however, provides a separate number that can be used at any time to send voice mail to a guest.

**NOTE:**
For Release 4 systems, see the administration book or Chapter 6 in the system installation manual for instructions to access the Voice Equipment screen.

To provide this service:

1. Administer on your switch a phantom number. This number is used to send voice messages to your subscribers.
2. Configure the phantom number so that the Lucent INTUITY system hunt group covers all calls.
3. Assign to the new extension, the service: "ldg_ni_ca" as follows:
   a. Log on to the Lucent INTUITY system as sa or craft.
   b. From the Lucent INTUITY Administration screen or the INTUITY Main Menu select:




   c. From the Voice Equipment screen, press CHG-KEYS (F8) then ASSIGN (F3).
   d. Select Services to Called Numbers from the Assign menu.
   e. Press CHOICES (F2) and select ldg_ni_ca
   f. Enter the called number of your choice.
   g. Press SAVE (F3). A command-output screen appears confirming your choice.
   h. Press CANCEL (F6) three times to exit to the Voice Equipment screen.
4. If the phantom extension will be accessed from outside your system, assign the extension to a Direct-Inward-Dialing number.
5. Provide the Lodging voice mail number to subscribers for the Lodging application.

## Call Coverage Path

A coverage path directs the switch to transfer unanswered calls to a hunt group, to a service, or to another extension.

When a call goes to coverage, the switch forwards the called number to the INTUITY system. The INTUITY system detects that the called number is administered as a specific subscriber's extension and treats the call as one to be answered and recorded. Depending on how the extension is configured, the call may be answered by either the AUDIX or the Lodging application.

1. Administer your switch to assign call coverage for each guest's extension to the associated INTUITY system hunt group number.

## Do-Not-Disturb

Look for features on your switch that adapt themselves especially well to lodging situations. One example is the *Do not Disturb* feature on some switches. This feature makes it possible to request that a particular extension not receive calls until a specified time. At the specified time, the switch automatically deactivates the feature and allows calls to terminate normally at the extension.

If this extension is covered by the INTUITY system hunt group, then calls received while *Do-not-Disturb* is active will be recorded for later retrieval.

## Cut-to-Service

A cut-to-service of the INTUITY Lodging application amounts to changing the coverage path for each guest extension to the INTUITY system hunt group. The associated system must be completely installed before you cut the INTUITY Lodging application into service. Furthermore, all INTUITY system initial administration, associated switch administration, and acceptance tests must be completed.

Some switching systems make it possible to group these extensions as a set allowing the coverage path to be changed simultaneously. Most switching systems permit changing the coverage path for guest extensions one extension at a time. You may use either method.

## Gradual Cut-to-Service

Using this cut-to-service strategy, enter guests into the INTUITY Lodging system as they check in. Only new guests, not current guests, receive INTUITY Lodging services.

The advantages of this method include:

- Attendants can learn the new system while only a portion of guests are also learning to use it.
- Guests do not have to learn both the previous and the new systems. Current guests use the previous system; new guests use the INTUITY Lodging system.
- Custom passwords and language options can be assigned to each guest as the guest is checked in.

Gradually cut-to-service as follows:

1. Administer your switch to send the guests' telephone call coverage to the INTUITY system hunt group.
2. Check in each new guest as described in *INTUITY Lodging Administration and Feature Operations, 585-310-559*.

## One-Step Cut-to-Service

On switches where a coverage path is separately defined and then applied to a class of stations, assign all guest stations to INTUITY Lodging at once.

Using this cut-to-service strategy, all guest stations are changed to INTUITY Lodging at the same time.

The advantages of this method include:

- Since INTUITY Lodging is brought up in one step, attendants must cope with only one call-answering system at a time.
- Cut-to-service is over at once. Multiple messaging systems can confuse the guests.
- Reasonable coverage options can be assigned to all guests at once; administration can be modified for the few that have unusual requirements.

Cut-to-service as follows:

1. Use INTUITY Lodging to administer the options that guests require.
2. Make sure guests and attendants know when the change will take place and have some idea of how the new service operates.
3. On your switch, determine the coverage path that applies to your guests' stations.
4. On your switch, set the new coverage path for your guests' stations to the INTUITY system hunt group.

## Summary

You have completed the switch integration tasks necessary to configure your INTUITY system for the Lodging application.

# Abbreviations

## A

**AC**
alternating current

**ACD**
automatic call distribution

**ADAP**
administration and data acquisition package

**ADU**
asynchronous data unit

**ALT**
assembly load and test

**AMIS**
Audio Messaging Interchange Specification

**API**
application programming interface

**AUDIX**
Audio Information Exchange

**AWG**
American wire gauge

## B

**BCS**
Business Communications Systems

**BIOS**
basic input/output system

**bit**
binary digit

**bps**
bits per second

**BRI**
basic rate interface

**BSC**
binary synchronous communications

**BTU**
British thermal unit

## C

**CAS**
call accounting system

**CCA**
call classification analysis

**CDH**
call data handler process

**CELP**
code excited linear prediction

**CICS**
customer information control system

**CMS**
call management system

**CO**
central office

**COIN**
central office implemented network

**COM1**
serial communications port 1

**COM2**
serial communications port 2

**COR**
class of restriction

**COS**
class of service

**CPU**
central processing unit

**CSI**
called subscriber information

**CTS**
clear to send

## D

**DAC**
dial access code

**DBP**
database processor

**DC**
direct current

**DCE**
data communications equipment

**DCIU**
data communications interface unit

**DCP**
digital communications protocol

**DCS**
distributed communications system

**DID**
direct inward dialing

**DIP**
data interface process

**DMA**
direct memory access

**DNIS**
dialed number identification service

**DSP**
digital signal processor

**DSR**
data set ready

**DSU**
data service unit

**DTE**
data terminal equipment

**DTMF**
dual tone multifrequency

**DTR**
data terminal ready

## E

**EIA**
Electronic Industries Association

**ESD**
electrostatic discharge

**ESS**
electronic switching system

## F

**F key**
function key

**FIFO**
first-in first-out

**FOOS**
facility out of service

## G

**GOS**
grade of service

## H

**Hz**
hertz

## I

**I/O**
input/output

**IDI**
isolating data interface

**IMAPI**
Intuity messaging application programming interface

**INADS**
initialization and administration system

**IRQ**
interrupt request

**ISDN**
integrated services digital network

**IVC6**
integrated voice CELP card (6 channels)

**IVR**
integrated voice response

## K

**Kbps**
kilobits per second

**Kbyte**
kilobyte (1024 bytes)

**kHz**
kilohertz

## L

**LAN**
local area network

**LCD**
liquid crystal display

**LED**
light-emitting diode

**LIFO**
last-in first-out

**LWC**
leave word calling

## M

**MANOOS**
manually out of service

**Mbyte**
megabyte (one million bytes)

**MHz**
megahertz

**modem**
modulator/demodulator

**MPDM**
modular processor data module

**ms**
millisecond

**MT**
maintenance (Intuity software component)

**MTBF**
mean time between failures

**MWI**
message-waiting indicator

**MWL**
message-waiting lamp

## N

**NW**
Intuity AUDIX Digital Networking

## O

**OA&M**
operations, administration, and maintenance

**OS**
operating system

**OSI**
open systems interconnection

## P

**PBX**
private branch exchange

**PC**
power converter or personal computer

**PDM**
processor data module

**PEC**
price element code

**PIB**
processor interface board

**PMS**
property management system

**POST**
power-on self test

## R

**RAM**
random-access memory

**REN**
ringer equivalence number

**ROM**
read-only memory

**RTS**
request to send

**RTU**
right to use

## S

**SCA**
switch communications adapter

**SCSI**
small computer systems interface

**SID**
switch integration device

**SIMM**
single in-line memory module

**SMSI**
simplified message service interface

**SW**
switch integration (Intuity software component)

## T

**TCP/IP**
Transmission Control Protocol/Internet Program

**TDD**
telecommunications device for the deaf

**TDM**
time division multiplex

**T/R**
tip/ring

**TRIP**
tip/ring input process

**TSC**
Lucent Technologies's Technical Services Center

## U

**UCD**
uniform call distribution

**UPS**
uninterruptible power supply

## V

**VM**
Intuity AUDIX Voice Messaging

**VP**
voice platform (Intuity software component)

**VROP**
voice response output process

# Glossary

**5ESS Switch**
A Lucent Technologies central office switch that can be integrated with the Lucent Intuity system.

## A

**accessed message**
A message that was received and scanned (either the entire message or just the header).

**ACD**
See *automatic call distribution*.

**activity menu**
The list of options spoken to subscribers when they first access a messaging system. Selecting an activity is the starting point for all user operations.

**ADAP**
See *administration and data acquisition package*.

**address**
Intuity AUDIX subscriber identification, containing the subscriber's extension and machine, that indicates where the system needs to deliver a message. An address may include several subscribers or mailing lists. Name or number addressing can be selected with the *A command.

**adjunct**
A separate system closely integrated with a switch, such as a Lucent Intuity system or a call management system (CMS).

**administration**
The process of setting up a system (such as a switch or a messaging system) to function as desired. Options and defaults are normally set up (translated) by the system administrator or service personnel.

**administration and data acquisition package (ADAP)**
A software package that allows the system administrator to transfer system subscriber, maintenance, or traffic data from an Intuity AUDIX system to a personal computer (PC).

**ADU**
See *asynchronous data unit*.

**alarm log**
A list of alarms that represent all of the active or resolved problems on a Lucent Intuity system. The alarm log is stored in a software file on disk and can be accessed either locally or remotely on a terminal connected to the system.

**alarms**
Hardware, software, or environmental problems that may affect system operation. Alarms are classified as major, minor, or warning.

**alphanumeric**
Alphabetic, numeric, or punctuation symbols.

**ALT**
See *assemble load and test.*

**AMIS**
See *Audio Messaging Interchange Specification*.

**AMIS Prefix**
A number added to the destination number to indicate that the destination number is an AMIS analog networking number.

**ampere (amp)**
The unit of measurement of electric current. One volt of potential across one ohm causes a current flow of one amp.

**analog networking**
A method of transferring a message from one messaging system to another whereby the message is played back (voiced) during the transmission from one system to another.

**analog signal**
A communications path that, in teleprocessing usage, usually refers to a voice-grade telephone line.

**announcement fragment**
A numbered piece of spoken information that makes up a system message or prompt.

**antistatic**
A material that is treated to prevent the build-up of static electricity.

**API**
See *application programming interface.*

**application programming interface**
A set of formalized software calls and routines that can be referenced by an application program to access underlying network services.

**assemble load and test**
The factory process that preloads software, installs hardware, and tests the system prior to shipping.

**asynchronous communication**
A method of data transmission in which bits or characters are sent at irregular intervals and bits or characters are spaced by start and stop bits and not by time. See also *synchronous communication*.

**asynchronous data unit (ADU)**
An electronic communications device that can extend data transmission over asynchronous lines more than 50 feet in length. Recommended ADUs include Z3A1 or Z3A4.

**asynchronous transmission**
A form of serial communications where each transmitted character is bracketed with a start bit and one or two stop bits. The Lucent Intuity system provides asynchronous RS-232 capabilities for Intuity AUDIX Digital Networking, if required.

**attendant console**
A special purpose phone with numerous lines and features located at the front desk. The front desk attendant uses the phone to answer and transfer calls.

**Audio Messaging Interchange Specification (AMIS)**
An analog networking protocol that allows subscribers to exchange messages with any messaging system that also has AMIS Analog Networking capabilities. Messages can be exchanged with subscribers on Lucent Intuity systems as well as with users on remote messaging systems made by vendors other than Lucent Technologies.

**Audio Information Exchange (AUDIX)**
A complete messaging system accessed and operated by touch-tone telephones and integrated with a switch.

**audit**
A software program that resolves filesystem incompatibilities and updates restored filesystems to a workable level of service. Audits are done automatically on a periodic basis, or can be performed on demand.

**AUDIX**
See *Audio Information Exchange*.

**autodelete**
An Intuity AUDIX feature that allows subscribers to indicate that faxes are automatically deleted from their mailbox after being printed.

**automated attendant**
A feature that allows a user of an Intuity system to set up a main extension number with a menu of options that routes callers to an appropriate department at the touch of a button.

**automatic call distribution (ACD)**
The System 85, Generic 2, or Generic 3 call-distribution group of analog ports that connects Intuity subscribers and users to the system. See also *call-distribution group*.

**automatic message scan**
An Intuity AUDIX feature that allows subscribers to scan all message headers and messages at the touch of two buttons. With Intuity FAX Messaging, this feature allows all new faxes to be bundled and transmitted over a single fax call delivery call. Also called *autoscan*.

**autoprint**
An Intuity AUDIX feature that allows subscribers to indicate that faxes are automatically sent to a specified print destination.

**autoscan**
See *automatic message scan*.

**AWG**
See *American wire gauge.*

**American wire gauge**
A standard measuring gauge for non-ferrous conductors.

# B

**background testing**
Testing that runs continuously when the system is not busy doing other tasks.

**backup**
A duplicate copy of files and directories saved on a removable media such as floppy diskette or tape. The backup filesystem may be copied back (restored) if the active version is damaged (corrupted) or lost.

**basic input/output system (BIOS)**
A system that contains the buffers for sending information from a program to the actual hardware device the information should go to.

**baud**
A unit of measurement that describes the speed of transferred information.

**baud rate**
Transmission signaling speed.

**basic call transfer**
A switch hook-flash method used to send the Intuity AUDIX transfer command over analog voice ports.

**basic rate access**
See *basic rate interface*.

**basic rate interface (BRI)**
International standard protocol for connecting a station terminal to an integrated systems digital network (ISDN) switch. ISDN BRI supports two 64 Kbps information bearer channels (B1 and B2), and one 16 Kbps call status and control (D) channel (a 2B + D format). Also called b*asic rate access*.

**binary digit (bit)**
Two-number notation that uses the digits 0 and 1. Low-order bits are on the right (for example, 0001=1, 0010=2, and so forth). Four bits make a nybble; eight bits make a byte.

**binary synchronous communications (BSC)**
A character-oriented synchronous link protocol.

**BIOS**
See *basic input/output system*.

**bit**
See *binary digit*.

**body**
The part of subscriber voice mail that contains the actual spoken message. For a leave word calling (LWC) message, it is a standard system announcement.

**boot**
The operation to start a computer system by loading programs from disk to main memory (part of system initialization). Booting is typically accomplished by physically turning on or restarting the system. Also called *reboot*.

**boot filesystem**
The filesystem from which the system loads its initial programs.

**bps (bits per second)**
The number of binary units of information (1s or 0s) that can be transmitted per second. Mbps refers to a million bits per second; Kbps refers to a thousand bits per second.

**BRI**
See *basic rate interface*.

**broadcast messaging**
An Intuity AUDIX feature that enables the system administrator and other designated users to send a message to all subscribers automatically.

**BSC**
See *binary synchronous communications*.

**buffer**
Memory used to compensate for time differences in transmission by temporarily storing data.

**bulletin board**
An Intuity AUDIX feature that allows a message to be played to callers who dial the extension. Callers cannot leave a message since it is a listen-only service. Also called *information service*.

**bundling**
Combining several calls and handling them as a single call. See also *automatic message scan*.

**bus**
An electrical connection/cable allowing two or more wires, lines, or peripherals to be connected together.

**busy-out/release**
To remove an Intuity device from service (make it appear busy or in use), and later restore it to service (release it). The Intuity switch data link, voice ports, or networking ports may be busied out if they appear faulty or if maintenance tests are run.

**byte**
A unit of storage in the computer. On many systems, a byte is eight bits (binary digits), the equivalent of one character of text.

# C

**call accounting system (CAS)**
A software device that monitors and records information about a calling system.

**call-answer**
An Intuity AUDIX or Lucent Intuity Lodging feature that allows the system to answer a call and record a message when the subscriber is unavailable. Callers may be redirected to the system through the call coverage or call forwarding switch features. Intuity AUDIX subscribers may record a personal greeting for these callers.

**call-answer language choice**
The capability of subscriber mailboxes to accept messages in different languages. For the Intuity AUDIX application, this capability exists when the multilingual feature is turned on.

**callback number**
In AMIS analog networking, the telephone number transmitted to the recipient machine to be used in returning messages that cannot be delivered.

**call coverage**
A switch feature that defines a preselected path for calls to follow if the first (or second) coverage points are not answered. The Intuity system may be placed at the end of a coverage path to handle redirected calls through call coverage, send all calls, go to cover, etc.

**call delivery**
See *message delivery*.

**call-distribution group**
The set of analog port cards on the switch that connects subscribers and users to the Intuity system by distributing new calls to idle ports. This group (or split) is called automatic call distribution (ACD) on System 85, Generic 2, and Generic 3 and uniform call distribution (UCD) on System 75, Generic 1, and Generic 3. See also *automatic call distribution* and *uniform call distribution*.

**call management system (CMS)**
An inbound call distribution and management reporting package.

**called tone (CED tone)**
The distinctive tone generated by a fax endpoint when it answers a call (constant 2100 Hz tone).

**called subscriber information (CSI)**
The identifier for the answering fax endpoint. This identifier is sent in the T.30 protocol and is generally the telephone number of the fax endpoint.

**calling tone (CNG tone)**
The distinctive tone generated by a fax endpoint when placing a call (constant 1100 Hz tone on for one-half second, off for three seconds).

**call vectoring**
A System 85 R2V4, Generic 2, and Generic 3 feature that uses a vector (switch program), allowing a switch administrator to customize the behavior of calls sent to an automatic call distribution (ACD) group.

**card cage**
An area within the Intuity hardware platform that contains and secures all of the standard and optional circuit cards used in the system.

**cartridge tape drive**
A high-capacity data storage/retrieval device that can be used to transfer large amounts of information onto high-density magnetic cartridge tape based on a predetermined format. This tape is to be removed from the system and stored as a backup.

**CAS**
See *call accouting system*.

**CED tone**
See *called tone*.

**CELP**
See *code excited linear prediction*.

**central office (CO)**
An office or location in which large telecommunication machines such as telephone switches and network access facilities are maintained. In a CO, private customer lines are terminated and connected to the public network through common carriers.

**central processing unit (CPU)**
The component of the computer that manipulates data and processes instructions coming from software.

**channel**
A telecommunications transmission path for voice and/or data.

**channel capacity**
A measure of the maximum bit rate through a channel.

**CICS**
See *customer information control system*.

**class of service (COS)**
The standard set of Intuity AUDIX features given to subscribers when they are first administered (set up with a voice mailbox).

**clear to send (CTS)**
Located on Pin 5 of the 25-conductor RS-232 interface, CTS is used in the transfer of data between the computer and a serial device.

**client**
A computer that sends, receives and uses data, but that also shares a larger resource whose function is to do most data storage and processing. For Intuity Message Manager, the subscriber's PC running Message Manager is the client. See also *server*.

**CMS**
See *call management system*.

**CNG tone**
See *calling tone*.

**CO**
See *central office*.

**COS**
See *class of service*.

**code excited linear prediction**
An analog-to-digital voice coding scheme.

**co-located**
An Intuity system installed in the same physical location as the host switch. See also *local installation*.

**co-located adjunct**
Two or more adjuncts that are serving the same switch (i.e., each has voice port connections to the switch) or that are serving different switches but can be networked through a direct RS-232 connection due to their proximity.

**comcode**
Lucent's numbering system for telecommunications equipment. Each comcode is a nine digit number that represents a specific piece of hardware, software, or documentation.

**command**
An instruction or request given by the user to the software to perform a particular function. An entire command consists of the command name and options. Also, one- or two-key touch tones that control a mailbox activity or function.

**compound message**
A message that combines both a message and a fax message into one unit, which is then handled by Intuity AUDIX as a single message.

**configuration**
The particular combination of hardware and software components selected for a system, including external connections, internal options, and peripheral equipment.

**controller circuit card**
A circuit card used on a computer system that controls its basic functionality and makes the system operational. These cards are used to control magnetic peripherals, video monitors, and basic system communications.

**COS**
See *class of service*.

**coverage path**
The sequence of alternate destinations to which a call is automatically sent when the call is not answered by a subscriber. This sequence is set up on the switch, normally with the Lucent Intuity system as the last or only destination.

**CPU**
See *central processing unit*.

**cross connect**
Distribution system equipment used to terminate and administer communication circuits.

**cross connection**
The connection of one wire to another, usually by anchoring each wire to a connecting block and then placing a third wire between them so that an electrical connection is made.

**CSI**
See *called subscriber information*.

**CTS**
See *clear to send*.

# D

**DAC**
See *dial access code*.

**database**
A structured set of files, records, or tables. Also, a collection of filesystems and files in disk memory that store the voice and nonvoice (program data) necessary for Lucent Intuity system operation.

**data communications equipment (DCE)**
Standard type of data interface normally used to connect to data terminal equipment (DTE) devices. DCE devices include the data service unit (DSU), the isolating data interface (IDI), and the modular processor data module (MPDM).

**data communications interface unit (DCIU)**
A switch device that allows nonvoice (data) communication between a Lucent Intuity system and a Lucent switch. The DCIU is a high-speed synchronous data link that communicates with the

common control switch processor over a direct memory access (DMA) channel that reads data directly from FP memory.

**data link**
A term used to describe the communications link used for data transmission from a source to a destination. For example, a phone line for data transmission.

**data service unit (DSU)**
A device used to access digital data channels. DATAPHONE II 2500 DSUs are synchronous data communications equipment (DCE) devices used for extended-local Lucent Intuity system connections. The 2600 or 2700 series may also be used; these are more expensive DSU options and support diagnostic testing and the DATAPHONE II Service network system.

**data set**
Lucent Technologies term for a modem. A data set usually includes the telephone. See also *modem*.

**data terminal equipment (DTE)**
Standard type of data interface normally used for the endpoints in a connection. Normally the Lucent Intuity system, most terminals, and the switch data link are DTE devices.

**data terminal ready (DTR)**
A control signal sent from the data terminal equipment (DTE) to the data communications equipment (DCE) that indicates the DTE is on and ready to communicate.

**DBP**
See *data base processor*.

**DCE**
See *data communications equipment*.

**DCIU**
See *data communications interface unit*.

**DCP**
See *digital communications protocol*.

**DCS**
See *distributed communications system*.

**debug**
See *troubleshoot*.

**dedicated line**
A communications path that does not go through a switch. A dedicated (hard-wired) path may be formed with directly connected cables. MPDMs, DSUs, or other devices may also be used to extend the distance that signals can travel directly through the building wiring.

**default**
A value that is automatically supplied by the system if no other value is specified.

**default print number**
The subscriber-administered extension to which autoprinted faxes are redirected upon their receipt into the subscriber's mailbox. This default print destination is also provided as a print option when the subscriber is manually retrieving and printing faxes from the mailbox.

**delivered message**
A message that has been successfully transmitted to a recipient's incoming mailbox.

**demand testing**
Testing performed on request (usually by service personnel).

**diagnostic testing**
A program run for testing and determining faults in the system.

**dial-ahead/dial-through**
The act of interrupting or preceding Intuity AUDIX system announcements by typing (buffering) touch-tone commands in the order the system would normally prompt for them.

**dialed number identification service (*DNIS_SVC)**
An available channel service assignment on the Lucent Intuity system. Assigning this service to a channel permits the Lucent Intuity system to interpret information from the switch and operate the appropriate application for the incoming telephone call.

**DID**
See *direct inward dialing*.

**digital**
Discrete data or signals such as 0 and 1, as opposed to analog continuous signals.

**digital communications protocol (DCP)**
A 64 Kbps digital data transmission code with a 160 Kbps bipolar bit stream divided into two information (I) channels and one signaling (S) channel.

**digital networking**
A method of transferring messages between messaging systems in a digital format. See also *Intuity AUDIX Digital Networking*.

**digital signal processor**
A specialized digital microprocessor that performs calculations on digitized signals that were originally analog and then sends the results on.

**DIP**
See *data interface process*.

**DIP switch**
See *dual in-line package switch*.

**direct inward dialing**
The ability for a caller outside a company to call an internal extension without having to pass through an operator or attendant.

**direct memory access (DMA)**
A quick method of moving data from a storage device directly to RAM, which speeds processing.

**directory**
An Intuity AUDIX feature allowing you to hear a subscriber's name and extension after typing **N at the activity menu. Also, a group of related files accessed by a common name in software.

**display terminal**
A data terminal with a screen and keyboard used for displaying Lucent Intuity screens and performing maintenance or administration activities.

**distributed communications system (DCS)**
A network of two or more switches that uses logical and physical data links to provide full or partial feature transparency. Voice links are made using tie trunks.

**distribution list**
See *mailing list*.

**DMA**
See *direct memory access*.

**DNIS**
See *dialed number identification service*.

**DSP**
See *digital signal processor*.

**DSU**
See *data service unit*.

**DTE**
See *data terminal equipment*.

**DTMF**
See *dual tone multifrequency*.

**dual in-line package (DIP) switch**
A very small switch, usually attached to a printed circuit card, in which there are only two settings: on or off (or 0 or 1). DIP switches are used to configure the card in a semipermanent way.

**dual language greetings**
The capability of Intuity AUDIX subscribers to create personal greetings in two different languages — one in a primary language and one in a secondary language. This capability exists when the multilingual feature is turned on and the prompts for subscriber mailboxes can be in either of the two languages.

**dual tone multifrequency**
A way of signaling consisting of a pushbutton or touch tone dial that sends out a sound which consists of two discrete tones picked up and interpreted by telephone switches.

## E

**electrostatic discharge (ESD)**
Discharge of a static charge on a surface or body through a conductive path to ground. An ESD can be damaging to integrated circuits.

**enabled/disabled**
The state of a hardware device that indicates whether the Lucent Intuity system can use it. Devices must be equipped before they can be enabled (made active). See also *equipped/ unequipped*.

**endpoint**
See *fax endpoint*.

**enhanced call transfer**
An Intuity AUDIX feature that allows compatible switches to transmit messages digitally over the BX.25 (data) link. This feature is used for quick call transfers and requires a fully integrated digital switch. Callers can only transfer to other extensions in the switch dial plan.

**enhanced serial data interface**
A software- and hardware-controlled method used to store data on magnetic peripherals.

**equipped/unequipped**
The state of a networking channel that indicates whether Lucent Intuity software has recognized it. Devices must be equipped before they can be enabled (made active). See also *enabled/disabled*.

**error message**
A message on the screen indicating that something is wrong and possibly suggesting how to correct it.

**errors**
Problems detected by the system during operation and recorded in the maintenance log. Errors can produce an alarm if they exceed a threshold.

**escape from reply**
The ability to quickly return to getting messages for a subscriber who gets stuck trying to respond to a message. To escape, the subscriber simply presses #.

**escape to attendant**
An Intuity AUDIX feature that allows a subscriber with the call answer feature to have a personal attendant or operator administered to potentially pick up an unanswered call. A system-wide extension could also be used to send callers to a live agent.

**ESD**
See *electrostatic discharge*.

**events**
Informational messages about the system's activities. For example, an event is logged when the system is rebooted. Events may or may not be related to errors and alarms.

## F

**facility out-of-service**
The current channel is not receiving a dial tone and is not functioning.

**fax endpoint**
Any device capable of receiving fax calls. Fax endpoints include fax machines, individual PC fax modems, fax ports on LAN fax servers, and ports on fax-enabled messaging systems.

**field**
An area on a screen, menu, or report where information can be typed or displayed.

**FIFO**
See *first-in/first-out*.

**file**
A collection of data treated as a basic unit of storage.

**filename**
Alphanumeric characters used to identify a particular file.

**file redundancy**
See *mirroring*.

**file system**
A collection of related files (programs or data) stored on disk that are required to initialize a Lucent Intuity system.

**first-in/first-out**
The first call (or data) to be received is the first call (or data) to be processed.

**F key**
See *function key*.

**FOOS**
See *facility out-of-service*.

**format**
To set up a disk, floppy diskette, or tape with a predetermined arrangement of characters so that the system can interpret meaningful information.

**function**
Individual steps or procedures within a mailbox activity.

**function key (F key)**
A key on a computer keyboard that performs a defined function when pressed. The user interface for the Lucent Intuity system defines keys F1 through F8.

# G

**Generic 1, 2, or 3**
Lucent switch system software releases. Generic 1, Generic 3i, and Generic 3s correspond to the new generation of System 75-based software. Generic 2 and Generic 3r correspond to the new release of System 85-based software.

**generic tape**
A copy of the standard software and stand-alone tape utilities that is shipped with a new Lucent Intuity system.

**GOS**
See *grade of service*.

**grade of service (GOS)**
A parameter that describes the delays in accessing a port on the Lucent Intuity system. For example, if the GOS is P05, 95% of the callers would hear the system answer and 5% would hear ringing until a port became available to answer the call.

**guaranteed fax**
A feature of Lucent Intuity FAX Messaging that temporarily stores faxes sent to a fax machine. In cases where the fax machine is busy or does not answer a call, the call is sent to an Intuity AUDIX mailbox.

**guest password**
A feature that allows users who are not Intuity AUDIX subscribers to leave messages on the system by dialing a subscriber's extension and entering a system-wide guest password.

# H

**hard disk drive**
A high-capacity data storage/retrieval device that is located inside a computer platform. A hard disk drive stores data on non-removable high-density magnetic media based on a predetermined format for retrieval by the system at a later date.

**hardware**
The physical components of a computer system. The central processing unit, disks, tape and floppy drives are all hardware.

**header**
Information that the system creates to identify a message. A message header includes the originator or recipient, type of message, creation time, and delivery time.

**help**
A command run by pressing HELP or CTRL ? on a Lucent Intuity display terminal to show the options available at your current screen position. In the Intuity AUDIX system, press * H on the telephone keypad to get a list of options. See also *on-line help*.

**hertz (Hz)**
A measurement of frequency in cycles per second. A hertz is one cycle per second.

**host switch**
The switch directly connected to the Lucent Intuity system over the data link. Also, the physical link connecting a Lucent Intuity system to a distributed communications system (DCS) network.

**hunt group**
A group of analog ports on a switch usually administered to search for available ports in a circular pattern.

**Hz**
See *hertz*.

# I

**I/O**
Input/output.

**IDI**
See *isolating data interface*.

**IMAPI**
See *Intuity messaging application programming interface*.

**INADS**
See *initialization and administration system*.

**information service**
See *bulletin board*.

**initialization**
The process of bringing a system to a predetermined operational state. The start-up procedure tests hardware; loads the boot filesystem programs; locates, mounts, and opens other required filesystems; and starts normal service.

**initialization and administration system (INADS)**
A computer-aided maintenance system used by remote technicians to track alarms.

**initialize**
To start up the system for the first time.

**input**
A signal fed into a circuit or channel.

**integrated services digital network (ISDN)**
A network that provides end-to-end digital connectivity to support a wide range of voice and data services.

**integrated voice processing CELP (IVC6) card**
A computer tip/ring circuit card that supports both fax processing and voice processing capabilities. It provides two analog ports to support six analog channels. All telephone calls to and from the Lucent Intuity system are processed through tip/ring circuit cards.

**integrated voice response**
An application module that allows customers to write their own alternate applications, also known as a script builder.

**interface**
The device or software that forms the boundary between two devices or parts of a system, allowing them to work together. See also *subscriber interface*.

**interrupt request (IRQ)**
A device that signals the data bus and the CPU that it needs attention.

**Intuity AUDIX Digital Networking**
A Lucent Intuity feature that allows customers to link together up to 500 remote Lucent Intuity machines for a total of up to 500,000 remote subscribers. See also *digital networking*.

**Intuity Message Manager**
A Windows-based software product that allows Intuity AUDIX subscribers to receive, store, and send their voice/FAX messages from a PC.

**Intuity messaging application programming interface (IMAPI)**
A software function-call interface that allows Intuity AUDIX to interact with Lucent Intuity Message Manager.

**I/O address**
input/output address.

**IRQ**
See *interrupt request*.

**ISDN**
See *integrated services digital network*.

**isolating data interface (IDI)**
A synchronous, full duplex data device used for cable connections between a Lucent Intuity GPSC-AT/E card and the switch data communications interface unit (DCIU).

**IVC6**
See *integrated voice processing CELP (IVC6) card.*

**IVR**
See *integrated voice response*.

## J

**jumper**
Pairs or sets of small prongs on circuit cards and mother boards that allow the user to instruct the computer to select one of its available operation options. When two pins are covered, an electrical circuit is completed.

## K

**Kbps**
kilobits per second; one thousand bits per second.

**Kbyte**
kilobyte per second; 1024 thousand bytes per second.

## L

**label**
The name assigned to a disk device (either a removable tape cartridge or permanent drive) through software. Cartridge labels may have a generic name (such as 3:3) to show the software release or a descriptive name if for backup copies (such as back01). Disk drive labels usually indicate the disk position (such as disk00 or disk02).

**LAN**
See *local area network*.

**last-in/first-out**
The last call (or data) to be received is the first call (or data) to be processed.

**LCD**
See *liquid crystal display*.

**leave word calling (LWC)**
A switch feature that allows the calling party to leave a standard (nonvoice) message for the called party using a feature button or dial access code.

**LED**
See *light emitting diode*.

**LIFO**
See *last-in/first-out*.

**light emitting diode (LED)**
A light indicator on the hardware platform that shows the status of operations.

**liquid crystal display (LCD)**
The 10-character alphanumeric display that shows status of the system, including alarms.

**load**
To read software from external storage (such as disk) and place a copy in system memory.

**local area network (LAN)**
A network of PCs that communicate with each other and that normally share the resources of one or more servers. Operation of Lucent Intuity Message Manager requires that the Intuity AUDIX system and the subscribers' PCs are on a LAN.

**local AUDIX machine**
The Lucent Intuity system where a subscriber's Intuity AUDIX mailbox is located. All subscribers on this home machine are called *local subscribers*.

**local installation**
A switch, adjunct, or peripheral equipment installed physically near the host switch or system. See also *colocated*.

**local network**
An Intuity AUDIX Digital Network in which all Lucent Intuity systems are connected to the same switch.

**login**
A unique code used to gain approved access to the Lucent Intuity system. See also *password*.

**login announcement**
A feature enabling the system administrator and other designated users to create a mail message that is automatically played to all Intuity AUDIX subscribers every time they login to the system.

**LWC**
See *leave word calling*.

# M

**magnetic peripherals**
Data storage devices that use magnetic media to store information. Such devices include hard disk drives, floppy disk drives, and cartridge tape drives.

**mailbox**
A portion of disk memory given to each subscriber for creating and storing outgoing and incoming messages.

**mailing list**
A group of subscriber addresses assigned a list ID# and public or private status. A mailing list may be used to simplify sending messages to several subscribers.

**maintenance**
The process of identifying system errors and correcting them, or taking steps to prevent problems from occurring.

**major alarm**
An alarm detected by Lucent Intuity software that affects at least one fourth of the Lucent Intuity ports in service. Often a major alarm indicates that service is affected.

**MANOOS**
See *manually out-of-service*.

**manually out-of-service**
A unit has been intentionally taken out of service.

**mean time between failures**
The average time a manufacturer estimates before a failure occurs in a component or system.

**megabyte**
A unit of memory equal to 1,048,576 bytes (1024 x 1024). It is often rounded to one million.

**memory**
A device which can store logic states such that data can be accessed and retrieved. Memory may be temporary (such as system RAM) or permanent (such as disk).

**menu tree**
The way in which nested automated attendants are set up.

**message categories**
Groups of messages in Intuity AUDIX subscribers' mailboxes. Categories include new, unopened, and old for the incoming mailbox and delivered, accessed, undelivered, undeliverable (not deliverable), and file cabinet for the outgoing mailbox.

**message delivery**
An optional Lucent Intuity feature that permits subscribers to send messages to any touch-tone telephone, as long as the telephone number is in the range of allowable numbers. This feature is an extension of the AMIS analog networking feature and is automatically available when the AMIS feature is activated.

**Message Manager**
See *Intuity Message Manager*.

**message-waiting indicator (MWI)**
An indicator that alerts subscribers that they have received new mail messages. An MWI can be LED, neon, or audio (stutter dial tone).

**message waiting lamp (MWL)**
An lamp that alerts subscribers that they have received new mail messages. An MWL can be LED, neon, or audio (stutter dial tone). Also known as a message-waiting indicator.

**migration**
An installation that moves data from another messaging system to the Lucent Intuity system.

**minor alarm**
An alarm detected by maintenance software that affects less than one fourth of the Lucent Intuity ports in service, but has exceeded error thresholds or may impact service.

**mirroring**
a Lucent Intuity system feature that allows data from crucial filesystems to be continuously copied to backup (mirror) filesystems while the system is running. If the system has some problem where an original filesystem cannot be used, the backup filesystem is placed in service automatically.

**mode code**
A string of touch-tones from a MERLIN LEGEND switch. A mode code may send the Lucent Intuity AUDIX system information such as call type, calling party, called party, and on/off signals for message waiting lamps.

**modem**
A device that converts data from a form that is compatible with data processing equipment (digital) to a form compatible with transmission facilities (analog), and vice-vera.

**modular**
A term that describes equipment made of plug-in units that can be added together to make the system larger, improve its capabilities, or expand its size.

**modular processor data module (MPDM)**
A data device that converts RS-232C or RS-449 protocol signals to digital communications protocol (DCP) used by System 75/85, Generic1, and Generic 3 switches. MPDMs may connect Lucent Intuity to a switch DCIU or SCI link or connect terminals to a switch port card.

**MPDM**
See *modular processor data module*.

**MTBF**
See *mean time between failures*.

**multi-application platform (MAP)**
The computer hardware platform used by the Lucent Intuity system. Currently, a MAP/5, MAP/40, and MAP/100 are available.

**multilingual feature**
A feature that allows simultaneously-active language announcement sets on the system. With this feature, mailboxes can be administered so that subscribers can hear prompts in the language of their choice.

**MWI**
See *message-waiting indicator*.

**MWL**
See *message waiting lamp*.

## N

**networking**
See *Intuity AUDIX Digital Networking*.

**networking prefix**
A set of digits that identifies a Lucent Intuity machine.

**night attendant**
The automated attendant created on a MERLIN LEGEND switch that automatically becomes active during off-hours. The night attendant substitutes for one or more daytime attendants.

**not deliverable message**
Al message that could not be delivered after a specified number of attempts. This usually means that the subscriber's mailbox is full.

# O

**on-line help**
A Lucent Intuity feature that provides information about Lucent Intuity user interface screens by pressing a predetermined key. See also *help*.

**open systems interconnection (OSI)**
Internationally accepted framework of standards for communication between two systems made by different vendors.

**operating system (OS)**
The set of programs that runs the hardware and interprets software commands.

**option**
A choice selected from a menu, or an argument used in a command line to modify program output by modifying the execution of a command. When you do not specify any options, the command will execute according to its default options.

**OS**
See *operating system*.

**OSI**
See *open systems interconnection*.

**outcalling**
A Lucent Intuity feature that allows the system to dial subscribers' numbers to inform them they have new messages.

**outgoing mailbox**
A storage area for subscribers to keep copies of messages for future reference or action.

# P

**parallel transmission**
The transmission of several bits of data at the same time over different wires. Parallel transmission of data is usually faster than serial transmission.

**password**
A code assigned to every Lucent Intuity terminal user and Intuity AUDIX subscriber for security reasons. After dialing the system, subscribers must dial their personal password correctly to log on. Passwords are also assigned to local and remote networked machines to identify the machines or the network. See also *login.*

**password aging**
An Intuity AUDIX feature that allows administrators to set a length of time after which a subscriber's password expires. The subscriber is then forced to change the password.

**PBX**
See *private branch exchange*.

**PC**
See *power converter*.

**PDM (processor data module)**
See *modular processor data module (MPDM)*.

**PEC**
See *price element code*.

**peripheral device**
Equipment external to the Lucent Intuity cabinet, such as printers or terminals, necessary for full operation and maintenance of the Lucent Intuity system. Also called *peripherals*.

**personal directory**
An Intuity AUDIX feature allowing each subscriber to create a private list of customized names.

**personal fax extension**
See *secondary extension*.

**pinouts**
The signal description per pin number for a particular connector.

**PMS**
See *property management system*.

**port**
A connection or link between two devices, allowing information to travel to a desired location. For example, a switch port connects to a Lucent Intuity voice port to allow a subscriber to leave a message.

**POST**
See power-on self test.

**priority call answer**
An Intuity AUDIX feature that allows callers to designate a call answer message as a priority message. To make a message priority, the caller presses 2 after recording the message.

**priority messaging**
An Intuity AUDIX feature that allows some subscribers to send messages that are specially marked and preferentially presented to recipients. See also *priority outcalling*.

**priority outcalling**
Works with the priority messaging feature by allowing the message recipient to elect to be notified by outcalling only when a priority message has been received. See also *priority messaging*.

**private branch exchange (PBX)**
An analog, digital, or electronic system where data and voice transmissions are not confined to fixed communications paths, but are routed among available ports or channels. See also *switch*.

**private mailing list**
A list of addresses that only the owning subscriber can access.

**private messaging**
A feature of Intuity AUDIX that allows a subscriber to send a message that cannot be forwarded by the recipient.

**processor data module (PDM)**
See *modular processor data module (MPDM)*.

**processor interface (PI)**
A System 75, Generic 1, Generic 3i, Generic 3s, and Generic 3vs switch data link. Also called *processor interface board (PIB)*.

**programmed function key**
See *function key*.

**property management system**
Term used in hospitality industry referring to the database used by hotels for guest records and billing information.

**protocol**
A set of conventions or rules governing the format and timing of message exchanges (signals) to control data movement and the detection and possible correction of errors.

**public mailing list**
A list of addresses that any Intuity AUDIX subscriber can use if that subscriber knows the owner's list ID# and extension number. Only the owner can modify a public mailing list.

**pulse-to-touchtone converter**
A device connected to the switch that converts signals from a rotary phone to touch tones. This device allows callers to use rotary phones to access options in a subscriber's mailbox or to access options in an automated attendant.

# R

**RAM**
See *random access memory*.

**random access memory (RAM)**
The primary memory in a computer that can be overwritten with new information.

**read-only memory**
A memory device which is programmed at the factory and whose contents thereafter cannot be altered.

**reboot**
See *boot*.

**remote access**
Sending and receiving data to and from a computer or controlling a computer with terminals or PCs connected through communications links.

**remote installation**
A system, site, or piece of peripheral equipment that is installed in a different location from the host switch or system.

**remote network**
A network in which the systems are integrated with more than one switch.

**remote service center**
A Lucent or Lucent-certified organization that provides remote support to Lucent Intuity customers. Depending upon the terms of the maintenance contract, your remote service center may be notified of all major and minor alarms and have the ability to remotely log into your system and remedy problems.

**remote subscribers**
Intuity AUDIX subscribers whose mailboxes reside on a remote Intuity AUDIX Digital Networking machine.

**remote terminal**
A terminal connected to a computer over a phone line.

**REN**
See *ringer equivalence number*.

**reply loop escape**
An Intuity AUDIX feature that allows a subscriber the option of continuing to respond to a message after trying to reply to a nonsubscriber message.

**reply to sender**
An Intuity AUDIX feature that allows subscribers to immediately place a call to the originator of an incoming message if that person is in the switch's dial plan.

**request to send (RTS)**
One of the control signals on a RS-232 connector that places the modem in the originate mode so that it can begin to send.

**restart**
A Lucent Intuity feature that allows Intuity AUDIX subscribers who have reached the system through the call answer feature to access their own mailboxes by typing the *R (Restart) command. This feature is especially useful for long-distance calls or for users who wish to access the Lucent Intuity system when all the ports are busy. Also, the reinitialization of certain software. For example, restarting the messaging system.

**restore**
The process of recovering lost or damaged files by retrieving them from available backup tapes, floppy diskette, or another disk device.

**retention time**
The amount of time messages are saved on disk before being automatically deleted from a subscriber's mailbox.

**ringer equivalence number (REN)**
A number required in the United States for registering your telephone equipment with the phone company.

**ROM**
See *read-only memory*.

**RS-232**
A set of standards developed by the Electrical Industries Association (EIA) that specifies various electrical and mechanical characteristics for interfaces between computers, terminals, and modems.

**RTS**
See *request to send*.

# S

**sales representative**
A Lucent or Lucent-certified person who assists you in the purchasing, planning, and implementation of Lucent equipment and solutions.

**SCA**
See *switch communications adapter*.

**scan**
To automatically play mail messages, headers, or both.

**scheduled delivery time**
A time and/or date that an Intuity AUDIX subscriber optionally assigns to a message that tells the system when to deliver it. If a delivery time is omitted, the system sends the message immediately.

**SCSI**
See *small computer system interface*.

**secondary extension**
A second, fax-dedicated extension that directs incoming faxes directly into a subscriber's mailbox without ringing the telephone. The secondary extension shares the same mailbox as the voice extension, but acts like a fax machine. Also called *personal fax extension*.

**serial transmission**
The transmission of one bit at a time over a single wire.

**server**
A computer that processes and stores data that is used by other smaller computers. For Lucent Intuity Message Manager, Intuity AUDIX is the server. See also *client*.

**shielded cables**
Cables that are protected from interference with metallic braid or foil.

**SID**
See *switch integration device*.

**SIMMs**
See *single in-line memory modules*.

**simplified message service interface (SMSI)**
Type of data link connection to an integrated 1A ESS switch or 5ESS switch in the Lucent Intuity system.

**single in-line memory modules (SIMMs)**
A method of containing random access memory (RAM) chips on narrow circuit card strips that attach directly to sockets on the CPU circuit card. Multiple SIMMs are sometimes installed on a single CPU circuit card.

**small computer systems interface (SCSI)**
An interface standard defining the physical, logical, and electrical connections to computer system peripherals such as tape and disk drives.

**SMSI**
See *simplified message service interface*.

**split**
Group (or queue) of analog ports on the switch. See also *call-distribution group*.

**subscriber**
A Lucent Intuity user who has been assigned the ability to access the Intuity AUDIX Voice Messaging system.

**subscriber interface**
The devices that subscribers use to access their mailboxes, manage mailing lists, administer personal greeting, and use other messaging capabilities. Subscriber interfaces include a touch-tone telephone keypad and a PC using Lucent Intuity Message Manager.

**surge**
A sudden voltage rise and fall in an electrical circuit.

**surge protector**
A device that plugs into the phone system and the commercial AC power outlet. It is designed to protect the phone system from high voltage surges that could be damaging to the phone system.

**SW**
See *switch integration*.

**switch**
An automatic telephone exchange that allows the transmission of calls to and from the public telephone network. See also *private branch exchange (PBX)*.

**switched access**
A connection made from one endpoint to another through switch port cards. This allows the endpoint (such as a terminal) to be used for several applications.

**switch hook**
The device at the top of most telephones which is depressed when the handset is resting in the cradle (on hook). This device is raised when the handset is picked up (the phone is off hook).

**switch hook flash**
A signaling technique in which the signal is originated by momentarily depressing the switch hook.

**switch integration**
Sharing of information between a messaging system and a switch in order to provide a seamless interface to callers and subscribers.

**switch integration device**
Operates as a digital telephone set emulator.

**switch network**
Two or more interconnected switching systems.

**synchronous communication**
A method of data transmission in which bits or characters are sent at regular time intervals, rather than being spaced by start and stop bits. See also *asynchronous communication*.

**synchronous transmission**
A type of data transmission where the data characters and bits are exchanged at a fixed rate with the transmitter and receiver synchronized. This allows greater efficiency and supports more powerful protocols.

**system configuration**
See *configuration*.

# T

**T.30**
The standard for Group III fax machines that covers the protocol used to manage a fax session and negotiate the capabilities supported by each fax endpoint.

**tape cartridge**
One or more spare removable cartridges required to back up system information.

**tape drive**
The physical unit that holds, reads, and writes magnetic tape.

**TCP/IP**
See *transmission control protocol/internet program*.

**TDD**
See *telecommunications device for the deaf*.

**TDM**
See *time division multiplex*.

**telecommunications device for the deaf (TDD)**
A device with a keyboard and display unit that connects to or substitutes for a phone. The TDD allows a deaf or hearing-impaired person to communicate over the phone lines with other people who have TDDs. It also allows a deaf person to communicate with the Intuity AUDIX system.

**terminal**
See *display terminal*.

**terminal type**
A number indicating the type of terminal being used to log on to the Lucent Intuity system. Terminal type is the last required entry before gaining access to the Lucent Intuity display screens.

**terminating resistor**
A grounding resistor placed at the end of bus, line, or cable to prevent signals from being reflected or echoed.

**time division multiplex**
A device which derives multiple channels on a single transmission facility by connecting bit streams one at a time at regular intervals.

**tip/ring**
A term used to denote the analog telecommunications interface.

**tone generator**
A device acoustically coupled to a rotary phone, used to produce touch-tone sounds when subscribers cannot use a regular touch-tone generating voice terminal.

**traffic**
The flow of attempts, calls, and messages across a telecommunications network.

**translations**
Software assignments that tell a system what to expect on a certain voice port or the data link, or how to handle incoming data. They customize the Lucent Intuity system and switch features for users.

**transmission control protocol/internet program (TCP/IP)**
A set of protocols developed by the Department of Defense to link dissimilar computers across many kinds of networks. It is the protocol commonly used over Ethernet, as well as x.25, networks. Although committed to an eventual migration to an Open Systems Interconnection (OSI) architecture. TCP/IP currently divides networking functionality into only four layers: network interface, Internet, transport, and application.

**T/R**
See *tip/ring*.

**troubleshoot**
The process of locating and correcting errors in computer programs. Also called *debug*.

# U

**UCD**
See *uniform call distribution*.

**Undelete**
An Intuity AUDIX feature that allows subscribers to restore the last message deleted. The subscriber presses * U to restore a deleted message.

**undelivered message**
A message that has not yet been sent to an Intuity AUDIX subscriber's incoming mailbox. The message resides in the sender's outgoing message and may be modified or redirected by the sender.

**Unequipped**
See *equipped/unequipped*.

**unfinished message**
A message that was recorded but not approved or addressed, usually the result of an interrupted Intuity AUDIX session. Also called *working message*.

**uniform call distribution (UCD)**
The type of call-distribution group (or hunt group) of analog port cards on some switches that connects subscribers and users to the Intuity AUDIX system. System 75, Generic 1, Generic 3, and some central office switches use UCD groups. See also *call-distribution group*.

**uninterruptable power supply**
An auxiliary power unit for a telephone system that provides continuous power in cases where commercial power is lost.

**UNIX operating system**
A multi-user, multi-tasking computer operating system.

**upgrade**
An installation that moves a Lucent Intuity system to a newer release.

**untouched message**
An Intuity AUDIX feature that allows a subscriber to keep a message in its current category by using the **H (Hold) command. If the message is in the new category, message-waiting indication remains active (for example, the message-waiting lamp will remain lit).

**UPS**
See *uninterruptable power supply*.

**U. S. 123**
An alternate announcement set in U. S. English whose prompts use numbers, not letters, to identify phone keypad presses. For example, a prompt might say, "press star three," instead of, "press star D."

**user population**
A combination of light, medium, and heavy users on which Lucent Intuity configuration guidelines are based.

# V

**vector**
A customized program in the switch for processing incoming calls.

**voice link**
The Lucent Intuity analog connection(s) to a call-distribution group (or hunt group) of analog ports on the switch.

**voice mail**
See *voice message*.

**voice mailbox**
See *mailbox*.

**voice message**
Digitized information stored by the Lucent Intuity system on disk memory. Also called *voice mail*.

**voice port**
The tip/ring circuit card port that provides the interface between the Lucent Intuity system and the analog ports on the switch.

**voice terminal**
A telephone used for spoken communications with the Lucent Intuity system. A touch-tone telephone with a message-waiting indicator is recommended for all Intuity AUDIX subscribers.

**voicing**
Either speaking a message into the Lucent Intuity system during recording, or having the system playback a message or prompt to a subscriber.

**volt**
The unit of measurement of electromotive force. One volt is the force required to product a current of one ampere through a resistance of one ohm.

# W

**watt**
A unit of electrical power that is required to maintain a current of one amp under the pressure of one volt.

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