Lucent Technologies

Bell Labs Innovations

INTUITY™ Messaging Solutions

Release 4
Upgrade Procedures

Your Responsibility for Your System's Security
Toll fraud is the unauthorized use of your telecommunications system by an unauthorized party, for example, persons other than your company's employees, agents, subcontractors, or persons working on your company's behalf. Note that there may be a risk of toll fraud associated with your telecommunications system and, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

You and your system manager are responsible for the security of your system, such as programming and configuring your equipment to prevent unauthorized use. The system manager is also responsible for reading all installation, instruction, and system administration documents provided with this product in order to fully understand the features that can introduce risk of toll fraud and the steps that can be taken to reduce that risk. Lucent Technologies does not warrant that this product is immune from or will prevent unauthorized use of common-carrier telecommunication services or facilities accessed through or connected to it. Lucent Technologies will not be responsible for any charges that result from such unauthorized use.

Federal Communications Commission Statement
Part 15: Class A Statement. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to corect the interference at his/her own expense.

Part 68: Network Registration Number. This equipment is registered with the FCC in accordance with Part 68 of the FCC Rules. It is identified by FCC registration number AS5USA-20411-VM-E.

Part 68: Answer-Supervision Signaling. Allowing this equipment to be operated in a manner that does not provide proper answer-supervision signaling is in violation of Part 68 rules. This equipment returns answer-supervision signals to the public switched network when:
- Answered by the called station
- Answered by the attendant
- Routed to a recorded announcement that can be administered by the CPE user

This equipment returns answer-supervision signals on all DID calls forwarded back to the public switched telephone network. Permissible exceptions are:
- A call is unanswered
- A busy tone is received
- A reorder tone is received

Canadian Department of Communications (DOC) Interference Information
This digital apparatus does not exceed the Class A limits for radio noise emissions set out in the radio interference regulations of the Canadian Department of Communications.

Le Présent Appareil Nomérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A préscrites dans le reglement sur le brouillage radioélectrique édicté par le ministére des Communications du Canada.

Trademarks
For trademark information, refer to the section entitled, ""Trademarks and Service Marks" on page xxi" in "About This Book."

Ordering Information
Call: Lucent Technologies BCS Publications Center
Voice 1 800 457-1235   International Voice 317 361-5353
Fax 1 800 457-1764   International Fax 317 361-5355
Write: Lucent Technologies BCS Publications Center
P.O. Box 4100
Crawfordsville, IN 47933
Order: Document No. 585-310-168
Comcode 107889263
Issue 2, January 1997
For more information about AT&T documents, refer to the section entitled, "Related Documents" in "About This Book."

You can be placed on a Standing Order list for this and other BCS documents you may need. Standing Order will enable you to automatically receive updated versions of individual documents or document sets, billed to account information that you provide. For more information on Standing Orders, or to be put on a list to receive future issues of this document, please contact the Lucent Technologies BCS Publications Center.

Lucent Technologies Fraud Intervention
If you *suspect that you are being victimized* by toll fraud and you need technical support or assistance, call BCS Technical Service Center Toll Fraud Intervention Hotline at 1 800 643-2353.

Comments
To comment on this document, return the comment card at the front of the document.

Acknowledgment
This document was prepared by the BCS Product Documentation Development group, Lucent Technologies, Denver, CO 80234-2703 and Columbus, OH.

RECYCLED PAPER

Contents

Contents

2   Preparing Both Lucent INTUITY Systems for an In-Service or Out-of-Service Upgrade   2-1

3   Connecting the Lucent INTUITY Systems for an In-Service or Out-of-Service Upgrade   3-1

Contents

4   Running the Out-of-Service Upgrade   4-1

5   Running the In-Service Upgrade   5-1

Contents

Contents

Contents

Contents

Contents

Contents

Contents

About This Book

Purpose

This book, *Lucent INTUITY™ Messaging Solutions Release 4 Upgrade Procedures, 585-310-168,* contains the procedures needed for upgrading a Lucent INTUITY system with an updated release of Lucent INTUITY software.

This chapter describes:

- Intended audiences
- Prerequisite skills and knowledge the audience should possess
- How this book is organized
- How to use this book
- Conventions used in this book
- Trademarks and Service Marks
- Related resources, including additional documentation and training available
- How to comment on this book

Intended Audiences

This book is intended primarily for the on-site service technician and technical customer personnel. Secondary audiences include:

- Field support and remote maintenance centers
- Helpline personnel

Prerequisite Skills and Knowledge

The primary users of this book must have fundamental knowledge regarding computers and PBXs, and are familiar with previous products such as INTUITY AUDIX or AUDIX Voice Power.

Organization of This Book

This book is divided into the following chapters and appendices:

- Chapter 1, "Getting Started"

  This chapter provides an overview of the in-service and out-of-service upgrade process and hints for performing a successful in-service and out-of-service upgrade. It also describes the materials and information needed to complete an in-service or out-of-service upgrade, as well as how to move around in the screens, windows, and menus. Additionally, this chapter contains an upgrade checklist.

- Chapter 2, "Preparing Both Lucent INTUITY Systems for an In-Service or Out-of-Service Upgrade"

  This chapter provides step-by-step procedures for setting up the Lucent INTUITY Release 4 system for the in-service and out-of-service upgrade and preparing the Lucent INTUITY Release 2 or Release 3 system for data transfer.

- Chapter 3, "Connecting the Lucent INTUITY Systems for an In-Service or Out-of-Service Upgrade"

  This chapter describes the procedures used to connect the new and existing Lucent INTUITY systems. The procedures include running the Pre-Upgrade Package, installing a LAN card (if needed), and making cable connections.

- Chapter 4, "Running the Out-of-Service Upgrade"

  This chapter describes the procedure used to run the data transfer from the existing system to the new system while the existing system is unavailable to callers or users.

- Chapter 5, "Running the In-Service Upgrade"

  This chapter describes the procedure used to run the data transfer from the existing system to the new system while the existing system is available for callers and users for *most* of the upgrade.

  ### ➡ NOTE:
  Even during an in-service upgrade, there is a period of time that the existing system will be out of service.

■ Chapter 6, "Verifying the In-Service or Out-of-Service Upgrade"

This chapter describes the procedures the technician performs to verify that all the Lucent INTUITY Release 2 or Release 3 data has transferred to the Lucent INTUITY Release 4 system and that the Release 4 system is capable of taking calls and operating properly.

■ Chapter 7, "Completing the In-Service or Out-of-Service Upgrade"

This chapter provides instructions to ensure that all final connections to Lucent INTUITY Release 4 system are made. Additionally, procedures are included for the orderly removal of the Lucent INTUITY Release 2 or Release 3 system from the customer's site.

■ Appendix A, "Installing a LAN Circuit Card in the MAP/5"

This appendix provides instructions for installing a LAN card in a Lucent INTUITY Release 2 or Release 3 MAP/5 system. The procedures in this appendix are only performed if there is no LAN card in the existing Release 2 or Release 3 machine.

■ Appendix B, "Installing a LAN Circuit Card in the MAP/40"

This appendix provides instructions for installing a LAN card in a Lucent INTUITY Release 2 or Release 3 MAP/40 system. The procedures in this appendix are only performed if there is no LAN card in the existing Release 2 or Release 3 machine.

■ Appendix C, "Installing a LAN Circuit Card in the MAP/100"

This appendix provides instructions for installing a LAN card in a Lucent INTUITY Release 2 or Release 3 MAP/100 system. The procedures in this appendix are only performed if there is no LAN card in the existing Release 2 or Release 3 machine.

■ Appendix D, "Preparing for the Transfer of Custom Announcement Sets"

This appendix provides instructions for identifying the base announcement set that a corresponding custom announcement set uses. Additionally, procedures are included to enable the technician to transfer the custom announcement sets from the Lucent INTUITY Release 2 or Release 3 to the Lucent INTUITY Release 4 system.

■ Appendix F, "Running a Software Upgrade (Release 4.0 to Release 4.n)"

This appendix provides instructions for upgrading the Lucent INTUITY Release 4 system from Release 4.0 to Release 4.n.

■ Appendix F, "Performing a Platform Upgrade (MAP/40s to MAP/40)"

This appendix provides instructions for upgrading MAP/40s platform to a MAP/40 platform with 64 Mbyte of memory.

■ Appendix G, "Accessing Windows and Screens"

This appendix provides an overview of how to access and use the Lucent INTUITY™ AUDIX® administration screens and the Lucent INTUITY platform windows.

- Abbreviations and Glossary

  These sections lists abbreviations and acronyms used in Lucent INTUITY system documentation and defines the terms and acronyms used in Lucent INTUITY system documentation, respectively.

- Index

  An alphabetized list which provides a cross reference of specific terms used in the book and the page numbers on which they are mentioned.

How to Use This Book

Use this book to complete several varieties of upgrades.

- *If you are performing an out-of-service upgrade*, use the ''Out-of-Service Checklist'', follow the directions in Chapter 4, and skip Chapter 5. Within each chapter, follow the procedures in the order presented.

- *If you are performing an in-service upgrade*, use the appropriate ''In-Service Checklists'', follow the directions in Chapter 5, and skip Chapter 4. Within each chapter, follow the procedures in the order presented.

- *If you are performing a Release 4 software upgrade*, use the procedures described in Appendix E. A software upgrade increments the software and platform packages from Lucent INTUITY Release 4.0 to Release 4.n.

- *If you are upgrading a MAP/40s platform to a MAP/40 platform*, use Appendix F. The necessary hardware installation and software upgrade procedures are described in that appendix.

Conventions Used in This Book

This section describes the terminology and data-entry conventions used in this book.

Terminology

- The words "subscriber" and "user" are interchangeable terms that describe a person administered on the Lucent INTUITY system. The word "user" is the preferred term in the text; however, "subscriber" appears on most of the screens and is the command word you must type at the command line, for example, **change subscriber "Jane Doe".**

- The word "type" means to press the key or sequence of keys specified. For example, an instruction to type the letter "y" is shown as

  Type **y** to continue.

■ The word "enter" means to type a value and then press ⟨ENTER⟩. For
example, an instruction to type the letter "y" and press ⟨ENTER⟩ is shown as

  Enter **y** to continue.

■ The word "select" means to move the cursor to the desired menu item and
then press ⟨ENTER⟩. For example, an instruction to move the cursor to the
`Start Test` option on the Network Loop-Around Test screen and then
press ⟨ENTER⟩ is shown as

  Select `Start Test`.

■ The system displays *windows, screens,* and *menus.*

  — *Windows* show system information (Figure 1 on page xvii).

  — *Screens* request user input. This input is either a value or other
  specific information you must type into a field (Figure 2 on page
  xviii) or a command you must enter from the `enter command:`
  prompt (Figure 2 on page xviii).

  — *Menus* (Figure 3 on page xviii) present options from which you can
  choose to view another menu, screen, or window.
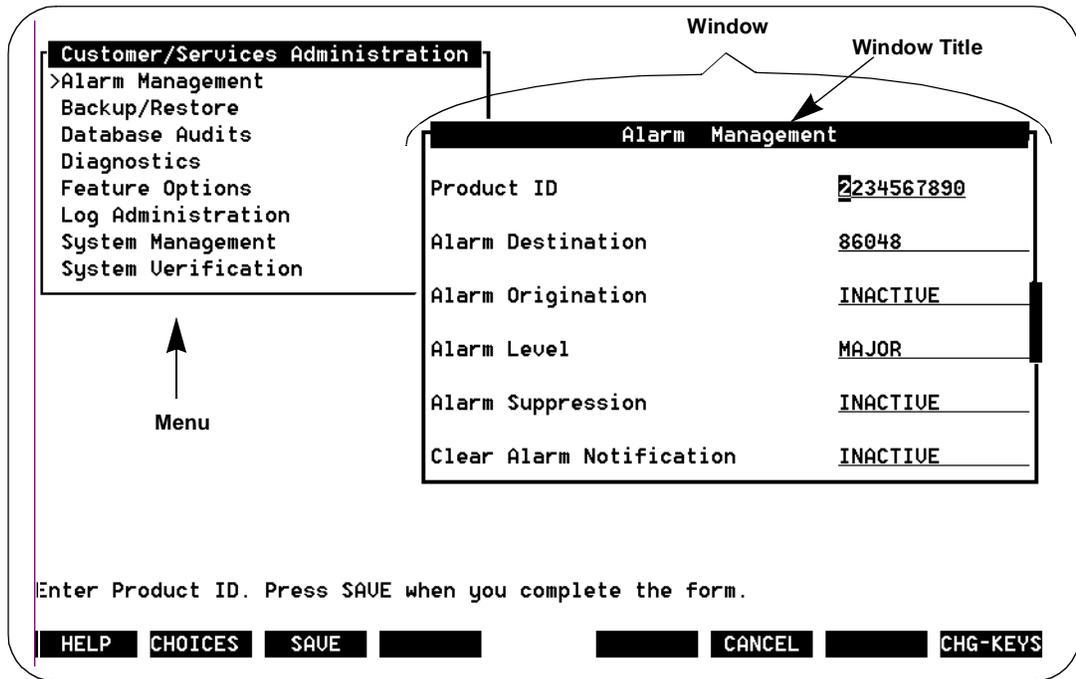
Figure 1.   Example of a Lucent INTUITY Window

```
drin                Active              Alarms:   wA                Logins: 4
add remote-subscriber draudln1                                 Page 1 of 1
                        REMOTE SUBSCRIBER


       Subscriber Name: █_____
    Trusted Server Name: draudln1 ◄
Text Address: _____  Field Entry_____
              _____


         Community ID: __
         Administered? y
          Voiced Name?
Non-Administered Type:                 Last Usage Date:




─enter command prompt                   Command Line Entry



Press [ENTER] to execute or press [CANCEL] to abort
►enter command: add remote-subscriber draudln1 ◄
```

Figure 2.   Example of an AUDIX Administration Screen with an Entry in a Field and in the Command Line

```
        Networking Administration
       >Local Machine Administration
        Remote Machine Administration
        Networking Channel Administration
        Networking Traffic
```

Figure 3.   Example of a Lucent INTUITY Menu

Keyboard and Telephone Keypad Representations

■   Keys that you press on your *terminal or PC keyboard* are represented as rounded boxes. For example, an instruction to press the enter key is shown as

Press ⌈ENTER⌋.

■   Two keys that you press at the same time on your *terminal or PC keyboard* (that is, you press and hold down the first key and then press the second key) are represented as a series inside a rounded box. For example, an instruction to press and hold ⌈ALT⌋ while typing the letter "d" is shown as

Press ⌈ ALT–D ⌋.

■ A combination keystroke is a series of keystrokes that combines the two key function described above plus a third key, that is, you press and hold down the first key, then press the second key, then release those keys and press a third key. A combination keystroke is represented as an equation. For example, an instruction to press and hold $\boxed{\text{ALT}}$ while typing the letter "d" and then typing the number "1" is shown as

> Press $\boxed{\text{ALT–D}}$ + $\boxed{1}$.

■ Function keys on your terminal, PC, or system screens, also known as *soft keys*, are represented as square boxes followed by the function or value of that key enclosed in parentheses. For example, an instruction to press function key 3 is shown as

> Press $\boxed{\text{F3}}$ (Save).

■ Keys that you press on your *telephone keypad* are represented as square boxes. For example, an instruction to press the first key on your telephone keypad is shown as

> Press $\boxed{1}$ to record a message.

Screen Displays

■ Values, system messages, field names, and prompts that appear on the screen are shown in typewriter-style `Courier` type, as shown in the following examples:

Example 1:

> Enter the number of ports to be dedicated to outbound traffic in the `Maximum Simultaneous Ports:` field.

Example 2:

> The system displays the message `Alarm Form Update was successful.`

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

> Start at the Lucent INTUITY Main Menu and select:

> ```
> > Customer/Services Administration
> ```
> ```
>     > Alarm Management
> ```

> In this example, you would access the Main Menu and select the line item `Customer/Service Administration`. From the Customer/Service Administration menu that then displays, you would select the line item `Alarm Management`.

■ *Screens shown in this book are examples only*. The screens you see on your machine will be similar, but not exactly the same in all cases.

Data Entry Conventions

- Commands and text you type in or enter appear in **bold type**, as in the following examples:

  Example 1:

    Enter **change-switch-time-zone** at the `enter command:` prompt.

  Example 2:

    Type **high** or **low** in the `Speed:` field.

- Command variables are shown in *bold italic* type when they are part of what you must type in and *regular italic* type when they are not, for example:

    Enter **ch ma** *machine_name*, where *machine_name* is the name of the call delivery machine you just created.

Safety and Security Alert Labels

This book uses the following symbols to call your attention to potential problems that could cause personal injury, damage to equipment, loss of data, service interruptions, or breaches of toll fraud security:

⚠ **CAUTION:**
Indicates the presence of a hazard that if not avoided can or will cause minor personal injury or property damage, including loss of data.

⚠ **WARNING:**
Indicates the presence of a hazard that if not avoided can cause death or severe personal injury.

⚠ **DANGER:**
Indicates the presence of a hazard that if not avoided will cause death or severe personal injury.

⚠ **SECURITY ALERT:**
Indicates the presence of a toll fraud security hazard. Toll fraud is the unauthorized use of a telecommunications system by an unauthorized party.

Trademarks and Service Marks

The following trademarked products are mentioned in books in the Lucent INTUITY document set:

- AT™ is a trademark of Hayes Microcomputer Products, Inc.
- AUDIX® is a registered trademark of Lucent Technologies™.
- cc:Mail® is a registered trademark of cc:Mail, a subsidiary of Lotus Development Corporation.
- COMSPHERE® is a registered trademark of Lucent Technologies™ Paradyne Corp.
- CONVERSANT® Voice Information System is a registered trademark of Lucent Technologies™.
- DEFINITY® is a registered trademark of Lucent Technologies™.
- DMS-100™ is a trademark of Northern Telecom Limited.
- Dterm™ is a trademark of NEC Telephones, Inc.
- Equinox™ is a trademark of Equinox Systems, Inc.
- 5ESS® is a registered trademark of Lucent Technologies™.
- INTUITY™ is a trademark of Lucent Technologies™.
- Lotus® is a registered trademark of Lotus Development Corporation.
- Lotus Notes® is a registered trademark of Lotus Development Corporation.
- MEGAPORT™ is a trademark of Equinox Systems, Inc.
- MEGAPLEX™ is a trademark of Equinox Systems, Inc.
- Meridian™ is a trademark of Northern Telecom Limited.
- MERLIN LEGEND® is a registered trademark of Lucent Technologies™.
- Microcom Networking Protocol® is a registered trademark of Microcom, Inc.
- Microsoft® is a registered trademark of Microsoft Corporation.
- MS® is a registered trademark of Microsoft Corporation.
- MS-DOS® is a registered trademark of Microsoft Corporation.
- Mitel™ is a trademark of Mitel Corporation.
- NEAX™ is a trademark of NEC Telephone, Inc.
- NEC® is a registered trademark of NEC Telephone, Inc.
- Netware® is a registered trademark of Novell, Inc.
- Netware® Loadable Module™ is a registered trademark of Novell, Inc.
- Northern Telecom® is a registered trademark of Northern Telecom Limited.

- Novell® is a registered trademark of Novell, Inc.

- Paradyne® is a registered trademark of Lucent Technologies™.

- Pentium™ is a registered trademark of Intel Corporation.

- Phillips® is a registered trademark of Phillips Screw Company.

- Rolm® is a registered trademark of International Business Machines.

- SL-1™ is a trademark of Northern Telecom Limited.

- softFAX® is a registered trademark of VOXEM, Inc.

- SUPERSET™ is a trademark of Mitel Corporation.

- SX-100™ is a trademark of Mitel Corporation.

- SX-200™ is a trademark of Mitel Corporation.

- SX-2000™ is a trademark of Mitel Corporation.

- Telephony OneStop™ is a registered trademark of Lotus Development Corporation.

- TMI™ is a trademark of Texas Micro Systems, Inc.

- UNIX® is a registered trademark of UNIX Systems Laboratories, Inc.

- Voice Bridge® is a registered trademark of Voice Technologies Group, Inc.

- VOXEM® is a registered trademark of VOXEM, Inc.

- VT100™ is a trademark of Digital Equipment Corporation.

- Windows™ is a trademark of Microsoft Corporation.

Related Resources

This section describes additional documentation and training available for you to learn more about installation of the Lucent INTUITY product.

Documentation

➡ **NOTE:**
The *Lucent INTUITY™ Messaging Solutions Release 4 Documentation Guide, 585-310-016*, contains a detailed description of all books included in the Release 4.0 Lucent INTUITY documentation library. Always refer to the appropriate book for specific information on planning, installing, administering, or maintaining a Lucent INTUITY system.

It is suggested that you obtain and use the following books in conjunction with this upgrade book:

■ *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s System Installation, 585-310-169*
or
Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 System Installation, 585-310-173

■ *Lucent INTUITY™ Messaging Solutions Release 4 Change Description and Upgrade Planning, 585-310-607*

See the inside front cover for information on how to order Lucent INTUITY documentation.

Training

The following training class is recommended as a prerequisite to installing a Release 4.0 Lucent INTUITY system:

■ Course No. MO1616A, Lucent INTUITY Messaging Solutions Installation and Maintenance

For more information on Lucent INTUITY training, call the BCS Education and Training Center at one of the following numbers:

■ Organizations within Lucent: (904) 636-3261

■ Lucent customers and all others: (800) 255-8988

How to Comment on This Book

We are always interested in your suggestions for improving this book. Please complete and return the reader comment card that is located behind the title page.

If the reader comment card has been removed, send your comments to:

Lucent Technologies
Product Documentation Development Department
Room 22-2H15
11900 North Pecos Street
Denver, Colorado 80234

Alternatively, you can fax your comments to:

Lucent INTUITY Writing Team
(303) 538-1741

Please be sure to mention the name and order number of this book:

Lucent INTUITY™ Messaging Solutions Release 4 Upgrade Procedures, 585-310-168

Getting Started

<div style="text-align: right; font-size: 4em;">1</div>

Overview

There are several varieties of upgrades available to provide customers with added functionality, features, and system capability. Those upgrades are:

- Upgrading from a Lucent INTUITY Release 2 or Release 3 system to a Lucent INTUITY Release 4 system. This *system upgrade* can be either an *in-service upgrade* or an *out-of-service upgrade*. This chapter provides information on in-service and out-of-service upgrades.

- Upgrading the software and platform packages on an existing Lucent INTUITY Release 4 system from Release 4.0 to Release 4.n. See Appendix E for information on *software upgrades*.

- Upgrading a Lucent INTUITY Release 4 MAP/40s platform to a MAP/40 platform, with the full complement of MAP/40 capacity and functionality. See Appendix F for information on *platform upgrades*.

This chapter provides:

- An overview of the in-service and out-of-service system upgrades, including:

    — Preparing for the in-service and out-of-service upgrade

    — LAN card requirements for the Lucent INTUITY systems

    — Running the *out-of-service* or the *in-service* upgrade

    — Installing the Lucent INTUITY Release 4 System

- A listing of the materials and information needed

- Information on stopping an in-service and out-of-service upgrade

- Connecting the systems during the in-service and out-of-service upgrade, including:

    — Direct connection

    — Customer LAN connection

- Upgrade checklists for both out-of-service and in-service upgrades

Purpose

The purpose of this chapter is to provide the technician with a general understanding of the in-service and out-of-service upgrade process. The information outlined in this chapter is covered in detail in the subsequent chapters of this book.

System Upgrade Overview

Upgrading a Lucent INTUITY Release 2 or Release 3 system to a Lucent INTUITY Release 4 system involves more than loading some new software. The upgrade actually starts at the Lucent factory, where a new Release 4 computer is:

- Assembled

- Loaded with a core set of software and hardware

- Loaded with any optional software and hardware the customer ordered

The new computer contains the equivalent capability of the existing Release 2 or Release 3 computer that is to be replaced, plus the added functionality, capability, capacity, and feature set of the new platform and the newest release of INTUITY AUDIX.

Once the Release 4 system is shipped to the customer's site, the in-service or out-of-service upgrade continues into its final steps; transferring the customer's data onto the new machine and removing the Release 2 or Release 3 machine from the customer's site.

The final steps of the in-service and out-of-service upgrade can be broken down into the following processes:

- Preparing for an In-Service or Out-of-Service Upgrade

- LAN Card Requirements for the Lucent INTUITY Systems (see page 1-4)

- Running an In-Service or Out-of-Service Upgrade (see page 1-4)

- Installing the Lucent INTUITY Release 4 System (see page 1-5)

This section provides an overview of each of these processes.

⚠ WARNING:
The traffic data and Activity Log data are not transferred during an upgrade. If you use traffic data on a regular basis, run the appropriate traffic reports immediately prior to the start of the system upgrade.

➡ NOTE:
See Appendix E for information on *software upgrades*, that is, upgrading the software and platform packages on an existing Lucent INTUITY Release 4 system from Release 4.0 to Release 4.n.

See Appendix F for information on *platform upgrades*, that is upgrading a Lucent INTUITY Release 4 MAP/40s platform to a MAP/40 platform.

Preparing for an In-Service or
Out-of-Service Upgrade

The new and existing Lucent INTUITY systems must be set up close enough so that the video cables that run from each system to the monitor, can connect to both systems. Typically, video cables are 10 feet long. In that case, the new and existing systems can be no more than 20 feet apart. Additionally, the new Release 4 system must be located so that the cables from the existing system can be swung to the new system once the in-service or out-of-service upgrade is complete.

⟹ **NOTE:**
Check the contents of the Reusable Upgrade Kit (RUK). Call the remote maintenance center at least 48 hours prior to the in-service or out-of-service upgrade if you haven't received all the required documentation and software.

LAN Card Requirements for the
Lucent INTUITY Systems

Copying data from a Release 2 or Release 3 machine to a Release 4 machine requires that both machines have LAN cards. The pre-upgrade software, after it is installed on the existing platform, checks to see if a LAN card is on the platform. If the existing system does not contain a LAN card, the pre-upgrade software will alert you that a LAN card must be installed.

A LAN card is included in the RUK.

Running an In-Service or Out-of-Service Upgrade

Running an in-service or out-of-service upgrade consists of transferring the customers messages, customer greetings, and user database from the Release 2 or Release 3 system to the Release 4 system. The upgrade can be run with the customer's system *in-service* or *out-of-service*.

Out-of-Service Upgrade

An out-of-service upgrade is conducted with the Release 2 or Release 3 system out of service, that is, unavailable to users or callers. For the duration of an out-of-service upgrade, the customer will experience a loss of service.

The upgrade package copies and translates the data from the Release 2 or Release 3 system to the Release 4 system.

In-Service Upgrade

An in-service upgrade is conducted with the Release 2 or Release 3 system in service during *most* of the upgrade process. As in the out-of-service upgrade, the upgrade package copies and translates the data from the Release 2 or Release 3 system to the Release 4 system. However, most of the data transfer occurs while the Release 2 or Release 3 system is processing calls.

The in-service upgrade can be conducted on the customer's LAN or through a direct connection between the Release 2 or Release 3 system and the Release 4 system. File transfers are moderated so that the effect on the Release 2 or Release 3 system performance and the customer's LAN is minimized.

NOTE:
Because of the amount of traffic produced by the Release 2 or Release 3 system on the customer's LAN, LAN service will be slightly degraded.

The in-service upgrade allows the customer to maintain service on the Release 2 or Release 3 system for most of the data transfer. *However, at some point the Release 2 or Release 3 system will have to be shut down to complete the upgrade* and move the cables from the Release 2 or Release 3 system to the new Release 4 system.

Installing the Lucent INTUITY Release 4 System

Once the customer data have been copied from the Release 2 or Release 3 system to the Release 4 system, the Release 4 system must be established as a working system. To install the Release 4 System, the following steps must be taken:

- The systems must be rearranged so that the Release 4 system is in the appropriate spot, as designated by the customer.

- The cables that were connecting the Release 2 or Release 3 system must be attached to the Release 4 system.

- If a DEFINITY switch was busied out, the switch link must be released.

- User data and system configuration settings are transferred during the in-service or out-of-service upgrade process. However, there is some additional administration and testing on the Release 4 system that must be performed.

- The appropriate passwords must be assigned to the Release 4 system.

- The upgrade software package must be removed.

- The Release 4 system must be backed up.

Before You Begin; Materials and Information Needed

Table 1-1 lists the materials and information which are necessary before you start the in-service or out-of-service upgrade procedure.

Table 1-1.   System Upgrade Materials

Material	Source
Upgrade checklist (*out-of-service* or *in-service*)	This chapter
Login password for craft	Customer representative or Lucent project manager
Name and telephone number of the remote maintenance center contact	Lucent project manager
Verification that the customer has backed up any custom announcements	Customer representative
Lucent INTUITY Release 4 system platform	Lucent project manager
Female–male gender changer	Lucent project manager
Reusable Upgrade Kit (RUK) — A/B switch box — Video cables — Ethernet LAN circuit card — 25-foot coaxial cable with two "T" adapters and terminators — Pre-upgrade software package — Lucent INTUITY Messaging Solutions Release 4 Upgrade Procedures (document)	Lucent project manager
Several initialized, blank cartridge tapes for a backup	Lucent project manager
The appropriate Lucent INTUITY documentation: *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s System Installation, 585-310-169* or *Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 System Installation, 585-310-173*	Customer representative (This book was delivered with the Lucent INTUITY Release 4 system.)
Name for the Lucent INTUITY Release 4 system ⮕ **NOTE:** If you are doing an in-service upgrade on the customer's LAN, the customer must provide a temporary system name. If the upgrade is being done with a direct connection, a default name will be assigned.	Customer representative

Table 1-1. System Upgrade Materials — *Continued*

Material	Source
IP address for the Lucent INTUITY Release 4 system **≡➤ NOTE:** If you are doing an in-service upgrade on the customer's LAN, the customer must provide a temporary IP address. If the upgrade is being done with a direct connection, a default IP address will be assigned.	Customer representative

Subnet mask for the Lucent INTUITY Release 4 system
 	
≡➤ NOTE:
    If you are doing an in-service upgrade on the customer's LAN, the customer must provide the subnet mask.
    If the upgrade is being done with a direct connection, a default subnet mask will be assigned.
	Customer representative

If the customer's configuration includes customized announcements, you need a: ■ Listing of all changed fragments ■ Description of what changed to make the announcement custom, for example, re-recorded fragments, substitution of silence or 'blank' for a fragment, etc. **≡➤ NOTE:** The wording for some of the standard U S English fragments has changed for Release 4.	Customer representative

Stopping an In-Service or Out-of-Service Upgrade

> **⚠ WARNING:**
> *Do not stop the upgrade unless it is absolutely necessary. Contact the remote maintenance center before stopping an upgrade.*

If the in-service or out-of-service upgrade process stops, contact your remote maintenance center. If you are instructed to begin the upgrade again, the upgrade process has tracked which packages have been upgraded and will begin again at the place where it stopped.

In-Service and Out-of-Service Upgrade Connectivity

The Lucent INTUITY systems can be connected through:

- A direct connection, which involves linking the Lucent INTUITY systems through a coaxial LAN cable that attaches to both LAN circuit cards

- An existing customer LAN

> **⇒ NOTE:**
> The procedure for connecting the systems is presented in a later chapter. The in-service or out-of-service upgrade checklist will direct you how and when to perform the cabling procedure.

Direct Connection

Figure 1-1 shows the cabling for an out-of-service or in-service upgrade using a direct connection.

> **⇒ NOTE:**
> Most in-service transfers are done using a direct connection. However, using a direct connection requires a reboot of the system.
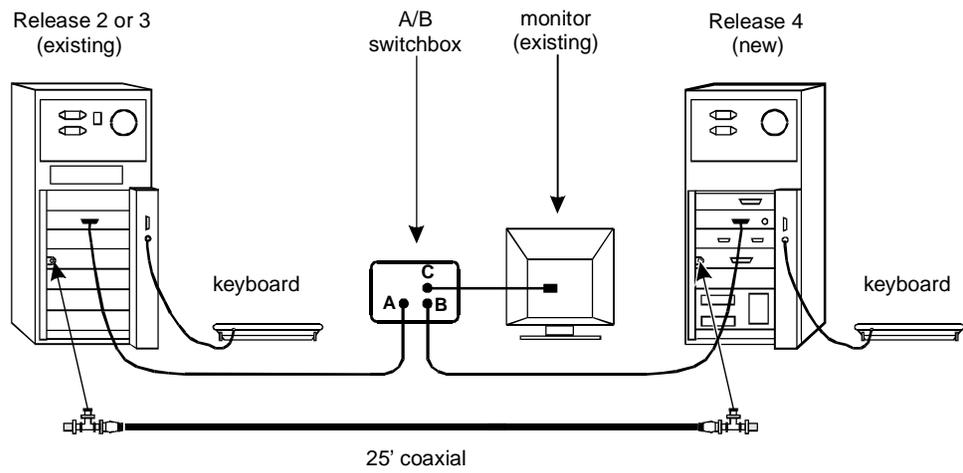
Figure 1-1.   Direct Connection

Customer LAN Connection

Figure 1-2 shows a LAN connection for an in-service upgrade.
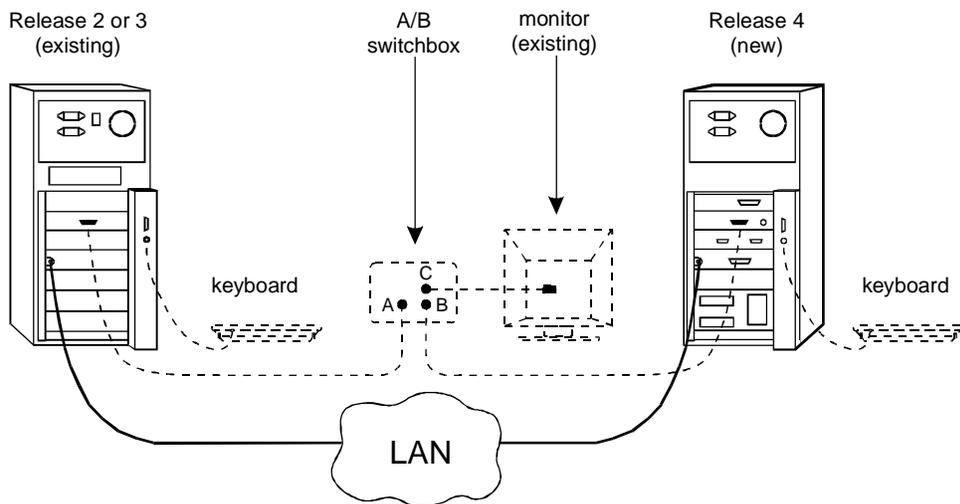
Figure 1-2.   Customer LAN Connection

Out-of-Service and In-Service Upgrade Checklists

The following checklists can be used for easy reference for the tasks necessary to perform either an:

- Out-of-service
- In-service upgrade (see page 1-19)

Out-of-Service Checklist

> ⚠ **CAUTION:**
> *If you are conducting an in-service transfer, do not use the checklist in this section. See "In-Service Checklists" on page 1-19 for the correct checklist.*

Table 1-2 on page 1-13 is a checklist of procedures necessary when upgrading using an out-of-service data transfer through a direct connection.

Table 1-2 on page 1-13 IS DESIGNED TO BE TAKEN OUT OF THE BOOK AND USED AS A REFERENCE GUIDE DURING THE OUT-OF-SERVICE UPGRADE.

Table 1-2. Out-of-Service Upgrade Using a Direct Connection Checklist

Step	Procedure	Reference Documentation/ Location of Procedure	✔
1.	Set up the Lucent INTUITY Release 4 system, including connecting the ■ Monitor ■ Keyboard ■ A/B switchbox.	"Setting Up the Lucent INTUITY Release 4 System" on page 2-2 in this book *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s System Installation, 585-310-169*, Chapter 2, "Unpacking the MAP/40 and MAP/40s and Installing the Nonassembled Hardware" *Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 System Installation, 585-310-173*, Chapter 2, "Unpacking the MAP/100 and Installing the Nonassembled Hardware"	
2.	Change the name of the Release 4 system, if necessary.	"Setting the Lucent INTUITY Release 4 Machine Name" on page 2-5 in this book	
3.	Obtain the Lucent INTUITY Release 2 or Release 3 LAN settings.	"Obtaining the Lucent INTUITY Release 2 or Release 3 LAN Settings" on page 2-7 in this book	
4.	Check for the presence of custom announcement sets.	"Checking the Lucent INTUITY Release 2 or Release 3 System for Custom Announcements" on page 2-9 in this book	
5.	⇒ **NOTE:** If the Release 2 or Release 3 system does not have custom announcements, skip this step. Prepare for the transfer of custom announcement sets.	Appendix D, "Preparing for the Transfer of Custom Announcement Sets" in this book	
6.	Install the pre-upgrade package on the Release 2 or Release 3 system.	"Installing the Pre-Upgrade Package on the Lucent INTUITY Release 2 or Release 3 System" on page 3-3 in this book	
7.	Run the pre-upgrade package.	"Running the Pre-Upgrade Package" on page 3-7 in this book	
8.	Turn off alarm origination for the Release 2 or Release 3 system.	"Turning Off Alarm Origination on the Lucent INTUITY Release 2 or Release 3 System" on page 3-5 in this book	

Continued on next page

Table 1-2.   Out-of-Service Upgrade Using a Direct Connection Checklist — *Continued*

Step	Procedure	Reference Documentation/ Location of Procedure	✔
9.	**⚠ CAUTION:** *If the Release 2 or Release 3 system is not connected to a DEFINITY switch, skip this step.* Busy out the switch data link.	"Busying Out the Switch Data Link" on page 4-2 in this book	
10.	**⚠ CAUTION:** *If the Release 2 or Release 3 system is already equipped with a LAN card, skip this step.* Install a LAN card, if applicable.	"Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System" on page 3-14 in this book Appendix A, "Installing a LAN Circuit Card in the MAP/5" in this book Appendix B, "Installing a LAN Circuit Card in the MAP/40" in this book Appendix C, "Installing a LAN Circuit Card in the MAP/100" in this book	
11.	Set the LAN settings on the Release 2 or Release 3 system to the default settings. **⇒ NOTE:** If the customer site has an existing LAN, this procedure changes the LAN address. In that case, the system must be rebooted.	"Setting the LAN Configuration for an Out-of-Service Upgrade" on page 3-9 in this book	

Table 1-2. Out-of-Service Upgrade Using a Direct Connection Checklist — *Continued*

Step	Procedure	Reference Documentation/ Location of Procedure	✔
12.	Connect the coaxial cable between the Release 2 or Release 3 system and the Release 4 sytem one of two ways:		
	■ If the Release 2 or Release 3 system *does not have a LAN*, connect the platforms.	"Establishing a Cable Connection Between the Lucent INTUITY Systems" on page 3-17 in this book	
	■ If the Release 2 or Release 3 system *has an existing LAN*, unhook the LAN and connect the platforms.	"Establishing a Cable Connection Between the Lucent INTUITY Systems" on page 3-17 in this book **⚠ CAUTION:** *Before unhooking the LAN, confirm with the customer that the loss of Message Manager service is acceptable.*	
13.	Run the upgrade package on the Release 4 system.	"Running the Platform Upgrade Package" on page 4-4 in this book	
14.	Start the data transfer. This will shut down the Release 2 or Release 3 system. **⚠ CAUTION:** *Before executing the shutdown, confirm with the customer that the loss of service is acceptable.*	"Starting the Out-of-Service Data Transfer" on page 4-8 in this book	
15.	Monitor the transfer status until the data transfer is complete.	"Monitoring the Out-of-Service Data Transfer" on page 4-9 in this book	
16.	Complete the data transfer. This includes an automatic reboot of the Release 4 system.	"Completing the Data Transfer" on page 4-13 in this book	
17.	Check for alarms.	"Checking for Alarms that Indicate an Upgrade Failure" on page 6-2 in this book	
18.	Verify system date and time.	"Verifying the Lucent INTUITY Release 4 System Date and Time" on page 6-5 in this book	
19.	Check the Release 4 system date and time.	"Setting the UNIX Date and Time Window" on page 6-5 in this book	

Continued on next page

Table 1-2. Out-of-Service Upgrade Using a Direct Connection Checklist — *Continued*

Step	Procedure	Reference Documentation/ Location of Procedure	✔
20.	Shut down the Release 4 system.	"Shutting Down the Lucent INTUITY Release 4 System" on page 7-3 in this book	
21.	Shut down the Release 2 or Release 3 system.	"Shutting Down the Lucent INTUITY Release 2 or Release 3 System" on page 7-4 in this book	
22.	Remove the LAN connection between the Lucent INTUITY systems.	"Removing the LAN Connection Between the Lucent INTUITY Systems" on page 7-5 in this book	
23.	Remove the switch box and cables.	"Removing the Switch Box and Cables" on page 7-6 in this book	
24.	Rearrange the Lucent INTUITY systems.	"Rearranging the Lucent INTUITY Systems" on page 7-7 in this book	
25.	Move the cables.	"Moving the Cables" on page 7-7 in this book	
26.	**⚠ CAUTION:** *If the Release 2 or Release 3 system is not connected to a DEFINITY switch, skip this step.* Release the Switch Data Link.	"Releasing the Switch Data Link" on page 7-15 in this book	
27.	Turn alarm origination on.	"Turning Alarm Origination On" on page 7-16 in this book	
28.	Register Release 4 system with remote maintenance center.	"Sending Test Alarm to Register New Release 4 System" on page 7-17 in this book	
29.	Change the default announcement set to a custom announcement set, if applicable.	"Changing the Default Announcement Set to a Custom Announcement Set" on page 7-18 in this book	
30.	Test the Release 4 system and peripherals.	"Testing the Lucent INTUITY Release 4 System" on page 7-20 in this book	
31.	Assign passwords.	"Assigning Passwords" on page 7-20 in this book	
32.	Perform final administration on the Release 4 system.	"Controlling Call Transfers on the Lucent INTUITY Release 4 System" on page 7-22, "Setting the Number of Simultaneous IMAPI Sessions" on page 7-25, and "Removing the Platform Upgrade Package" on page 7-27 in this book	

Table 1-2. Out-of-Service Upgrade Using a Direct Connection Checklist — *Continued*

Step	Procedure	Reference Documentation/ Location of Procedure	✔
33.	Back up the Release 4 system.	"Backing Up the Lucent INTUITY Release 4 System" on page 7-28 in this book	
34.	⚠ **CAUTION:** *If the Release 2 or Release 3 system was previously equipped with the LAN circuit card, skip this step.* Remove the LAN circuit card from the Release 2 or Release 3 system.	"Removing the LAN Circuit Card from the Lucent INTUITY Release 2 or Release 3 System" on page 7-31 in this book	
35.	Repack and return the RUK.	Procedures start with "Repacking and Returning the RUK" on page 7-32 in this book	
36.	Return the Release 2 or Release 3 system.		

In-Service Checklists

The in-service checklists include:

- In-Service Upgrade Using a Direct Connection Checklist
- In-Service Upgrade Using the Customer's LAN Checklist (see page 1-27)

In-Service Upgrade Using a Direct Connection Checklist

⚠ CAUTION:
If you are conducting an out-of-service transfer, do not use this checklist. See "Out-of-Service Checklist" on page 1-10 for the correct checklist.

If you are conducting an in-service data transfer using the customer's LAN, do not use this checklist. See "In-Service Upgrade Using the Customer's LAN Checklist" on page 1-27 for the correct checklist.

Table 1-3 on page 1-21 is a checklist of procedures necessary when upgrading using an in-service data transfer through a direct connection.

Figure 1-1 on page 1-9 shows a direct connection for an upgrade.

Table 1-3 on page 1-21 IS DESIGNED TO BE TAKEN OUT OF THE BOOK AND
USED AS A REFERENCE GUIDE DURING THE IN-SERVICE UPGRADE.

Table 1-3.   In-Service Upgrade Using a Direct Connection Checklist

Step	Procedure	Reference Documentation/ Location of Procedure	✔
1.	Set up the Lucent INTUITY Release 4 system, including connecting the: ■ Monitor ■ Keyboard ■ A/B switchbox.	"Setting Up the Lucent INTUITY Release 4 System" on page 2-2 in this book *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s System Installation, 585-310-169*, Chapter 2, "Unpacking the MAP/40 and MAP/40s and Installing the Nonassembled Hardware" *Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 System Installation, 585-310-173*, Chapter 2, "Unpacking the MAP/100 and Installing the Nonassembled Hardware"	
2.	Change the name of the Release 4 system, if necessary.	"Setting the Lucent INTUITY Release 4 Machine Name" on page 2-5 in this book	
3.	Obtain the Lucent INTUITY Release 2 or Release 3 LAN settings.	"Obtaining the Lucent INTUITY Release 2 or Release 3 LAN Settings" on page 2-7 in this book	
4.	Check for the presence of custom announcement sets.	"Checking the Lucent INTUITY Release 2 or Release 3 System for Custom Announcements" on page 2-9 in this book	
5.	⇒ **NOTE:** If the Release 2 or Release 3 system does not have custom announcements, skip this step. Prepare for the transfer of custom announcement sets.	Appendix D, "Preparing for the Transfer of Custom Announcement Sets" in this book	
6.	Install the pre-upgrade package on the Release 2 or Release 3 system.	"Installing the Pre-Upgrade Package on the Lucent INTUITY Release 2 or Release 3 System" on page 3-3 in this book	
7.	Turn off alarm origination for the Release 2 or Release 3 system.	"Turning Off Alarm Origination on the Lucent INTUITY Release 2 or Release 3 System" on page 3-5 in this book	
8.	Run the pre-upgrade package.	"Running the Pre-Upgrade Package" on page 3-7 in this book	

Table 1-3. In-Service Upgrade Using a Direct Connection Checklist — *Continued*

Step	Procedure	Reference Documentation/ Location of Procedure	✔
9.	⚠ **CAUTION:** *If the Release 2 or Release 3 system is already equipped with a LAN card, skip this step.* Install a LAN card, if applicable.	"Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System" on page 3-14 in this book Appendix A, "Installing a LAN Circuit Card in the MAP/5" in this book Appendix B, "Installing a LAN Circuit Card in the MAP/40" Appendix C, "Installing a LAN Circuit Card in the MAP/100"	
10.	Set the LAN settings on the Release 2 or Release 3 system to the default settings ➡ **NOTE:** If the customer site has an existing LAN, this procedure changes the LAN address. In that case, the system must be rebooted.	"Setting the LAN Configuration for an In-Service Upgrade" on page 3-11 in this book	
11.	Connect the coaxial cable between the Release 2 or Release 3 system and the Release 4 sytem one of two ways:		
	■ If the Release 2 or Release 3 system *does not have a LAN*, connect the platforms.	"Establishing a Cable Connection Between the Lucent INTUITY Systems" on page 3-17 in this book	
	■ If the Release 2 or Release 3 system *has an existing LAN*, unhook the LAN and connect the platforms.	"Establishing a Cable Connection Between the Lucent INTUITY Systems" on page 3-17 in this book ⚠ **CAUTION:** *Before unhooking the LAN, confirm with the customer that the loss of Message Manager service is acceptable.*	
12.	Run the upgrade package on the Release 4 system.	"Running the Platform Upgrade Package" on page 5-3 in this book	

Continued on next page

Table 1-3. In-Service Upgrade Using a Direct Connection Checklist — *Continued*

Step	Procedure	Reference Documentation/ Location of Procedure	✔
13.	Start the in-service data transfer. ⚠ **CAUTION:** *This process takes several hours to complete. The actual number of hours depends on the number of users and callers on the system during the transfer. If possible, start this procedure during a period of low system demand. At the scheduled down time (as specified by the customer), perform the final transfer (the part that requires system down time).*	"Starting the In-Service Data Transfer" on page 5-9 in this book	
14.	Monitor the transfer status until the system is on *at least the second pass*.	"Monitoring the In-Service Data Transfer" on page 5-10 in this book	
15.	⚠ **CAUTION:** *If the Release 2 or Release 3 system is not connected to a DEFINITY switch, skip this step.* Busy out the switch data link.	"Busying Out the Switch Data Link" on page 5-14 in this book	
16.	Start the final transfer. The system must be on at least the second pass. This will shut down the voice services of the Release 2 or Release 3 system and initiate the data transfer. ⚠ **CAUTION:** *Before executing the shutdown, confirm with the customer that the loss of service is acceptable.*	"Starting the Final Transfer" on page 5-15 in this book	

Table 1-3.   In-Service Upgrade Using a Direct Connection Checklist — *Continued*

Step	Procedure	Reference Documentation/ Location of Procedure	✔
17.	Complete the transfer. This includes an automatic reboot of the Release 4 system.	"Completing the Data Transfer" on page 5-17 in this book	
18.	Check for alarms.	"Checking for Alarms that Indicate an Upgrade Failure" on page 6-2 in this book	
19.	Check the Release 4 system date and time.	"Verifying the Lucent INTUITY Release 4 System Date and Time" on page 6-5 in this book	
20.	Shut down the Release 4 system.	"Shutting Down the Lucent INTUITY Release 4 System" on page 7-3 in this book	
21.	Shut down the Release 2 or Release 3 system.	"Shutting Down the Lucent INTUITY Release 2 or Release 3 System" on page 7-4 in this book	
22.	Remove the LAN connection between the Lucent INTUITY systems.	"Removing the LAN Connection Between the Lucent INTUITY Systems" on page 7-5 in this book	
23.	Remove the switch box and cables.	"Removing the Switch Box and Cables" on page 7-6 in this book	
24.	Rearrange the Lucent INTUITY systems.	"Rearranging the Lucent INTUITY Systems" on page 7-7 in this book	
25.	Move the cables.	"Moving the Cables" on page 7-7 in this book	
26.	⚠ **CAUTION:** *If the Release 2 or Release 3 system is not connected to a DEFINITY switch, skip this step.* Release the Switch Data Link.	"Releasing the Switch Data Link" on page 7-15 in this book	
27.	Turn alarm origination on.	"Turning Alarm Origination On" on page 7-16 in this book	
28.	Register Release 4 system with remote maintenance center.	"Sending Test Alarm to Register New Release 4 System" on page 7-17 in this book	
29.	Change the default announcement set to a custom announcement set, if applicable.	"Changing the Default Announcement Set to a Custom Announcement Set" on page 7-18 in this book	

Table 1-**3.** **In**-**Service Upgrade Using a Direct Connection Checklist** — *Continued*

Step	Procedure	Reference Documentation/ Location of Procedure	✔
30.	Test the Release 4 system.	"Testing the Lucent INTUITY Release 4 System" on page 7-20 in this book	
31.	Assign passwords.	"Assigning Passwords" on page 7-20 in this book	
32.	Perform final administration on the Release 4 system.	"Controlling Call Transfers on the Lucent INTUITY Release 4 System" on page 7-22, "Setting the Number of Simultaneous IMAPI Sessions" on page 7-25, and "Removing the Platform Upgrade Package" on page 7-27 in this book	
33.	Back up the Release 4 system.	"Backing Up the Lucent INTUITY Release 4 System" on page 7-28 in this book	
34.	Remove the LAN circuit card from the Release 2 or Release 3 system. ➡ **NOTE:** If the Release 2 or Release 3 system was previously equipped with the LAN circuit card, skip this step.	"Removing the LAN Circuit Card from the Lucent INTUITY Release 2 or Release 3 System" on page 7-31 in this book	
35.	Repack and return the RUK.	Procedures start with "Repacking and Returning the RUK" on page 7-32 in this book	
36.	Return the Release 2 or Release 3 system.		

THIS PAGE INTENTIONALLY BLANK

In-Service Upgrade Using the Customer's LAN Checklist

Table 1-4 on page 1-29 is a checklist of procedures necessary when upgrading using an out-of-service data transfer through a direct connection.

⚠ **CAUTION:**
If you are conducting an out-of-service transfer, do not use this checklist. See "Out-of-Service Checklist" on page 1-10 for the correct checklist.

If you are conducting an in-service data transfer using a direct connection, do not use this checklist. See "In-Service Upgrade Using a Direct Connection Checklist" on page 1-19 for the correct checklist.

Table 1-4 on page 1-29 IS DESIGNED TO BE TAKEN OUT OF THE BOOK AND USED AS A REFERENCE GUIDE DURING THE IN-SERVICE UPGRADE.

Table 1-4. In-Service Upgrade Using the Customer's LAN Checklist

Step	Procedure	Reference Documentation	✔
1.	Set up the Lucent INTUITY Release 4 system, including connecting the ■ Monitor ■ Keyboard ■ A/B switchbox.	"Setting Up the Lucent INTUITY Release 4 System" on page 2-2 in this book *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s System Installation, 585-310-169*, Chapter 2, "Unpacking the MAP/40 and MAP/40s and Installing the Nonassembled Hardware" *Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 System Installation, 585-310-173*, Chapter 2, "Unpacking the MAP/100 and Installing the Nonassembled Hardware"	
2.	Change the name of the Release 4 system, if necessary.	"Setting the Lucent INTUITY Release 4 Machine Name" on page 2-5 in this book	
3.	Obtain the Lucent INTUITY Release 2 or Release 3 LAN settings.	"Obtaining the Lucent INTUITY Release 2 or Release 3 LAN Settings" on page 2-7 in this book	
4.	Check for the presence of custom announcement sets.	"Checking the Lucent INTUITY Release 2 or Release 3 System for Custom Announcements" on page 2-9 in this book	
5.	⇒ **NOTE:** If the Release 2 or Release 3 system does not have custom announcements, skip this step. Prepare for the transfer of custom announcement sets.	Appendix D, "Preparing for the Transfer of Custom Announcement Sets" in this book	
6.	Install the pre-upgrade package on the Release 2 or Release 3 system.	"Installing the Pre-Upgrade Package on the Lucent INTUITY Release 2 or Release 3 System" on page 3-3 in this book	
7.	Turn off alarm origination for the Release 2 or Release 3 system.	"Turning Off Alarm Origination on the Lucent INTUITY Release 2 or Release 3 System" on page 3-5 in this book	
8.	Run the pre-upgrade package.	"Running the Pre-Upgrade Package" on page 3-7 in this book	

Continued on next page

Table 1-4.   In-Service Upgrade Using the Customer's LAN Checklist — *Continued*

Step	Procedure	Reference Documentation	✔
9.	⚠ **CAUTION:** *If the Release 2 or Release 3 system is already equipped with a LAN card, skip this step.* Install a LAN card, if applicable.	"Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System" on page 3-14 in this book Appendix A, "Installing a LAN Circuit Card in the MAP/5" in this book Appendix B, "Installing a LAN Circuit Card in the MAP/40" in this book Appendix C, "Installing a LAN Circuit Card in the MAP/100" in this book	
10.	Set the LAN settings on the Release 2 or Release 3 system to the settings prescribed by the customer.	"Using the Customer's LAN" on page 3-13 in this book	
11.	Connect the Release 4 system to the customer's LAN. ⇒ **NOTE:** The customer must provide the cabling for the LAN connection.	"Establishing a Cable Connection Between the Lucent INTUITY Systems" on page 3-17 in this book	
12.	Run the upgrade package on the Release 4 system.	Procedures start with "Running the Platform Upgrade Package" on page 5-3 in this book	
13.	Start the in-service data transfer. ⚠ **CAUTION:** *This process takes several hours to complete. The actual number of hours depends on the number of users and callers on the system during the transfer. If possible, start this procedure during a period of low system demand. At the scheduled down time (as specified by the customer), perform the final transfer (the part that requires system down time).*	"Starting the In-Service Data Transfer" on page 5-9 in this book	
14.	Monitor the transfer status until the system is on *at least the second pass*.	"Monitoring the In-Service Data Transfer" on page 5-10 in this book	

Table 1-4.   In-Service Upgrade Using the Customer's LAN Checklist — *Continued*

Step	Procedure	Reference Documentation	✔
15.	⚠ **CAUTION:** *If the Release 2 or Release 3 system is not connected to a DEFINITY switch, skip this step.* Busy out the switch data link.	"Busying Out the Switch Data Link" on page 5-14 in this book	
16.	Start the final transfer. The system must be on at least the second pass. This will shut down the voice services of the Release 2 or Release 3 system and initiate the data transfer. ⚠ **CAUTION:** *Before executing the shutdown, confirm with the customer that the loss of service is acceptable.*	"Starting the Final Transfer" on page 5-15 in this book	
17.	Complete the transfer. This includes an automatic reboot of the Release 4 system.	"Completing the Data Transfer" on page 5-17 in this book	
18.	Check for alarms.	"Checking for Alarms that Indicate an Upgrade Failure" on page 6-2 in this book	
19.	Check the Release 4 system date and time.	"Verifying the Lucent INTUITY Release 4 System Date and Time" on page 6-5 in this book	
20.	Shut down the Release 4 system.	"Shutting Down the Lucent INTUITY Release 4 System" on page 7-3 in this book	
21.	Shut down the Release 2 or Release 3 system.	"Shutting Down the Lucent INTUITY Release 2 or Release 3 System" on page 7-4 in this book	
22.	Remove the LAN connection through the customer's LAN.	"Removing a Connection through the Customer's LAN" on page 7-6 in this book	
23.	Remove the switch box and cables.	"Removing the Switch Box and Cables" on page 7-6 in this book	
24.	Rearrange the Lucent INTUITY systems.	"Rearranging the Lucent INTUITY Systems" on page 7-7 in this book	

Table 1-4.   In-Service Upgrade Using the Customer's LAN Checklist — *Continued*

Step	Procedure	Reference Documentation	✔
25.	Move the cables.	"Moving the Cables" on page 7-7 in this book	
26.	⚠ **CAUTION:** *If the Release 2 or Release 3 system is not connected to a DEFINITY switch, skip this step.* Release the Switch Data Link.	"Releasing the Switch Data Link" on page 7-15 in this book	
27.	Turn alarm origination on.	"Turning Alarm Origination On" on page 7-16 in this book	
28.	Register Release 4 system with remote maintenance center.	"Sending Test Alarm to Register New Release 4 System" on page 7-17 in this book	
29.	Change the default announcement set to a custom announcement set, if applicable.	"Changing the Default Announcement Set to a Custom Announcement Set" on page 7-18 in this book	
30.	Test the Release 4 system.	"Testing the Lucent INTUITY Release 4 System" on page 7-20 in this book	
31.	Assign passwords.	"Assigning Passwords" on page 7-20 in this book	
32.	Perform final administration on the Release 4 system.	"Controlling Call Transfers on the Lucent INTUITY Release 4 System" on page 7-22, "Setting the Number of Simultaneous IMAPI Sessions" on page 7-25, and "Removing the Platform Upgrade Package" on page 7-27 in this book	
33.	Back up the Release 4 system.	"Backing Up the Lucent INTUITY Release 4 System" on page 7-28 in this book	
34.	Remove the LAN circuit card from the Release 2 or Release 3 system. ⚠ **CAUTION:** *If the Release 2 or Release 3 system was previously equipped with the LAN circuit card, skip this step.*	"Removing the LAN Circuit Card from the Lucent INTUITY Release 2 or Release 3 System" on page 7-31 in this book	
35.	Repack and return the RUK.	Procedures start with "Repacking and Returning the RUK" on page 7-32 in this book	
36.	Return the Release 2 or Release 3 system.		

Preparing Both Lucent INTUITY Systems for an In-Service or Out-of-Service Upgrade

2

Overview

This chapter provides instructions (or references to where instructions can be found) for the initial setup and system feature checks to prepare for an in-service or out-of-service upgrade.

If you are performing a Release 4 software upgrade, use the procedures described in Appendix F. A software upgrade increments the software and platform packages from Lucent INTUITY Release 4.0 to Release 4.n.

If you are upgrading a MAP/40s platform to a MAP/40 platform, use Appendix G. The necessary hardware installation and software upgrade procedures are described in that appendix.

This chapter is organized as follows:

- Setting Up the Lucent INTUITY Release 4 System

    — Unpacking the Computer

    — Positioning the Computer

    — Connecting the Keyboard

    — Connecting the Monitor and A/B Switch Box

- Setting the Lucent INTUITY Release 4 Machine Name

- Obtaining the Lucent INTUITY Release 2 or Release 3 LAN Settings

- Checking the Lucent INTUITY Release 2 or Release 3 System for Custom Announcements

Purpose

The procedures in this chapter enable the technician to set up the Lucent INTUITY Release 4 system in preparation for the upgrade from the Lucent INTUITY Release 2 or Release 3 system.

Setting Up the Lucent INTUITY Release 4 System

Setting up the Release 4 system consists of:

- Unpacking the Computer
- Positioning the Computer (see page 2-2)
- Connecting the Keyboard (see page 2-3)
- Connecting the Monitor and A/B Switch Box (see page 2-4)

Unpacking the Computer

For procedures on unpacking the computer, see the appropriate book:

- *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s System Installation, 585-310-169*, Chapter 2, "Unpacking the MAP/40 and MAP/40s and Installing the Nonassembled Hardware"
- *Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 System Installation, 585-310-173*, Chapter 2, "Unpacking the MAP/100 and Installing the Nonassembled Hardware"

These documents were shipped with the Release 4 system. Once you have completed unpacking the Release 4 machine, continue with the next procedure, ''Positioning the Computer''.

Positioning the Computer

The two Lucent INTUITY systems will be connected with a 25-foot coaxial cable. However, the video cables that allow both Lucent INTUITY systems to use the same monitor are typically only 10-feet long. If your video cables are 10-foot cables, the two systems must be placed within 20 feet of each other. Additionally, consider that the Release 4 system is equipped with a 4-foot power cord.

Once you have completed positioning the Release 4 system, continue with the next procedure, "Connecting the Keyboard" on page 2-3.

Connecting the Keyboard

A 5-pin, female DIN receptacle is located in the rear of the MAP/40 or MAP/100. The corresponding male plug is provided with the keyboard (Figure 2-1). Both of the connector assemblies are keyed to provide proper alignment.

Plug
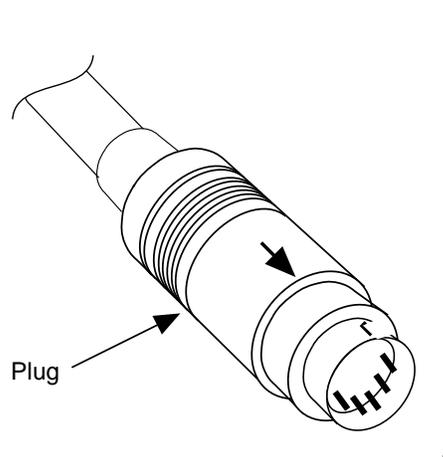
Figure 2-1. Circular DIN 5-Pin Connector for the Keyboard

Once you have completed connecting the keyboard, continue with the next procedure, "Connecting the Monitor and A/B Switch Box" on page 2-4.

Connecting the Monitor and A/B Switch Box

The Release 4 system is not shipped with a monitor. Both the Release 4 system and the Release 2 or 3 system will use the same monitor during the upgrade. You should place the monitor as close to the new system as possible.

⇒ NOTE:

If the customer has another monitor available, both Lucent INTUITY systems can be equipped with a separate monitor. *If this is the case, disregard the steps in this document which refer to an A/B switch box*.

The Release 2 or Release 3 system monitor is equipped with a power cable and a signal cable. The power cable has a male plug at one end and a female plug at the other end. One end of the signal cable has a video input connector and the other end is permanently attached to the monitor.

Release 2 or 3   A/B   monitor   Release 4
(existing)   switchbox (existing)   (new)

keyboard   C   keyboard
             A   B
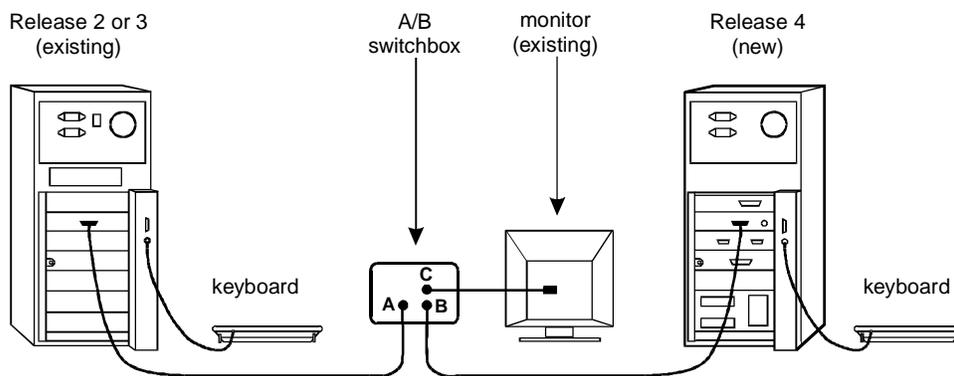
Figure 2-2.   Cabling for Connecting the Monitor

To connect the monitor, perform the following tasks (see Figure 2-2):

1. Make sure the power cable is routed to a wall outlet.

2. Disconnect the signal cable from the Release 2 or Release 3 system.

    The signal cable is currently attached to a female connector on the video controller circuit card faceplate.

3. Attach the signal cable to Position C on the A/B switch box (Figure 2-2).

4. Attach one of the two video cables, included in the RUK, to the Release 2 or Release 3 system video controller circuit card and tighten the thumb-screws on the video cable connector.

5. Attach the other end of this video cable to Position A on the A/B switch box (Figure 2-2).

6. Attach the second video cable to the Release 4 system video controller circuit card and tighten the thumb-screws on the video cable connector.

7. Attach the other end of this video cable to Position B on the A/B switch box (Figure 2-2 on page 2-4).

8. Power up the monitor.

9. Power up the Release 4 system.

10. Continue with the next procedure, ''Setting the Lucent INTUITY Release 4 Machine Name''.

Setting the Lucent INTUITY Release 4 Machine Name

If you are performing an upgrade using the customer's LAN, the customer will provide a temporary machine name for the Release 4 system. For all other cases, the Release 4 system is *Intuity4*.

1. Place the A/B switch on the A/B switch box in the "B" position (the Release 4 system position).

2. Log into the Release 4 system as *craft*.

The system displays the Lucent INTUITY Main Menu.

```
       INTUITY (TM) Main Menu
AUDIX Administration
Customer/Services Administration
Networking Administration
Switch Interface Administration
Upgrade
Voice System Administration
```
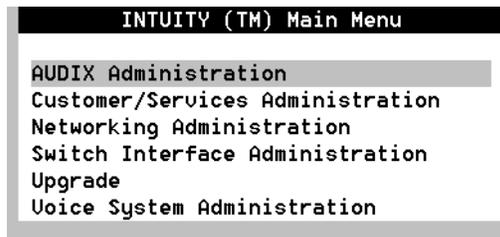
Figure 2-3.   Lucent INTUITY Main Menu for Release 4

3. Select:

```
> Networking Administration
```

```
   > TCP/IP Administration
```

The system displays the TCP/IP Administration window (Figure 2-4).

```
+==========================================================+
|                  TCP/IP Administration                   |
+==========================================================+
        UNIX Machine Name: Intuity4

                IP Address: XXX.X.XXX.XX

              Subnet Mask: 255.255.255.0

 Default Gateway IP Address: _____
```
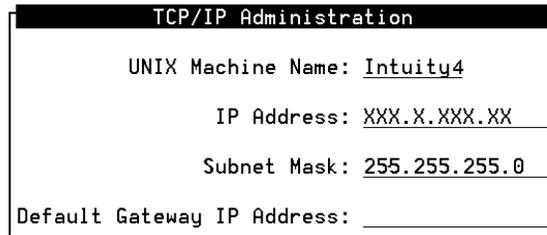
Figure 2-4. TCP/IP Administration Window

⚠ CAUTION:

If you are using the customer's LAN, enter information as provided by the customer's PC/LAN administrator. Otherwise, enter the information shown in the steps below.

4. Enter **Intuity4** in the `UNIX Machine Name:` field. Enter exactly as shown, that is capital letters must be typed as capitals, and lowercase letters as lowercase.

5. Enter **125.50.50.2** in the `IP Address:` field.

6. Enter **255.255.255.0** in the `Subnet Mask:` field.

7. Press `CHG-KEYS` (F8) and then `BRD CNFG` (F2). The system displays the Ethernet Board Configuration window (Figure 2-5).

```
+==========================================================+
|               Ethernet Board Configuration               |
|                                                          |
|Network Interface Type: BNC_____|
+----------------------------------------------------------+
```
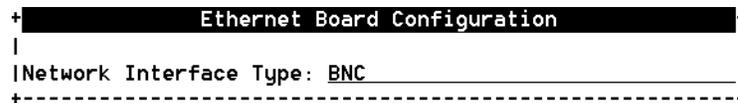
Figure 2-5. Ethernet Board Configuration Window

8. Press `CHOICES` (F2) to display a list of the network interface types.

9. Highlight **BNC** and press `RETURN`.

10. Press `SAVE` (F3) to save the Ethernet Board configuration.

11. Press `CANCEL` (F6) to return to the TCP/IP Administration window.

12. Press `SAVE` (F3) to save the TCP/IP administration values.

13. Press `CANCEL` (F6) repeatedly to return to the Main Menu.

14. Write *the machine name* and *IP Address* in Table 2-1 on page 2-8.

15. Continue with the next procedure, "Obtaining the Lucent INTUITY Release 2 or Release 3 LAN Settings" on page 2-7.

Obtaining the Lucent INTUITY
Release 2 or Release 3 LAN Settings

Upgrades using a direct connection or in-service upgrades using an existing LAN involve changes to the LAN address. These settings are restored after the upgrade is complete. However, for validation purposes, you should record what the existing settings are.

To obtain the Release 2 or Release 3 LAN settings, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "A" position (the Release 2 or Release 3 system position).

2. Start from the Lucent INTUITY Administration menu (Figure 2-6).

```
+     INTUITY (TM) Administration     +
|>AUDIX Administration              |
| Call Accounting System            |
| Customer/Services Administration| 
| Networking Administration         |
| Switch Administration             |
| Switch Interface Administration   |
| Upgrade                           |
| Voice System Administration       |
+----------------------------------+
```

Figure 2-6.   Lucent INTUITY Administration Menu for Release 2 or Release 3

3. Select:

```
> Networking Administration
```

```
> TCP/IP Administration
```

The system displays the TCP/IP Administration window (Figure 2-7).

⇒ NOTE:

If the *customer does not have a LAN*, TCP/IP Administration will not appear as a menu option on the Networking Administration menu. In that case, ask the customer for the temporary IP address and temporary system name. Write that temporary information in Table 2-1 on page 2-8 and continue with the next procedure, "Checking the Lucent INTUITY Release 2 or Release 3 System for Custom Announcements" on page 2-9.

If the *customer has a LAN*, continue with the next step.

The settings on your screen may vary from this illustration

```
┌────────────────────────────────────────────────┐
│              TCP/IP Administration               │
│                                                  │
│     UNIX Machine Name: Intuity4                  │
│                                                  │
│           IP Address: XXX.X.XXX.XX               │
│                                                  │
│          Subnet Mask: 255.255.255.0              │
│                                                  │
│ Default Gateway IP Address: _____    │
└────────────────────────────────────────────────┘
```

Figure 2-7.   TCP/IP Administration Window

4. Write the displayed values in their appropriate place in Table 2-1.

Table 2-1.   Lucent INTUITY Release 2/3 and Release 4 LAN Parameters

Parameter	Value
Release 4 LAN Parameters	
Temporary system name (UNIX machine name)	**➡ NOTE:** This name cannot start with a number and cannot contain any embedded spaces, for example, *denver 1* is not allowed, but *denver_1* is allowed.
Temporary IP address	
Release 2 or Release 3 LAN Parameters	
System name (UNIX machine name)	
IP address	
Subnet mask	
Default Gateway IP Address:	
Network interface type	

5. Press (CHG-KEYS) (F8) and (BRD CNFG) (F2).

The system displays the Ethernet Board Configuration window (Figure 2-8 on page 2-9).

```
+                    Ethernet Board Configuration                    +
|                                                                    |
|Network Interface Type: BNC_____|
+--------------------------------------------------------------------+
```
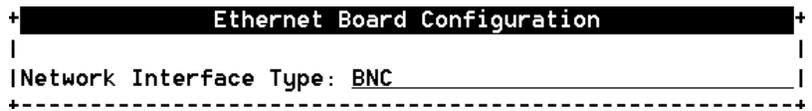
Figure 2-8.   Ethernet Board Configuration Window

6. Write the Network Interface Type in Table 2-1 on page 2-8.

7. Press ⌐CANCEL⌐ (F6) repeatedly to return to the Administration menu (Figure 2-6 on page 2-7).

8. Continue with the next procedure, "Checking the Lucent INTUITY Release 2 or Release 3 System for Custom Announcements".

Checking the Lucent INTUITY Release 2 or Release 3 System for Custom Announcements

The presales package compares the Release 2 or Release 3 system's default announcement set with a list of known announcement set names. If the default is not on the list, the presales package warns that the transfer of custom announcements is required during the upgrade.

To check for custom announcements, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "A" position (the Release 2 or Release 3 system position).

2. Starting from the main Administration menu (Figure 2-6 on page 2-7), select:

```
> AUDIX Administration
```

The system displays the AUDIX Administration screen (Figure 2-9).

```
AUDIX              Active              Alarms:                    Logins: 1




















enter command:
```
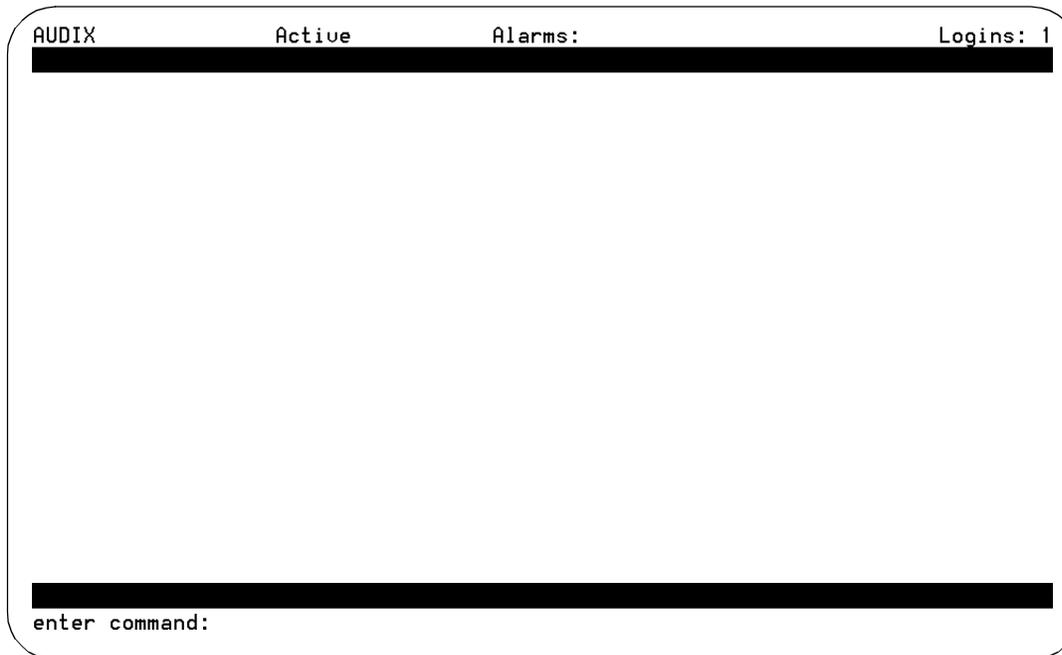
Figure 2-9.   AUDIX Administration Screen

3. At the `enter command:` prompt, enter either:

Full Command Version	Short Command Version
list annc-sets	**li annc**

The system displays the Announcement Sets screen (Figure 2-10).

⇒ **NOTE:**
list can be preceded by **print** to print the contents of this screen.

```
┌─────────────────────────────────────────────────────────────────────────┐
│ dr                  Active          Alarms:                  Logins: 4    │
│ list annc-sets                                                   Page 1   │
│                                                                           │
│                         ANNOUNCEMENT SETS                                 │
│                                                                           │
│       us-eng                                 us-eng-t                     │
│                                                                           │
│                                                                           │
│                                                                           │
│                                                                           │
│                                                                           │
│                                                                           │
│                                                                           │
│                                                                           │
│                                                                           │
│                                                                           │
│                                                                           │
│                                                                           │
│ Press [NextPage], [PrevPage] or [Cancel]                                  │
│ enter command: list annc-sets                                             │
│ 1Cancel   2Refresh 3Enter    4ClearFld 5Help     6Choices  7NextPage 8PrevPage │
└─────────────────────────────────────────────────────────────────────────┘
```
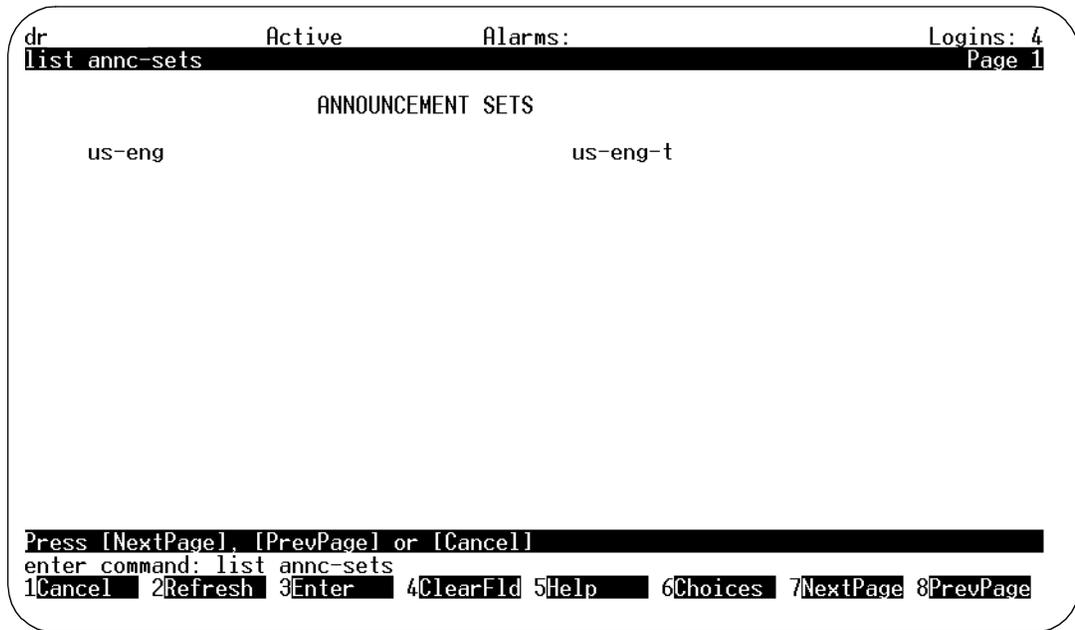
Figure 2-10.   Announcement Sets Screen

4. Determine if any of the announcement sets are custom announcement
    sets by comparing the announcements set(s) listed on your screen with
    the supported announcements listed in Table 2-2.

    The first word in each cell is the announcement set abbreviation as it
    appears on the screen, and the full name is in parentheses.

Table 2-2.   Supported Announcements Sets

us-eng (U.S. English)	czech (Czechoslovakian)	japanese
us-eng-t (U.S. English Terse)	dutch (Dutch)	lat-span (Latin American Spanish)
us-tdd (U.S. TDD)	french-c (Canadian French)	polish (Polish)
us-123 (U.S. English 1,2,3)	french-p (French)	portug (Brasilian Portuguese)
arabic (Arabic)	german (German)	russian (Russian)
british (British English)	greek (Greek)	slovak (Slovakia)
cantonese (Cantonese)	italian (Italian)	
cas-span (Castillion Spanish)	japan (Japanese)	

5. Write down the announcement sets on the Release 2 or Release 3 system that do not match the sets listed in Table 2-2 on page 2-11. Ask the customer their preference for a default announcement set, and record that default announcement set here, as well.

Table 2-3. Custom Announcement Set Names

Custom Announcement Set Name	Base Announcement Set[*]

Customer preference for default announcement set:
(not necessarily a custom announcement set name)

---

*   The standard announcement set on which the custom announcement set is based.

---

6. Press CANCEL (F6) repeatedly to return to the main Administration menu.

7. If the Release 2 or Release 3 system *does contain custom announcement* sets, complete the procedures in Appendix D, "Preparing for the Transfer of Custom Announcement Sets", before continuing with the upgrade.

   If the Release 2 or Release 3 system *does not include any custom announcement* sets, proceed to Chapter 3, "Connecting the Lucent INTUITY Systems for an In-Service or Out-of-Service Upgrade".

Connecting the Lucent INTUITY Systems for an In-Service or Out-of-Service Upgrade

3

> ⚠ **CAUTION:**
> *If you are performing a Release 4 software upgrade, use the procedures described in Appendix E. A software upgrade increments the software and platform packages from Lucent INTUITY Release 4.0 to Release 4.n.*
>
> *If you are upgrading a MAP/40s platform to a MAP/40 platform, use Appendix F. The necessary hardware installation and software upgrade procedures are described in that appendix.*

Overview

This chapter describes:

- The pre-upgrade package

- Installing the pre-upgrade package on the Lucent INTUITY Release 2 or Release 3 system

- Turning off alarm origination on the Lucent INTUITY Release 2 or Release 3 system

- Running the pre-upgrade package, including:

    — Setting the LAN configuration for an out-of-service upgrade

    — Setting the LAN configuration for an in-service upgrade

- Installing a LAN circuit card on the Lucent INTUITY Release 2 or Release 3 system, if necessary

- Establishing a cable connection between the Lucent INTUITY systems

Purpose

This chapter provides step-by-step procedures that complete final preparations on both Lucent INTUITY systems. After completing these procedures the technician will be able to start the in-service or out-of-service upgrade.

What is the Pre-Upgrade Package?

The technician installs the pre-upgrade package on the Release 2 or Release 3 system and prepares it for the connection to the Release 4 system. The pre-upgrade package provides a way to back out of the upgrade if something goes wrong.

The pre-upgrade package creates an entry on the Lucent INTUITY Administration menu (Figure 3-1).

```
┌──────────────────────────────────────┐
│     INTUITY (TM) Administration       │
│  AUDIX Administration                 │
│  Customer/Services Administration     │
│  Networking Administration            │
│ > Platform Pre-Upgrade                │
│  Switch Interface Administration      │
│  Upgrade                              │
│  Voice System Administration          │
└──────────────────────────────────────┘
```
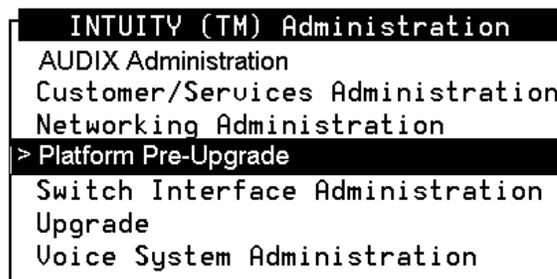
Figure 3-1.   Lucent INTUITY Administration Menu for Release 2 or Release 3 with Platform Pre-Upgrade Option

When selected, the pre-upgrade package displays the current LAN network configuration and gives you the following options:

- Install a LAN card (if not already installed)

- Set the LAN card and system for the upgrade

- Undoing the LAN administration changes (for back-out purposes)

Before You Begin

Before performing the procedures in this section, the following should be complete:

- Checklist items 1 – 5 for the checklist appropriate to the type of upgrade you're doing, that is, out-of-service or one of the in-service upgrades (see "Out-of-Service and In-Service Upgrade Checklists" on page 1-10)

- *The customer is aware that their system will be unavailable for at least 30 minutes* during the course of an in-service upgrade, and that there might be multiple instances of system unavailability

Start the pre-upgrade process with "Installing the Pre-Upgrade Package on the Lucent INTUITY Release 2 or Release 3 System" on page 3-3.

Installing the Pre-Upgrade Package on the Lucent INTUITY Release 2 or Release 3 System

The pre-upgrade package is provided with the Reusable Upgrade Kit (RUK). The package is contained on a floppy disk labeled "Pre-Upgrade Package".

To install the pre-upgrade package on the Release 2 or Release 3 system, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "A" position (the Release 2 or Release 3 system position).

2. Starting at the Administration menu (Figure 2-6 on page 2-7), select:

```
> Customer/Services Administration
    >System Management
      >UNIX Management
        >Software Install
```

The system displays the Software Install menu (Figure 3-2).

```
Software Install
>Floppy drive
 Tape drive
```

Figure 3-2.   Software Install Menu

3. Insert the diskette labeled *INTUITY Pre-Upgrade Package* into the floppy disk drive with the label facing up.

4. Select:

```
> Floppy drive
```

The system displays the message:

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

5. Press `ENTER` to go ahead with the install.

The system displays the message:

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

The following packages are available:
    1 pupgrade  Platform Pre-Upgrade Package

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

➡ NOTE:
> If you receive a `device open` failure message, the disk was
> inserted *after* you selected `Floppy Drive` or the system did not
> see the disk. In that case, complete step a – step d below.

      a. Enter **q**

         The system displays the Software Install menu (Figure 3-2).

      b. Remove the disk from the floppy disk drive.

      c. Re-insert the disk into the floppy disk drive.

      d. Repeat step 5.

6. Press `ENTER` to select **all**.

The system installs the software and displays several status messages.
When the software installation is complete, the system displays the
message:

```
    Installation of Upgrade Platform Pre-Upgrade
    Package was successful.

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

7. Remove the diskette from the floppy drive.

8. Enter **q**

➡ NOTE:
> The term "enter" means to type in the desired character(s) and then
> press `ENTER` or the return key. If you did not know that, please take a
> moment to read "Conventions Used in This Book" on page -xvi.

9. Press `CANCEL` (F6) repeatedly to log off the Lucent INTUITY system.

➡ NOTE:
> You must log off the system and log back on to get Platform
> Pre-Upgrade to display as an option on the Administration menu.

10. Continue with the next procedure, "Turning Off Alarm Origination on the
    Lucent INTUITY Release 2 or Release 3 System" on page 3-5.

Turning Off Alarm Origination on the Lucent INTUITY Release 2 or Release 3 System

The process of upgrading your system involves rebooting both the Release 2 or Release 3 system and the Release 4 system. This will cause the system to unnecessarily send alarms to the remote maintenance center.

To turn off alarm origination, perform the following tasks:

1. Place the A/B switch in the "A" position
   (the Release 2 or Release 3 system position).

2. Start at the Administration menu (Figure 3-1 on page 3-2).

3. Select:

```
> Customer/Services Administration

     > Alarm Management
```
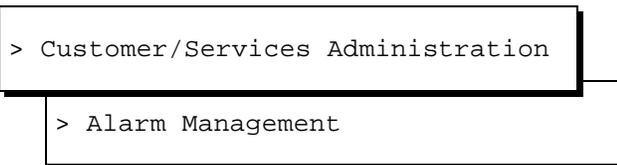
The system displays the Alarm Management window (Figure 3-3)

The settings on your screen may vary from this illustration

```
                   Alarm  Management

Product ID                      2999999999

Alarm Destination               916148606427

Alarm Origination               ACTIVE

Alarm Level                     MINOR

Alarm Suppression               ACTIVE

Clear Alarm Notification        ACTIVE
```

Figure 3-3.   Alarm Management Window

4. Use the down arrow ▼ to position the cursor in the `Alarm Origination` field and type **inactive**

5. Press SAVE (F3).

6. Press CANCEL (F6) repeatedly to return to the main Administration menu.

7. Continue with the next procedure, "Running the Pre-Upgrade Package" on page 3-7.
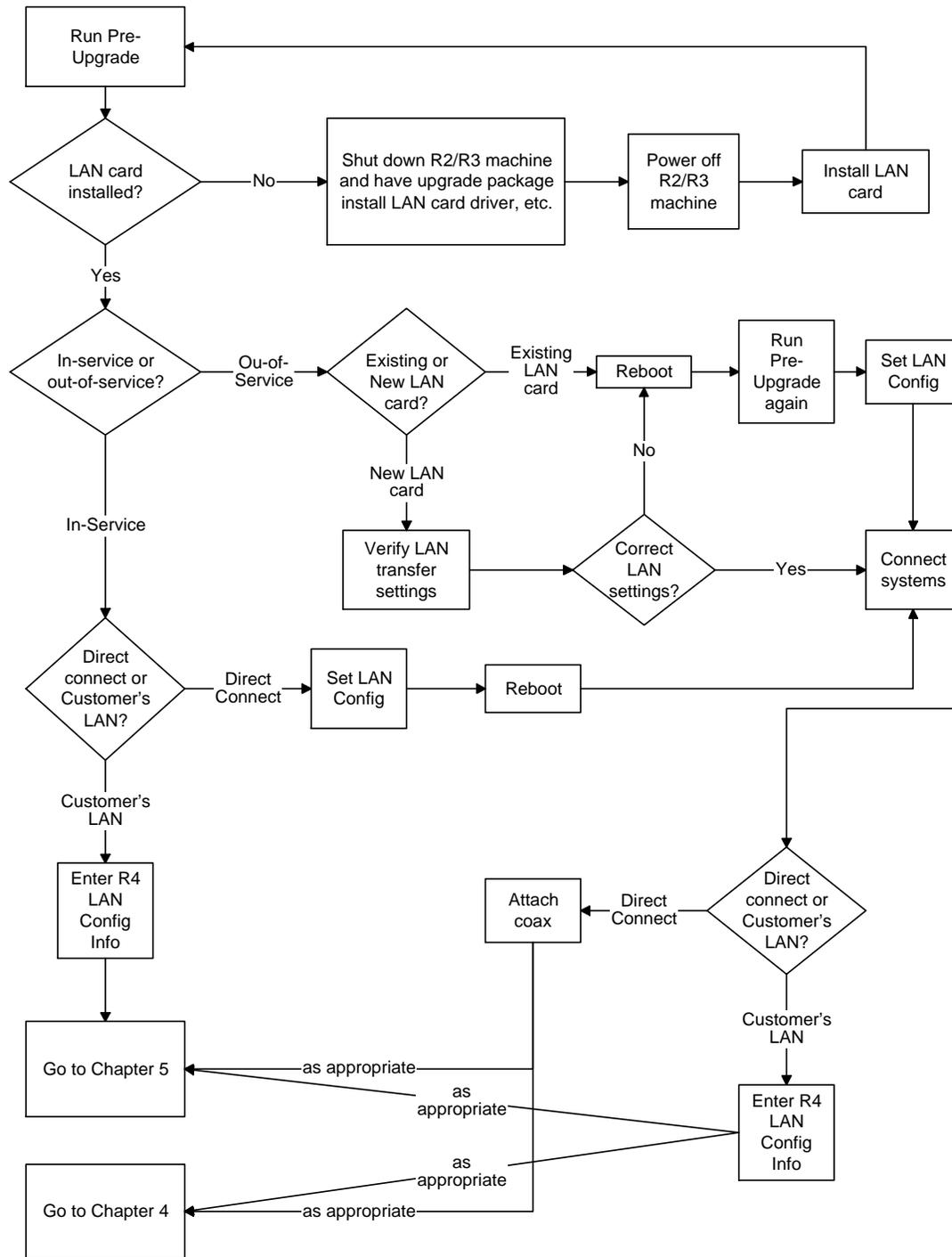
Figure 3-4.   Decision Flowchart for In-Service and Out-of-Service Upgrade

Running the Pre-Upgrade Package

Figure 3-4 on page 3-6 illustrates the flow of decisions you must make during this phase of the upgrade. To run the pre-upgrade package on the Release 2 or Release 3 system, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "A" position (the Release 2 or Release 3 system position).

2. Starting from the Administration menu (Figure 3-1 on page 3-2), select:

```
> Platform Pre-Upgrade
```

The system begins to run the platform pre-upgrade and displays the message   working...

The pre-upgrade package:

- Verifies that a pre-sales script has been run by the AUCC

   The upgrade will continue only if the pre-sales script has been run. If the pre-sales script has not been run, the upgrade will stop and you must contact the remote maintenance center.

- Checks for a LAN circuit card on the Release 2 or Release 3 system

   Because both Lucent INTUITY systems will be connected by either a coaxial LAN cable or through the customer's LAN, a LAN circuit card is required on the Release 2 or Release 3 system for the upgrade to proceed. Any Release 2 or Release 3 systems that are not currently equipped to operate on a LAN will need to have a LAN circuit card installed by the technician.

   ⚠ CAUTION:
   Installing a LAN circuit card involves rebooting the Release 2 or Release 3 system. Confirm with the customer that the temporary loss of service is acceptable.

3. If the Release 2 or Release 3 system *does have a LAN circuit card*, the system displays the Current LAN Configuration window (Figure 3-6 on page 3-8). In that case, *continue with step 4*.

   If the Release 2 or Release 3 system *does not have a LAN circuit card* the system displays the LAN Circuit Card Check screen (Figure 3-5 on page 3-8). In that case, *proceed to "Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System" on page 3-14*.

   ➡ NOTE:
   When the pre-upgrade package runs, the original settings for the customer's LAN are changed. If it is necessary to back-out of the upgrade you can recover the old LAN settings by pressing (UNDO) (F2) at the Current LAN Configuration window (Figure 3-6 on page 3-8).

If you see this screen, proceed to "Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System" on page 3-14.

```
LAN CARD CHECK

STATUS-------------------

No LAN card is currently installed. A LAN card is required to
upgrade this system.

SELECT TASK--------------

To install a LAN card...........Press <CONTINUE> (F3)

To return to the Main Menu......Press <CANCEL> (F6)
```
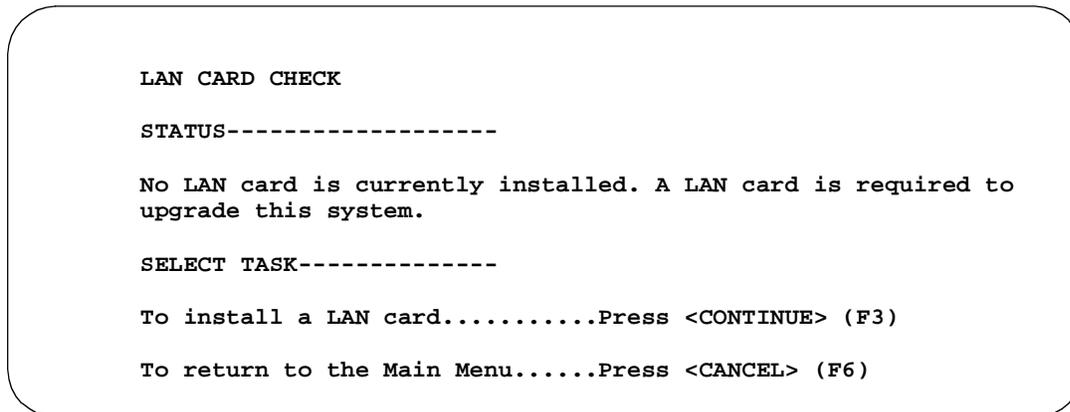
Figure 3-5.   LAN Circuit Card Check Screen

If you see this screen, continue with step 4 below.
NOTE: The settings on your screen may vary from this illustration.

```
                    Current LAN Configuration

A LAN card is currently installed using the LAN settings shown below:

              IP Address: 135.9.181.23
              NetMask:    255.255.255.0
              Interface:  AUI or 10BaseT

SELECT TASK---------

To restore original LAN settings..............Press <UNDO>     (F2)

To setup for Out-of-Service upgrade...........Press <OUT-SERV> (F3)

To setup for In-Service upgrade...............Press <IN-SERV>  (F4)

To return to main menu........................Press <CANCEL>   (F6)
```
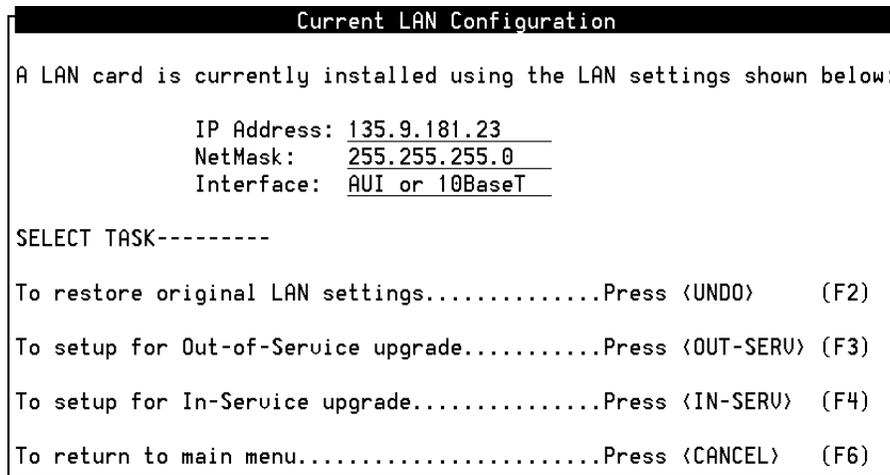
Figure 3-6.   Current LAN Configuration Window

4. For Release 2 or Release 3 systems that already have a LAN circuit card, you now have 2 choices:

   ■   Set the LAN configuration for an *Out-of-Service* upgrade (see page 3-9)

   ■   Set the LAN configuration for an *In-Service* upgrade (see page 3-11)

Setting the LAN Configuration
for an Out-of-Service Upgrade

> ⚠ **CAUTION:**
>
> *If you are going to perform an in-service upgrade, do not use this procedure. See "Setting the LAN Configuration for an In-Service Upgrade" on page 3-11 for the correct procedure.*

An *out-of-service upgrade* is conducted with the Release 2 or Release 3 system unavailable to callers and users for the duration of the upgrade. The upgrade package copies and translates the data from the Release 2 or Release 3 system to the Release 4 system.

> ⇨ **NOTE:**
>
> If your site has an existing LAN, this procedure changes the LAN address. In that case, the system will automatically reboot the system after you have performed step 2. If you have installed a LAN for the first time, you will not perform the reboot.

To set the LAN configuration for an out-of-service upgrade, perform the following tasks:

1. Ensure that there is no diskette in the floppy diskette drive.

2. Starting from the Current LAN Configuration window (Figure 3-6 on page 3-8), press ⌷OUT-SERV⌷ (F3).

   If your site *has an existing LAN circuit card*, the system displays a message indicating that it will perform a system reboot.

   a. After the reboot is complete, access the Administration menu (Figure 3-1 on page 3-2) and select:

   ```
   > Platform Pre-Upgrade
   ```

   The system redisplays the Current LAN Configuration window (Figure 3-6 on page 3-8).

   a. Verify the IP address in the window with the address you wrote in Table 2-1 on page 2-8.

   b. Press ⌷CANCEL⌷ (F6) to accept the LAN settings.

   c. Proceed to "Establishing a Cable Connection Between the Lucent INTUITY Systems" on page 3-17.

If you *have installed a new LAN circuit card*, the system displays the
Administration menu (Figure 3-1 on page 3-2).

a. Select:

```
> Platform Pre-Upgrade
```

The system displays the Current LAN Configuration window (Figure
3-6 on page 3-8).

b. If *there are values in the* `IP Address,` `NetMask,` *and* `Interface`
   fields, press `CANCEL` *(F6) to accept the LAN settings and continue
   with step d*.

   If *you see* `Not Available` *in any of the fields, press* `OUT-SERV` *(F3)*
   to have the upgrade package configure the settings. The system
   displays a message indicating that it will perform a system reboot.
   When the reboot is complete, access the Administration menu
   (Figure 3-1 on page 3-2) and select:

```
> Platform Pre-Upgrade
```

The system displays the Current LAN Configuration window
(Figure 3-6 on page 3-8).

c. Press `CANCEL` (F6) to accept the LAN settings.

d. Proceed to "Establishing a Cable Connection Between the Lucent
   INTUITY Systems" on page 3-17.

**Setting the LAN Configuration
for an In-Service Upgrade**

> **⚠ CAUTION:**
> *If you are going to perform an out-of-service upgrade, do not use this procedure. See "Setting the LAN Configuration for an Out-of-Service Upgrade" on page 3-9 for the correct procedure.*

An *in-service upgrade* is conducted with the Release 2 or Release 3 system available to callers and users during *most* of the upgrade process. The upgrade package copies and translates the data from the Release 2 or Release 3 system to the Release 4 system. File transfers are moderated so that the Release 2 or Release 3 system performance and the customer's LAN are not adversely affected.

An in-service upgrade can be conducted through:

- A direct connection
- The customer's LAN (see page 3-13)

> **⊫ NOTE:**
> Using a direct connection requires a reboot of the system. If you are using the customer's LAN, you will not perform the reboot.

The Release 2 or Release 3 system LAN configuration will differ, depending on the connection type.

Using a Direct Connection

> **⚠ CAUTION:**
> *Using a direct connection involves using the default LAN configuration. A reboot of the Release 2 or Release 3 system is required. Confirm with the customer that the temporary loss of service is acceptable.*

To initialize an in-service upgrade using a direct connection, perform the following tasks on the Release 2 or Release 3 system:

1. Ensure that there is no diskette in the floppy diskette drive.

2. Starting from the Current LAN Configuration window (Figure 3-6 on page 3-8), press ⌐IN-SERV⌐ (F4).

   The system displays the In-Service LAN Configuration window (Figure 3-7 on page 3-13).

3. Verify that **125.50.50.2** is the value in the `New System's IP Address` field.

   This is the default IP address for the Lucent INTUITY Release 4 system.

4. Press DIRECT (F4).

   The system asks for confirmation that it is all right to interrupt service and reboot the system.

5. *Confirm with the customer that the temporary loss of service is acceptable* and press CONTINUE (F3).

   The system automatically reboots. This process takes some time and the system displays numerous messages during the reboot. When the reboot is complete, the system displays the message:

   ```
   Please hit the <ENTER> key after messages stop
   scrolling.
   ```

6. Press ENTER.

7. Proceed to "Establishing a Cable Connection Between the Lucent INTUITY Systems" on page 3-17.

Using the Customer's LAN

To initialize an in-service upgrade using the customer's LAN, perform the following tasks on the Release 2 or Release 3 system:

1. Starting from the Current LAN Configuration window (Figure 3-6), press IN-SERV (F4).

   The system displays the In-Service LAN Configuration window (Figure 3-7).

```
                      In-Service LAN Configuration

 The In-Service LAN settings are shown below:

          New System's Name:      Intuity4         ]
          New System's IP Address: 125.50.50.2        ]

 Note: The default settings must be changed if the upgrade
       is to be performed over the customer's LAN.
       Use the default settings for direct connect only.

 SELECT TASK---------

 To save customer LAN settings.........Press <CUST-LAN> (F3)

 To configure for direct connect.......Press <DIRECT>   (F4)

 To return to main menu................Press <CANCEL>   (F6)
```
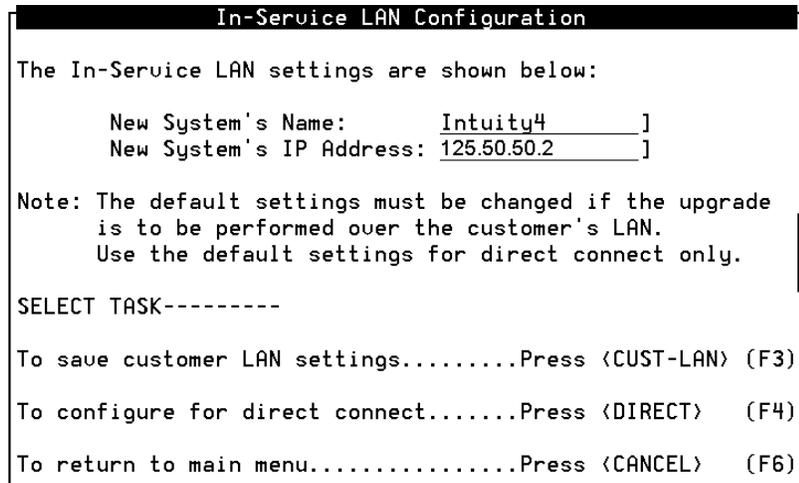
Figure 3-7.   In-Service LAN Configuration Window

2. Using the information you wrote down in Table 2-1 on page 2-8, enter:

   - The *name of the Lucent INTUITY Release 4 system* in the `New System's Name` field.

   - The *IP address of the Lucent INTUITY Release 4 system* in the `New System's IP Address` field.

3. Press CUST-LAN (F3) to save these LAN settings and continue.

   The system displays the Administration menu (Figure 3-1 on page 3-2).

4. Proceed to Chapter 5, "Running the In-Service Upgrade".

Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System

➡ NOTE:

If you are able to access the Current LAN Configuration window (Figure 3-6 on page 3-8), skip this procedure and proceed to "Establishing a Cable Connection Between the Lucent INTUITY Systems" on page 3-17.

To install a LAN circuit card on the Release 2 or Release 3 system, perform the following tasks:

1. Starting from the LAN Circuit Card Check screen (Figure 3-5 on page 3-8), press ⌷CONTINUE⌷ (F3).

   The system displays the Confirm LAN Board Installation screen (Figure 3-8).

```
CONFIRM LAN BOARD INSTALLATION

Installing a LAN Card will require the system to be shut down and
powered off. INTUITY AUDIX will be Out of service.

Confirm with the customer that a loss of service is acceptable.
After confirmation, review the following steps before you begin:

    1) Shutdown the machine
    2) Open the system cabinet and install the LAN Card
    3) Connect the coaxial cables between the INTUITY machines
    4) Power up the machine
    5) Login as "craft"
    6) Select "Platform Pre-Upgrade" from the Main Menu

SELECT TASK--------------

To shutdown this machine..............Press <CONTINUE> (F3)

To return to the Main Menu...........Press <CANCEL> (F6)
```

Figure 3-8. Confirm LAN Circuit Card Installation Screen

2. *Confirm with the customer that the temporary loss of service is acceptable* and press ⌷CONTINUE⌷ (F3) to continue.

   (If you do not wish to proceed with the LAN circuit card installation, press ⌷CANCEL⌷ (F6).)

The Release 2 or Release 3 system begins the shutdown process. During the shutdown the pre-upgrade package will:

- Install the LAN card driver

- Configure the system for the default upgrade IP address

- Complete the system shutdown

When installing the LAN card driver, the pre-upgrade package may have to rebuild the UNIX operating system. In that case, the system displays the message:

```
The UNIX Operating System kernel will be rebuilt
now. This will take some time. Please wait.
```

When the system is ready to proceed, it displays the message:

```
The UNIX operating system kernel has been rebuilt.

The AUDIX Voice System will now shut down
automatically. After AUDIX stops, the UNIX system
will shut down.
```

When the system has shut down the AUDIX voice system and is ready to reboot, it displays the message:

```
The system is down
Press CTRL-ALT-DEL to reboot your computer.
```

⟹ NOTE:
Other messages may be display on the screen during shutdown. Ignore messages such as:

```
svc_create: Bad file number
unable to create [NLM_PROG, NLM_VERS) for netpath.

Abnormal termination of RSE activities
```

3. Power off the Release 2 or Release 3 machine.

4. Install the LAN circuit card.

   If the Release 2 or Release 3 system is a:

   - MAP/5, see Appendix A, "Installing a LAN Circuit Card in the MAP/5" for the procedure.

   - MAP/40, see Appendix B, "Installing a LAN Circuit Card in the MAP/40" for the procedure.

   - MAP/100, see Appendix C, "Installing a LAN Circuit Card in the MAP/100" for the procedure.

5. Power on the Release 2 or Release 3 machine, if it is not already back on.

6. Starting from the Administration menu on the Release 2 or Release 3
    machine (Figure 3-1 on page 3-2), select:

```
> Platform Pre-Upgrade
```

The system begins to run the platform pre-upgrade and displays the
message:

```
working...
```

7. If the *LAN circuit card has been installed correctly*, the system displays the
    Current LAN Configuration window (Figure 3-6 on page 3-8). *Proceed* to
    one of these options, *as appropriate*:

    ■ "Setting the LAN Configuration for an Out-of-Service Upgrade" on
       page 3-9

    ■ "Setting the LAN Configuration for an In-Service Upgrade" on
       page 3-11

    If *LAN circuit card has not been installed correctly*, the system does not
    display the Current LAN Configuration window. In that case, *contact the
    remote maintenance center*.

Establishing a Cable Connection Between the Lucent INTUITY Systems

The Lucent INTUITY systems can be connected through:

- A direct connection, which involves linking the Lucent INTUITY systems through a coaxial cable that attaches to both LAN circuit cards

- The customer's LAN (see page 3-20)

Establishing a Direct Connection

A direct connection involves linking the Lucent INTUITY systems through a coaxial cable that attaches to both LAN circuit cards (Figure 3-9 on page 3-17).
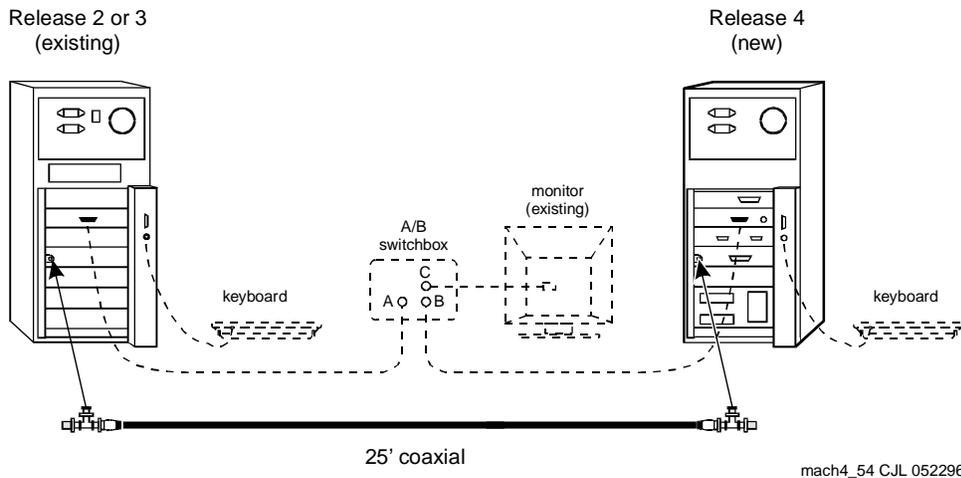
Figure 3-9.   Cabling for a Direct Connection

The RUK contains a 25-foot coaxial cable. At either end of this cable is a T-connector and terminator (Figure 3-10 on page 3-18). The LAN circuit cards on both Lucent INTUITY systems are equipped with a BNC connector to which the T-connector attaches (Figure 3-11 on page 3-18).

Terminator

T- adaptor

Coaxial
cable

t_conect CJL 052296
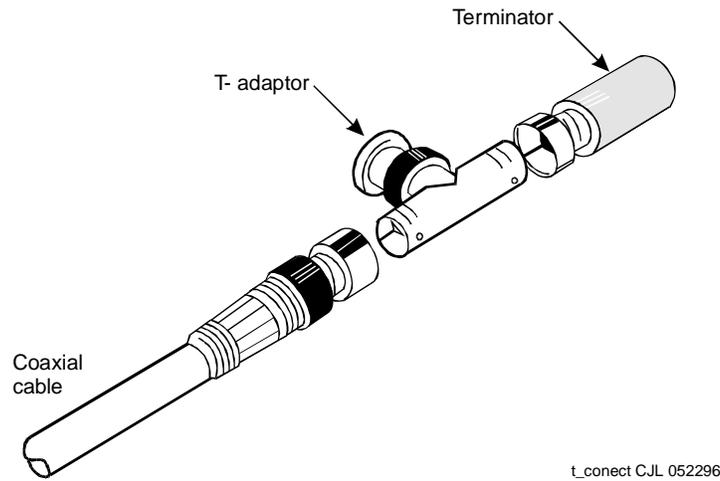
Figure 3-10.   Coaxial Cable T-Connector

Link LED

Transmit/
Receive
LED

RJ-45
modular jack
(UTP port)

15-pin
D-connector
(AUI port)

BNC
connector
(BNC port)
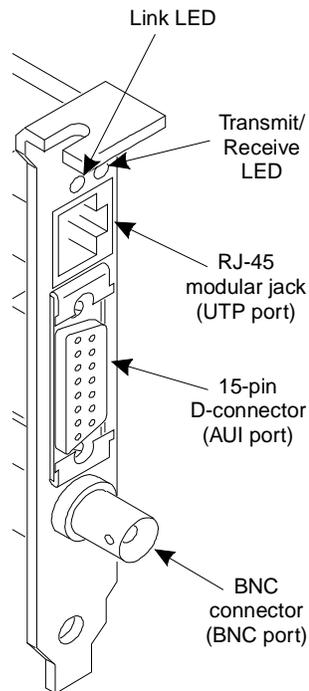
Figure 3-11.   Ethernet LAN Circuit Card Faceplate

To establish a direct cable link between the Lucent INTUITY systems, perform the following tasks:

1. If the Release 2 or Release 3 system is connected to an operating LAN, unhook the LAN cable.

   ### ⚠ CAUTION:
   Before unhooking the LAN, confirm with the customer that the loss of the Message Manager service is acceptable.

2. Connect the coaxial cable to the BNC connector on the Release 2 or Release 3 system. Make sure the cable connector is seated properly.

3. Connect the other end of the coaxial cable to the BNC connector on the Release 4 system. Make sure the cable connector is seated properly.

4. Proceed to Chapter 4, "Running the Out-of-Service Upgrade" or Chapter 5, "Running the In-Service Upgrade", as appropriate.

Establishing a Connection through the Customer's LAN

A connection through the customer's LAN involves linking the Lucent INTUITY systems through the customer's LAN (Figure 3-12).
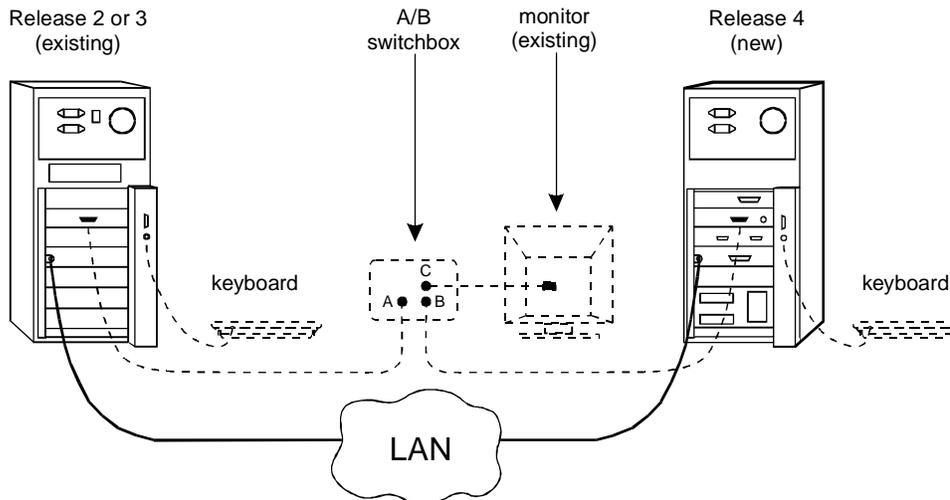
Figure 3-12.   Cabling for a Connection through the Customer's LAN

To establish a connection through the customer's LAN, perform the following tasks:

1. Connect the Release 4 system to the customer's LAN using the appropriate type of cable.

2. Ensure that the *temporary IP address and temporary system name* for the Lucent INTUITY Release 4 system are available. This temporary information should be recorded in Table 2-1 on page 2-8.

    NOTE:
    The temporary IP address for the Release 4 system must be provided by the customer to establish a connection through the customer's LAN.

3. Proceed to Chapter 4, "Running the Out-of-Service Upgrade" or Chapter 5, "Running the In-Service Upgrade", as appropriate.

Running the Out-of-Service Upgrade

4

> ⚠️ **CAUTION:**
> *If you intend to perform an in-service upgrade, do not use the procedures in this chapter. See Chapter 5, "Running the In-Service Upgrade" for the correct procedures.*

Overview

This chapter describes procedures to be followed for executing the Lucent INTUITY system out-of-service data transfer on the Lucent INTUITY Release 4 system.

This chapter is organized as follows:

- Busying out the switch data link, if applicable
- Verifying the installation of the platform upgrade package by the factory
- Running the platform upgrade package
- Starting the out-of-service data transfer
- Monitoring the out-of-service data transfer
- Completing the data transfer

Purpose

The procedures in this chapter enable the technician to complete the out-of-service data transfer. After finishing the procedures in this chapter, the Lucent INTUITY Release 4 system will contain all of the customer's messages and greetings, as well as the user data base.

Busying Out the Switch Data Link

⚠ CAUTION:

If the customer does not have a DEFINITY switch, do not complete these procedures. In that case, proceed to "Verifying the Installation of the Platform Upgrade Package by the Factory" on page 4-3.

⇒ NOTE:

If this procedure is already complete (as per the checklist), proceed to "Verifying the Installation of the Platform Upgrade Package by the Factory" on page 4-3. If the switch has not been busied out, complete these procedures now.

When the voice system is shut off for an upgrade, DEFINITY switches activate an alarm. If the customer has a DEFINITY switch, busy out the data link. For the purpose of busying out, DEFINITY switches are divided as follows:

- System 75, G1, and G3
- G2

Busying Out the Data Link on a System 75, G1, or G3 Switch

To busy out the data link, perform the following tasks on the switch administration terminal (SAT):

1. Enter **busy link *n***

   where *n* is the number of the link going to the Lucent INTUITY system. Valid input is an integer from 1 to 8.

   If additional information is needed, see the documentation associated with the DEFINITY switch.

2. Proceed to "Verifying the Installation of the Platform Upgrade Package by the Factory" on page 4-3.

Busying Out the Data Link on a G2 Switch

To busy out the data link, perform the following tasks on the switch administration terminal (SAT):

1. Enter **proc650 test 3**

2. Enter **bo bo**

   If additional information is needed, see the documentation associated with the DEFINITY switch.

3. Proceed to "Verifying the Installation of the Platform Upgrade Package by the Factory" on page 4-3.

Verifying the Installation of the Platform Upgrade Package by the Factory

The platform upgrade package should be installed on the new Release 4 system.

To verify that the platform upgrade package was installed by the factory, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "B" position (the Release 4 system position).

2. Check the Lucent INTUITY Main Menu (Figure 4-1) for the `Platform Upgrade` option.

```
              INTUITY (TM) Main Menu

AUDIX Administration
Customer/Services Administration
Networking Administration
Platform Upgrade
Switch Interface Administration
Upgrade
Voice System Administration
```
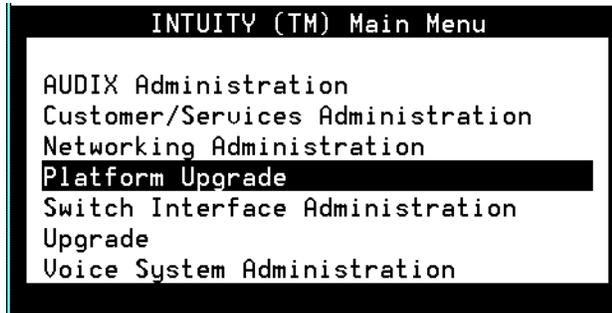
Figure 4-1.   Lucent INTUITY Main Menu for Release 4 with Platform Upgrade Option

3. If the `Platform Upgrade` option is present, proceed to "Running the Platform Upgrade Package" on page 4-4.

   If the `Platform Upgrade` option is not present, call the remote maintenance center.

Running the Platform Upgrade Package

To run the platform upgrade package, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "B" position (the Release 4 system position).

2. Starting at the Main Menu (Figure 4-1 on page 4-3), select:

```
> Platform Upgrade

   > Platform-to-Platform Data Transfer
```

The system displays the Platform-to-Platform Upgrade window (Figure 4-2).

The settings on your screen should match Table 4-1.

```
              Platform-to-Platform Upgrade
A Platform-to-Platform upgrade is used to upgrade a system
from one release to the next by copying customer data from
their existing system to a new system that is connected to
it via a LAN.

The current transfer settings are:
        Address of New Machine:          135.9.181.91
        Address of Existing Machine:     125.50.50.1
        Transfer Type:                   Out-of-Service

SELECT TASK------------

To use different transfer settings.......Press <CHG-CFG> (F2)

To use these settings....................Press <CONTINUE>(F3)

To return to the Upgrade Options menu....Press <CANCEL>  (F6)
```

Figure 4-2.   Platform-to-Platform Upgrade Window

3. The transfer settings in the window should match those in Table 4-1.

Table 4-1.   Transfer Settings for a Direct Connection Upgrade

Field	Setting
Address of New Machine	125.50.50.2
Address of Existing Machine	125.50.50.1
Transfer Type	Out-of-Service

If the settings do not match, call the remote maintenance center.

4. Press ⌐CONTINUE⌐ (F3).

The upgrade software runs a connectivity test between the Lucent INTUITY systems.

If the *connectivity test passes*, the system displays the Connectivity Test Passed window (Figure 4-3 on page 4-5). In that case, *proceed to step 5* on page 4-6.

If the *connectivity test does not pass*, the system displays the Check Connectivity and Configuration window (Figure 4-4 on page 4-5). Make sure the cable is firmly seated. If it seems loose, unplug it and reconnect it.

Press ⌐CONTINUE⌐ (F3) again to retest the connectivity. If it still fails, call the remote maintenance center.

```
                    Connectivity Test Passed

     STATUS-----------------

     The LAN connectivity test has passed.

     The upgrade software will compare the existing system and the
     new system for configuration and feature activation.  This
     comparison will take several minutes to complete.

     SELECT TASK------------

     To continue the Upgrade Process..............Press <CONTINUE>(F3)

     To return to the Upgrade Options menu........Press <CANCEL>  (F6)
```
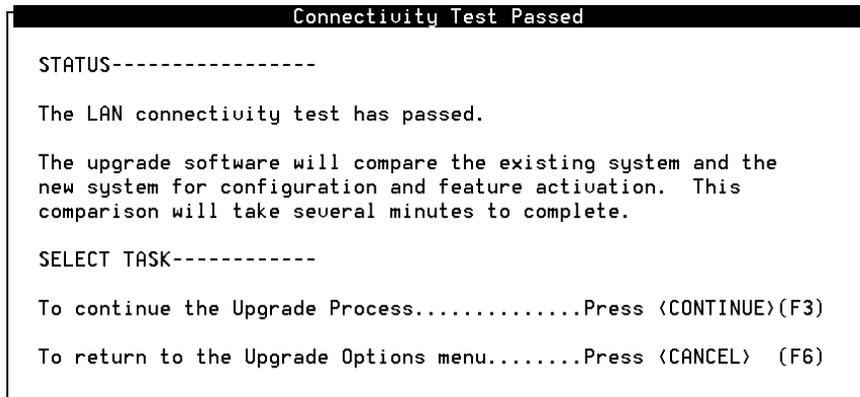
Figure 4-3. Connectivity Test Passed Window

```
                Check Connectivity and Configuration

      STATUS-----------------

     The connectivity test between this system and the existing
     system has failed.

        - Verify that the new and existing machines are both connected
          via a single coaxial cable -or- via the customer's LAN.

        - Verify that the new and existing machines both have remote
          access permissions for one another.
```
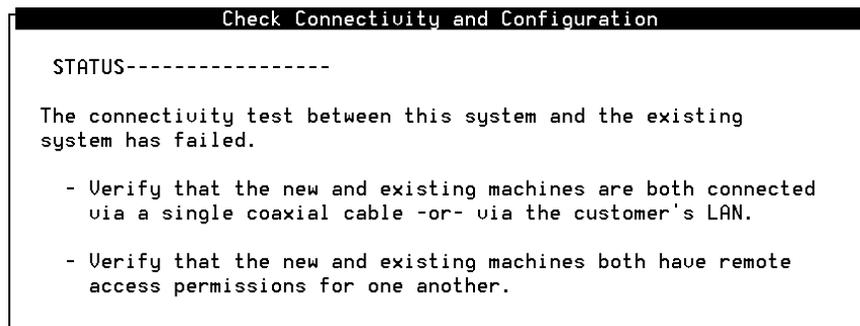
Figure 4-4.   Check Connectivity and Configuration Window

5. Press (CONTINUE) (F3).

    The Release 4 system conducts a "sanity" check which compares the features activate in both Lucent INTUITY systems. The sanity check also verifies that the features on both systems have the same configuration.

    The sanity check takes a few minutes to complete, during which time the system displays several status messages. When the sanity check is complete, the system displays the message:

    ```
    Successfully Completed
    Running Pre-Sales script on new machine.
    ```

    After approximately 30 more seconds the system displays the Sanity Check window (Figure 4-5).

```
                              Sanity Check
 SANITY CHECK: Passed.   Press (CONTINUE)(F3) to continue with the upgrade.

 ======================================================================
 System Type Check:             Existing    New        Comments

 Platform                       map40       map40      OK
 Software Version               mach 3      mach 4     OK

 ======================================================================
 Feature Options Check:         Existing    New        Comments

 Max Number of IMAPI Sessions   32          32         OK
 Multilingual                   OFF         OFF        OK
 Fax Creation                   ON          ON         OK
 Trusted Servers                N/A         OFF        OK     The listed features
 DCS                            OFF         OFF        OK     and settings
 SCSI Disk Mirroring            OFF         OFF        OK     on your screen
 AMIS Analog Networking         ON          ON         OK     may vary from
 High speed digital ports       4           4          OK     this illustration
 Low speed digital ports        OFF         2          OK
 TCPIP digital ports            N/A         OFF        OK
```
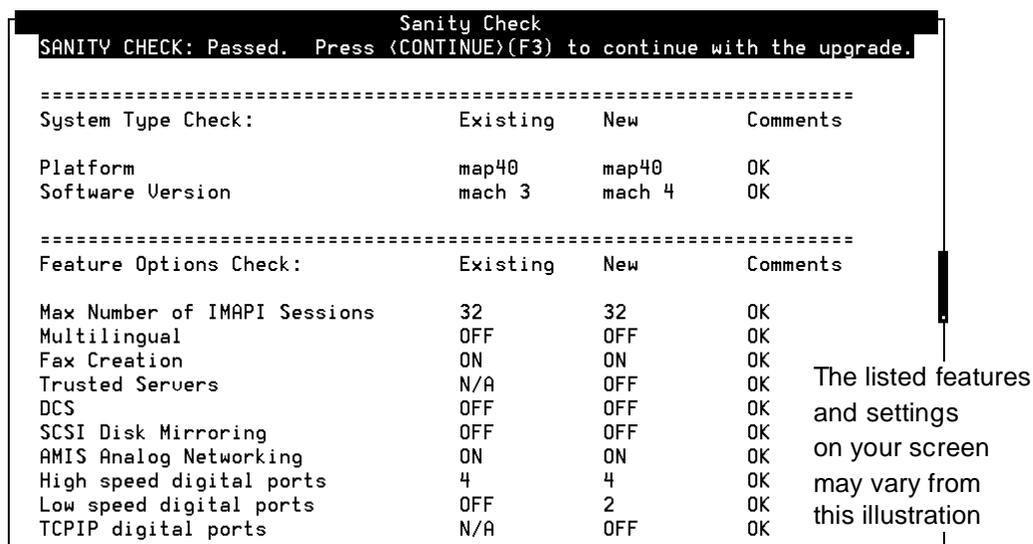
Figure 4-5. Sanity Check Window

> **NOTE:**
> The initial Sanity Check window does not show all of the information. Scroll down the window to see all of the sanity check information.

6. If the message at the top of the window reads, "SANITY CHECK: Passed", proceed to step 7.

    Any errors are flagged with the word ERROR! and an error message in the Comments column. If an error is found, the upgrade process will not proceed. Contact your remote maintenance center.

Checks are made for the following:

- System type

  The upgrade package checks the machine type (for example, MAP/40) and version of both the existing and new machine.

- Feature options installed on each system

  The upgrade package collects all the options information from the existing machine and compares it to the values on the new machine. If there is a discrepancy (for instance, hours of speech on the new machine are less than hours of speech on the existing machine), the system displays an error message.

- Switch integration check

  The upgrade package then checks which SWIN is installed on the existing system and the new system. If they are different, the system displays an error message.

- Default language setting

  The upgrade package checks for the default language on the existing system and verifies that the same language is installed and defaulted on the new system. If the language is not installed on the new system, the system displays an error message. If the language is installed but not defaulted, the system displays a warning message.

- Optional software

  The upgrade package then checks for the System Programming and Maintenance (SPM) and Call Accounting System (CAS) modules on both the existing and new systems. An error results if the new system does not contain a module that the existing system contains.

- Voice file space

  The voice file systems (VFS) space check queries the existing system for its current voice file system names and determines how much space is consumed in each (not counting announcement sets). It then takes these space consumption values and compares them to the space (in blocks) available in each VFS on the new system.

  If the space consumed by each VFS is less than the amount of space available for each VFS on the new system, then the system displays OK in the comment column.

  If the space consumed by any VFS is greater than the amount of space available for the VFS on the new system, a transfer cannot be successfully completed. The system displays ERROR! in the comment column. If this occurs, the customer will have to delete voice messages from the Lucent INTUITY Release 2 or Release 3 system.

7. Continue with the next procedure, "Starting the Out-of-Service Data Transfer" on page 4-8.

Starting the Out-of-Service Data Transfer

To start the out-of-service data transfer, perform the following tasks:

1. Starting at the Sanity Check window (Figure 4-5 on page 4-6), press ⌷CONTINUE⌷ (F3).

   The system displays the Out-of-Service Data Transfer screen (Figure 4-6).

```
OUT-OF-SERVICE DATA TRANSFER

An Out-of-Service data transfer will take the existing system out
of service for approximately xx hour(s).  This consists of two
sets of data:

    Voice files will take approximately xx hour(s) to transfer.

    Database files will take approximately xx hour(s).


Please verify that this is acceptable before continuing.

SELECT TASK--------------

To start the data transfer..............Press <CONTINUE> (F3)

To return to the Upgrade Options menu...Press <CANCEL> (F6)
```

Figure 4-6.   Out-of-Service Data Screen

2. *Confirm with the customer that the temporary loss of service is acceptable* and press ⌷CONTINUE⌷ (F3)

   The system stops the voice system and other applications that may be running (for example, CAS). This process takes a few minutes to complete, during which time the system displays several status messages.

   Once the shutdown is completed, the system data transfer begins.

3. Continue with the next procedure, "Monitoring the Out-of-Service Data Transfer" on page 4-9.

Monitoring the Out-of-Service Data Transfer

When the data transfer begins, the system displays the Out-of-Service Data Transfer Updates window (Figure 4-7).

➡ **NOTE:**
The data transfer takes some time to complete. The technician does not have to monitor the system for the duration of the transfer.

```
                    Out-of-Service Data Transfer Updates
A system to system data transfer is now in progress.

Audix Data                      Successfully Completed
Voice File Audit                Successfully Completed
Name Files                      In Progress
Voice Files                     Pending
Custom Anncs                    Pending
Platform                        Pending
Networking Data                 Pending
TCP/IP Machine Data             Pending
Upgrade                         Pending

Est. Total:  100.50 MB    Est. Done:   76.10 MB  %Complete:  75%
Upgrade Status: Working

THIS SCREEN UPDATES EVERY 30 SECONDS UNTIL THE UPGRADE IS COMPLETE.

To view the Upgrade Log...........................Press <VIEW LOG>(F2)

To stop the data transfer.........................Press <CANCEL>  (F6)
```

Figure 4-7.   Out-of-Service Data Transfer Updates Window

At this point the Release 4 system continues to transfer data until the upgrade is complete. During this transfer, the technician can:

■   View the Log File to monitor the status of the transfer

■   Stop the data transfer (see page 4-12)

Accessing the View Log File Window

During the data transfer, the Out-of-Service Data Transfer Updates window (Figure 4-7) is updated every 30 seconds with an estimate of how much data have been copied and how much data are left to be copied. If errors are found, the screen displays the status with a note that errors were found.

The technician can access the View Log File window and view the transfer status at any time during the data transfer. To do so, perform the following tasks:

1. Starting from the Out-of-Service Data Transfer Updates window (Figure 4-7 on page 4-9), press (VIEW LOG) (F2).

   The system displays the View Log File window (Figure 4-8).

   ⇒ **NOTE:**
   The initial View Log File window does not show all of the log information. Scroll down the window to see all of the log information.

```
                         View Log File
 Fri May 24 13:51:14 EDT 1996
 Begin In-Service (Final) Intuity Upgrade.

 13:51:14 Running PreScript Process for the "Audix Data" Module

         PreScript Processing Successfully Completed for "Audix Data"
 Module

 13:52:04 Performing Data Transfer for the "Audix Data" Module

         Files Transferred:
         /VM/misc/old_vintage >>> Successfully Completed
         /VM/misc/old_machtype >>> Successfully Completed
         /vm/audix/md/mdata >>> Successfully Completed
         /vm/audix/md/config >>> Successfully Completed
         /vm/audix/sd/mesg/mh          /vm/odb/audix/sd/mesg >>>
 Successfully Completed
         /vm/audix/sd/mesg/vf          /vm/odb/audix/sd/mesg >>>
 Successfully Completed
         /vm/audix/sd/mesg/note        /vm/odb/audix/sd/mesg >>>
 Successfully Completed
```

Figure 4-8.   View Log File Window

2. After viewing, press ⌈CANCEL⌋ (F6).

    The system redisplays the Out-of-Service Data Transfer Updates window
    (Figure 4-7 on page 4-9).

    ⚠ **WARNING:**

    It takes a few moments for the system to cancel out of this window.
    DO NOT press ⌈CANCEL⌋ ***(F6) a second time*** *(thinking that nothing is*
    happening), as this will initiate the Stop the Data Transfer process.

3. The out-of-service data transfer continues until complete. When it is
    complete, the system displays the Data Transfer Completion window
    (Figure 4-10 on page 4-13). Continue with the next procedure,
    "Completing the Data Transfer" on page 4-13.

Stopping the Data Transfer

> ⚠️ **WARNING:**
> *Do not stop the upgrade unless it is absolutely necessary. Contact the remote maintenance center before stopping an upgrade.*

To stop the data transfer, perform the following tasks:

1. Starting from the Out-of-Service Data Transfer Updates window (Figure 4-7), press (CANCEL) (F6).

    The system displays the Stop Data Transfer Confirmation window (Figure 4-9).

```
                  Stop Data Transfer Confirmation
 You have chosen to stop the data transfer, at this point you have
 three options:

 - Stop the data transfer and RESTART the existing Intuity system
   (putting it In-Service).  The next upgrade attempt will cause all
   data to be transferred.  (Use this option if uncorrectable problems
   with the LAN or upgrade process have been encountered).

 - Stop the data transfer and leave the existing Intuity System
   Out-of-Service.  The next upgrade attempt will CONTINUE the
   transfer of any remaining data. (Use this option if there are
   correctable problems with the LAN or upgrade process).

 - Do not stop the data transfer.  CANCEL the request to stop the
   data transfer and return to the previous screen.

 To restart the existing system................Press <RESTART> (F2)

 To leave the existing system Out-of-Service...Press <CONTINUE>(F3)

 To return to the previous screen..............Press <CANCEL>  (F6)
```

Figure 4-9.   Stop Data Transfer Confirmation Window

2. Choose 1 of the 3 options:

    - *If you do not wish to stop the upgrade*, press (CANCEL) (F6). This returns you to the Out-of-Service Data Transfer Updates window (Figure 4-7) and the upgrade will continue.

    - *If you would like to stop the upgrade but do not need* to put the Release 2 or Release 3 system back into *service*, press (CONTINUE) (F3). This puts the upgrade 'on hold' and enables the Release 4 system to continue transferring the remaining data when the upgrade resumes.

    - *If you would like to stop the upgrade and need* to put the Release 2 or Release 3 system back into *service*, press (RESTART) (F2). This causes the Release 4 system to begin transferring all the data again when the upgrade resumes.

Completing the Data Transfer

⚠ **CAUTION:**

If the customer has a DEFINITY switch, do not complete this procedure until you have completed "Busying Out the Switch Data Link" on page 4-2.

When the out-of-service data transfer is complete, the system displays the Data Transfer Completion window (Figure 4-10).

The listing of modules on your screen may vary from this illustration

```
                    Data Transfer Completion
A system to system data transfer is now complete.

Audix Data                      Successfully Completed
Voice Cleanup                   Successfully Completed
Name Files                      Successfully Completed
Voice Files                     Successfully Completed
Custom Anncs                    Successfully Completed
Platform                        Successfully Completed
Networking Data                 Successfully Completed
TCP/IP Machine Data             Successfully Completed
Upgrade                         Successfully Completed

The data transfer is complete!

If you haven't already done so, please swing all appropriate
cables from the existing machine to this machine.

To view the Upgrade Log......................Press <VIEW LOG>(F2)

To perform a "reboot" now....................Press <CONTINUE>(F3)
```

Figure 4-10.   Data Transfer Completion Window

1. If anything other than `Successfully Completed` displays, contact the remote maintenance center.

2. At this point the technician should:

   a. Press [VIEW LOG] (F2) to access the View Log File window Figure 4-8 on page 4-10).

   b. If no errors are found, press [CANCEL] (F6).

      If errors are found, contact the remote maintenance center.

   c. Continue with step 3.

3. Continue with the next procedure, "Rebooting the Lucent INTUITY Release 4 System to Effect Final System Changes" on page 4-14.

**Rebooting the Lucent INTUITY Release 4
System to Effect Final System Changes**

Now that all Release 2 or Release 3 system data have been transferred onto the Release 4 machine, you need to effect final changes to the Release 4 system by rebooting the Release 4 system.

To perform a system reboot, perform the following tasks:

1. Press CONTINUE (F3).

   The system displays the message:

   ```
   Shutdown started.
   ```

   The Release 4 system automatically reboots and displays the console login.

2. Log in and verify the Release 4 system LAN settings match the settings from the Release 2 or Release 3 system that you wrote in Table 2-1 on page 2-8. From the Main Menu (Figure 4-1 on page 4-3), select:

   ```
   > Networking Administration
   ```

   ```
   >TCP/IP Administration
   ```

   The system displays the TCP/IP Administration window (Figure 2-7 on page 2-8).

   ⇒ **NOTE:**
   Perform this task; whether or not the customer uses a LAN.

3. If the LAN settings match, proceed to step 5.

4. If the LAN settings do not match, administer them by performing the following tasks:

   a. Using the values in Table 2-1 on page 2-8 and information from the customer, enter:

      ■ The *Lucent INTUITY Release 4 server name* in the `UNIX Machine Name:` field. This is a case-sensitive field, so capital letters must be typed as capitals, and lowercase letters as lowercase.

         ⇒ **NOTE:**
         This name cannot contain any embedded spaces, for example, denver 1, and cannot start with a number.

      ■ The *IP (Internet Protocol) address* in the `IP Address:` field

■ The *subnet mask* in the `Subnet Mask:` field

This is an optional entry field. If you do not enter anything, the system will automatically use a default.

> **NOTE:**
> The default value may conflict with the customer's LAN configuration. Check with the customer to ensure compatibility.

■ The *default gateway IP address* in the `Default Gateway IP Address:` field

This field should be left blank if the Lucent INTUITY system will only be communicating with other machines on the same LAN.

b. Press `CHG-KEYS` (F8) and then `BRD CNFG` (F2).

The system displays the Ethernet Board Configuration window.

c. Press `CHOICES` (F2) to display a list of the network interface types.

d. Highlight the *network interface type* to be used on this system and press `RETURN`.

e. Press `SAVE` (F3) to save the Ethernet Board configuration.

f. Press `CANCEL` (F6) to return to the TCP/IP Administration window.

g. Press `SAVE` (F3) to save the TCP/IP administration values.

h. Continue with step 5.

5. Press `CANCEL` (F6) repeatedly to return to the Main Menu

6. Proceed to Chapter 6, "Verifying the In-Service or Out-of-Service Upgrade".

Running the In-Service Upgrade

5

CAUTION:

If you intend to perform an out-of-service upgrade, do not use the procedures in this chapter. See Chapter 4, "Running the Out-of-Service Upgrade" for the correct procedures.

Overview

This chapter describes procedures to be followed for executing the Lucent INTUITY system in-service data transfer on the Lucent INTUITY Release 4 system.

This chapter is organized as follows:

- Verifying the installation of the platform upgrade package by the factory

- Running the platform upgrade package

- Starting the in-service data transfer

- Monitoring the in-service data transfer

- Busying out the switch data link, if applicable

- Starting the final transfer

- Completing the data transfer

Purpose

The purpose of this chapter is to provide step-by-step instructions for completing the in-service data transfer. At the completion of these procedures the Lucent INTUITY Release 4 system will contain all of the customer's messages and greetings, as well as the user data base.

Verifying the Installation of the Platform Upgrade Package by the Factory

The platform upgrade package should be installed on the new Lucent INTUITY Release 4 system.

To verify that the platform upgrade package was installed by the factory, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "B" position (Release 4 system position).

2. Check the Lucent INTUITY Main Menu (Figure 5-1) for the `Platform Upgrade` option.

```
            INTUITY (TM) Main Menu

    AUDIX Administration
    Customer/Services Administration
    Networking Administration
    Platform Upgrade
    Switch Interface Administration
    Upgrade
    Voice System Administration
```
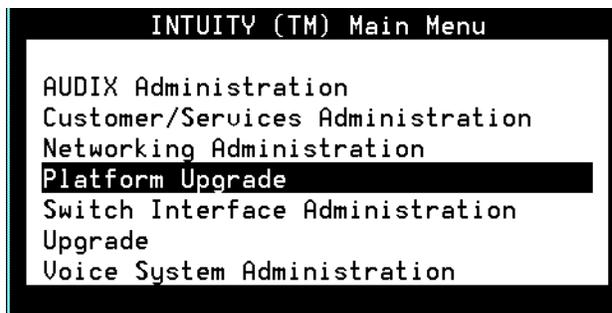
Figure 5-1. Lucent INTUITY Main Menu

3. If the `Platform Upgrade` option is present, proceed to "Running the Platform Upgrade Package" on page 5-3.

   If the `Platform Upgrade` option is not present, call the remote maintenance center.

Running the Platform Upgrade Package

The in-service upgrade can be run through:

- A direct connection — involves linking the Lucent INTUITY systems through a coaxial cable that attaches to both LAN circuit cards

- The customer's LAN

The Lucent INTUITY Release 4 system will be initialized differently depending on the connection type. *The difference will be clearly noted in this procedure*.

To run the platform upgrade package, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "B" position (Release 4 system position).

2. Starting from the Main Menu (Figure 5-1 on page 5-2), select:

> ```
> Platform Upgrade
> ```

> ```
> > Platform-to-Platform Data Transfer
> ```

The system displays the Platform-to-Platform Upgrade window (Figure 5-2).

The settings on your screen may vary from this illustration.

```
                  Platform-to-Platform Upgrade
A Platform-to-Platform upgrade is used to upgrade a system
from one release to the next by copying customer data from
their existing system to a new system that is connected to
it via a LAN.

The current transfer settings are:
        Address of New Machine:          135.9.181.91
        Address of Existing Machine:     125.50.50.1
        Transfer Type:                   Out-of-Service

SELECT TASK------------

To use different transfer settings.......Press <CHG-CFG> (F2)

To use these settings....................Press <CONTINUE>(F3)

To return to the Upgrade Options menu....Press <CANCEL>  (F6)
```

Figure 5-2.   Platform-to-Platform Upgrade Window

3. Press CHG-CFG (F2).

    The system displays the Advanced Upgrade/Migration Options window
    (Figure 5-3).

```
               Advanced Upgrade/Migration Options
Warning: Please see <HELP>(F1) before making changes.

This system's name:              [Intuity4   ]
This system's IP address:        [ 125.50.50.2        ]
This system's subnet mask:       [255.255.255.0   ]
This system's Interface type:    [ BNC              ]

Existing system's name:          [Intuity    ]
Existing system's IP address:    [125.50.50.1        ]

Transfer Type:                   [In-Service     ]

SELECT TASK------------

To save changes..........................Press <CONTINUE>(F3)

To return to previous screen..............Press <CANCEL>  (F6)
```
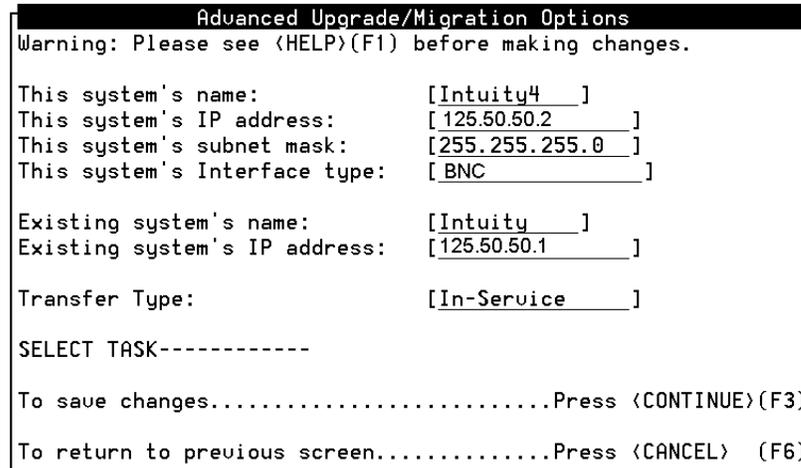
Figure 5-3.   Advanced Upgrade/Migration Options Window

Table 5-1 on page 5-5 describes the fields displayed in Advanced
Upgrade/Migration Options window (Figure 5-3) and lists the correct
settings for a direct connection upgrade and for a customer's LAN
connection upgrade.

4. Compare the values on your screen with those in Table 5-1 on page 5-5.

    If the *correct values display, proceed to step 5*.

    If the displayed *values are not correct, complete step a – step c below*.

    a. Use the down arrow ▼ to position the cursor in the field to be
        changed and type the correct value.

    b. Repeat for all incorrect settings.

    c. Continue with step 5.

Table 5-1.   Advanced Upgrade/Migration Options Window with Transfer Settings

Field	Description	Setting using Direct Connection	Setting using Customer' LAN
`This system's name`	The name provided for the Lucent INTUITY Release 4 system.	Intuity4 (Type exactly as shown)	See Table 2-1 on page 2-8.
`This system's IP address`	The IP address provided for the Lucent INTUITY Release 4 system.	125.50.50.2	See Table 2-1 on page 2-8.
`This system's subnet mask`	The subnet mask will hide the first 2 or 3 portions of the IP address from the system.	255.255.255.0	See Table 2-1 on page 2-8.
`This system's Interface type`	This is the LAN cable type, such as: ■ BNC ■ Twisted Pair ■ 10 Base-T ■ AUI	BNC	*Ask the customer*
`Existing system's name`	The name provided for the Lucent INTUITY Release 2 or Release 3 system.	Intuity	See Table 2-1 on page 2-8.
`Existing system's IP address`	The IP address provided for the Lucent INTUITY Release 2 or Release 3 system.	125.50.50.1	See Table 2-1 on page 2-8.
`Transfer type`	The data transfer type.	In-Service	In-Service

5. Press [CONTINUE] (F3).

    The system redisplays Platform-to-Platform Upgrade window (Figure 5-2 on page 5-3).

6. Press (CONTINUE) (F3) again to continue.

The upgrade software runs a connectivity test between the Lucent INTUITY systems.

If the *connectivity test passes*, the system displays the Connectivity Test Passed window (Figure 5-4). In that case, *proceed to step 7*.

If the *connectivity test does not pass*, the system displays the Check Connectivity and Configuration window (Figure 5-5 on page 5-6). Make sure the cable is firmly seated. If it seems loose, unplug it and reconnect it.

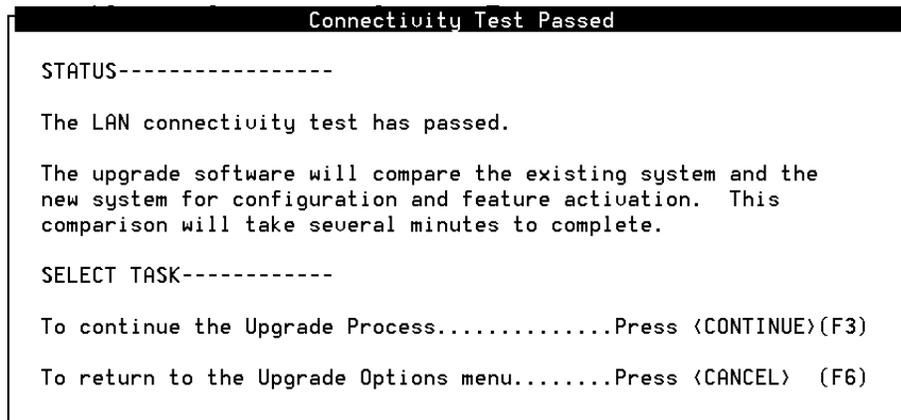Press (CONTINUE) (F3) again to retest the connectivity. If it still fails, call the remote maintenance center.

```
                      Connectivity Test Passed

   STATUS-----------------

   The LAN connectivity test has passed.

   The upgrade software will compare the existing system and the
   new system for configuration and feature activation.  This
   comparison will take several minutes to complete.

   SELECT TASK------------

   To continue the Upgrade Process..............Press <CONTINUE>(F3)

   To return to the Upgrade Options menu........Press <CANCEL>  (F6)
```

Figure 5-4.   Connectivity Test Passed Window

```
                Check Connectivity and Configuration

    STATUS-----------------

   The connectivity test between this system and the existing
   system has failed.

     - Verify that the new and existing machines are both connected
       via a single coaxial cable -or- via the customer's LAN.

     - Verify that the new and existing machines both have remote
       access permissions for one another.
```
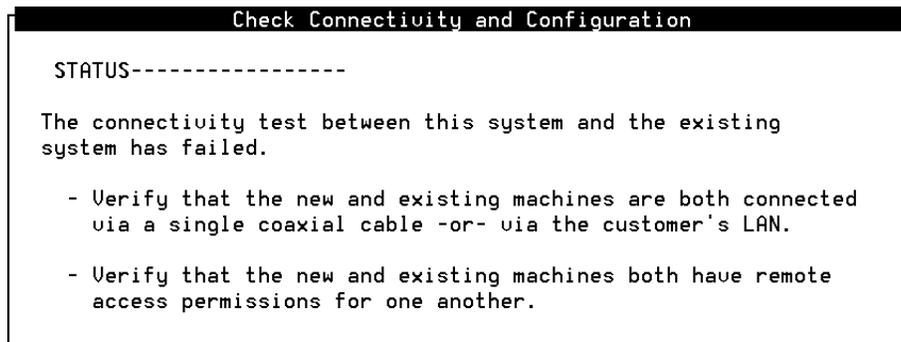
Figure 5-5.   Check Connectivity and Configuration Window

7. Press ⌷CONTINUE⌷ (F3).

   The Release 4 system conducts a "sanity" check that compares the features activate in both Lucent INTUITY systems. The sanity check also verifies that the features on both systems have the same configuration.

   The sanity check takes a few minutes to complete, during which time the system displays several status messages. When the sanity check is complete, the system displays the message:

   ```
   Successfully Completed
   Running Pre-Sales script on new machine.
   ```

   After approximately 30 more seconds the system displays the Sanity Check window (Figure 5-6).

```
                              Sanity Check
SANITY CHECK: Passed.   Press <CONTINUE>(F3) to continue with the upgrade.


======================================================================
System Type Check:                  Existing    New         Comments

Platform                            map40       map40       OK
Software Version                    mach 3      mach 4      OK


======================================================================
Feature Options Check:              Existing    New         Comments

Max Number of IMAPI Sessions        32          32          OK
Multilingual                        OFF         OFF         OK
Fax Creation                        ON          ON          OK
Trusted Servers                     N/A         OFF         OK
DCS                                 OFF         OFF         OK
SCSI Disk Mirroring                 OFF         OFF         OK
AMIS Analog Networking              ON          ON          OK
High speed digital ports            4           4           OK
Low speed digital ports             OFF         2           OK
TCPIP digital ports                 N/A         OFF         OK
```

The listed features and settings on your screen may vary from this illustration

Figure 5-6.   Sanity Check Window

⟹ **NOTE:**
   The initial Sanity Check window does not show all of the sanity check information. Scroll down the window to see all of the sanity check information.

8. Any errors are flagged with the word ERROR! and an error message in the Comments column. If *an error is found*, the upgrade process will not proceed. *Contact your remote maintenance center*.

   If no errors are found, continue with the next step.

Checks are made for the following:

- System type

    The upgrade package checks the machine type (for example, MAP/40) and version of both the existing and new machine.

- Feature options installed on each system

    The upgrade package collects all the options information from the existing machine and compare it to the values on the new machine. If there is a discrepancy (for instance, hours of speech on the new machine are less than hours of speech on the existing machine), the system displays an error message.

- Switch integration check

    The upgrade package then checks which SWIN is installed on the existing system and the new system. If they are different, the system displays an error message.

- Default language setting

    The upgrade package checks for the default language on the existing system and verifies that the same language is installed and defaulted on the new system. If the language is not installed on the new system, the system displays an error message. If the language is installed but not defaulted, the system displays a warning message.

- Optional software

    The upgrade package then checks for the System Programming and Maintenance (SPM) and Call Accounting System (CAS) modules on both the existing and new systems. An error results if the new system does not contain a module that the existing system contains.

- Voice file space

    The voice file systems (VFS) space check queries the existing system for its current voice file system names and then determines how much space is consumed in each (not counting announcement sets). It then takes these space consumption values and compares them to the space (in blocks) available in each VFS on the new system.

    If the space consumed by each VFS is less than the amount of space available for each VFS on the new system, then the system displays OK in the comment column.

    If the space consumed by any VFS is greater than the amount of space available for the VFS on the new system, a transfer cannot be successfully completed. The system displays ERROR! in the comment column. If this occurs, the customer will have to delete voice messages from the Lucent INTUITY Release 2 or Release 3 system.

9. Press ⌈CONTINUE⌉ (F3).

10. Continue with the next procedure, "Starting the In-Service Data Transfer".

Starting the In-Service Data Transfer

➡ **NOTE:**
This process takes several hours to complete. The actual number of hours depends on the number of users and callers on the system during the transfer. Start this procedure during a period of low system demand. At the scheduled down time (as specified by the customer), perform the final transfer (the part that requires the system to be down).

To start the in-service data transfer, perform the following tasks on the Release 4 machine:

1. Place the A/B switch in the "B" position
   (Release 4 system position).

2. Starting from the Sanity Check window (Figure 5-6), press ⌈CONTINUE⌉ (F3).

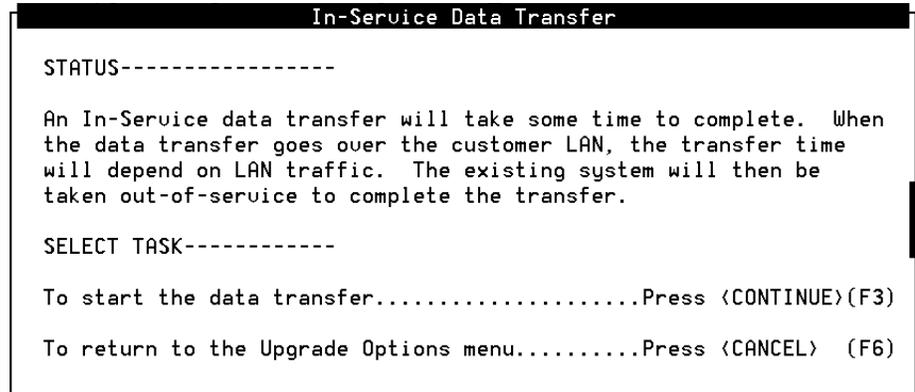   The system displays the In-Service Data Transfer window (Figure 5-7).

```
                    In-Service Data Transfer

  STATUS----------------

  An In-Service data transfer will take some time to complete.  When
  the data transfer goes over the customer LAN, the transfer time
  will depend on LAN traffic.  The existing system will then be
  taken out-of-service to complete the transfer.

  SELECT TASK------------

  To start the data transfer.....................Press <CONTINUE>(F3)

  To return to the Upgrade Options menu..........Press <CANCEL>  (F6)
```

Figure 5-7. In-Service Data Transfer Window

3. Press ⌈CONTINUE⌉ (F3).

   The system starts the data transfer and displays several status messages.

4. The data transfer is in progress. This process takes several hours to complete. *Read the next section, "Monitoring the In-Service Data Transfer", before you press any other function keys.*

Monitoring the In-Service Data Transfer

The in-service data transfer copies and moves all available customer information while the system is still in service and taking calls. The process of copying and moving the data is called a *pass*. The pass number is located in the upper left hand corner of the In-Service Data Transfer Updates window (Figure 5-8 on page 5-11). **The pass number must be at least 2 before the final data transfer is started**.

The first pass copies and translates (if necessary) the most pertinent and largest blocks of customer data from the Release 2 or Release 3 system to the Release 4 system. Each module determines the data to be copied while in-service. Data transfer is a low priority.

Typically, additional messages or other customer-generated data are initiated while the in-service data transfer is processing the first pass. As a result, the in-service data transfer makes multiple passes. The second and subsequent passes only copy newly-generated information, so each of these passes take less time to process then the first pass.

When the data transfer begins, the system displays the In-Service Data Transfer Updates window (Figure 5-8 on page 5-11). The window shows the 3 modules that are involved in the data transfer. These modules and what data they look for are:

- Voice File Audit — looks for messages, greetings, and names that have been deleted on the existing Release 2 or Release 3 machine and deletes them on the Release 4 machine

- Name Files — copies over any names that don't exist on the Release 4 machine

- Voice Files — copies over any messages and greetings that don't exist on the Release 4 machine

⇒ NOTE:
The data transfer takes some time to complete. The technician does not have to monitor the system for the duration of the transfer.

> **NOTE:**
> An in-service transfer is never finished. That is, it will continue making passes through the data base for as long as you allow. Therefore, this status message will never read: "A system to system data transfer is now complete".

```
                  In-Service Data Transfer Updates
A system to system data transfer is now in progress. ◄────── Status Message
Data Transfer - Pass #1

Voice File Audit                 Pending
Name Files                       In Progress
Voice Files                      Pending

Est. Total:  138.83 MB    Est. Done:    0.00 MB  %Complete:   0%
Upgrade Status: Working

THIS SCREEN UPDATES EVERY 30 SECONDS UNTIL THE UPGRADE IS COMPLETE.

To view the Upgrade Log.............................Press <VIEW LOG>(F2)

To complete the data transfer in Out-of-Service mode
(The existing system will be taken Out-of-Service)..Press <COMPLETE>(F3)

To stop the data transfer...........................Press <CANCEL>  (F6)
```

Figure 5-8.   In-Service Data Transfer Updates Window

During the in-service data transfer, the technician can:

■   View the Log File to monitor the status of the transfer

■   Stop the data transfer (see page 5-13)

■   Start the final data transfer after, at least, the second pass is complete (see page 5-15)

Accessing the View Log File Window

The technician can access the View Log File window and view the transfer status at any time during the data transfer. To do so, perform the following tasks:

1. Starting from the In-Service Data Transfer Updates window (Figure 5-8), press VIEW LOG (F2).

    The system displays the View Log File window (Figure 5-9).

    > **NOTE:**
    > The initial View Log File window does not show all of the log information. Scroll down the window to see all of the log information.

```
                          View Log File
Fri May 24 13:51:14 EDT 1996
Begin In-Service (Final) Intuity Upgrade.

13:51:14 Running PreScript Process for the "Audix Data" Module

        PreScript Processing Successfully Completed for "Audix Data"
Module

13:52:04 Performing Data Transfer for the "Audix Data" Module

        Files Transferred:
        /VM/misc/old_vintage >>> Successfully Completed
        /VM/misc/old_machtype >>> Successfully Completed
        /vm/audix/md/mdata >>> Successfully Completed
        /vm/audix/md/config >>> Successfully Completed
        /vm/audix/sd/mesg/mh           /vm/odb/audix/sd/mesg >>>
Successfully Completed
        /vm/audix/sd/mesg/vf           /vm/odb/audix/sd/mesg >>>
Successfully Completed
        /vm/audix/sd/mesg/note         /vm/odb/audix/sd/mesg >>>
Successfully Completed
```

Figure 5-9. View Log File Window

2. After viewing, press (CANCEL) (F6).

   The system redisplays the In-Service Data Transfer Updates window
   (Figure 5-8).

   ⚠ **WARNING:**
   It takes a few moments for the system to cancel out of this window.
   DO NOT press (CANCEL) ***(F6) a second time*** *(thinking that nothing is
   happening), as this will initiate the Stop the Data Transfer process.*

3. *If the upgrade has completed, at least, the second pass*, proceed to
   "Busying Out the Switch Data Link" on page 5-14.

   If the upgrade has not completed the second pass, continue monitoring the
   upgrade. When the second pass is complete, proceed to "Busying Out the
   Switch Data Link" on page 5-14

Stopping the Data Transfer

⚠ **WARNING:**

Do not stop the upgrade unless it is absolutely necessary. Contact the remote maintenance center before stopping an upgrade.

To stop the data transfer, perform the following tasks:

1. Starting from the In-Service Data Transfer Updates window (Figure 5-8), press [CANCEL] (F6).

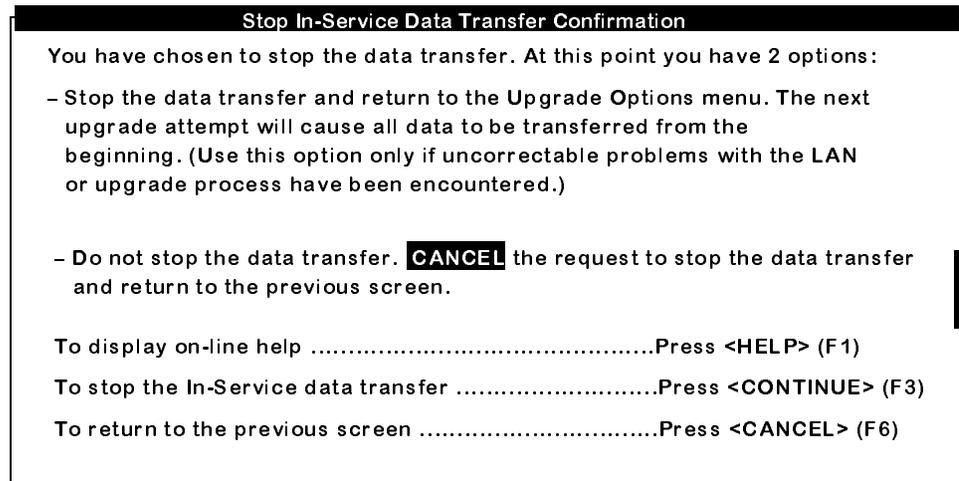   The system displays the Stop In-Service Data Transfer Confirmation window (Figure 5-10).

```
┌─────────────────────────────────────────────────────────────────────┐
│              Stop In-Service Data Transfer Confirmation               │
│ You have chosen to stop the data transfer. At this point you have 2 options: │
│                                                                       │
│ – Stop the data transfer and return to the Upgrade Options menu. The next │
│   upgrade attempt will cause all data to be transferred from the      │
│   beginning. (Use this option only if uncorrectable problems with the LAN │
│   or upgrade process have been encountered.)                          │
│                                                                       │
│                                                                       │
│   – Do not stop the data transfer. ▐CANCEL▌ the request to stop the data transfer │
│     and return to the previous screen.                                │
│                                                                       │
│   To display on-line help ...............................Press <HELP> (F1) │
│                                                                       │
│   To stop the In-Service data transfer ...........Press <CONTINUE> (F3) │
│                                                                       │
│   To return to the previous screen ...............Press <CANCEL> (F6) │
│                                                                       │
└─────────────────────────────────────────────────────────────────────┘
```

Figure 5-10.   Stop Data Transfer Confirmation Window

2. Choose an option:

   ■ *If you do not wish to stop the upgrade, press*   (F6). This returns you to the In-Service Data Transfer Updates window (Figure 5-8 on page 5-11) and the upgrade will continue.

     In that case, continue to monitor the data transfer until the pass number is at least 2, and then proceed to "Busying Out the Switch Data Link" on page 5-14.

   ■ *If you would like to stop the upgrade, press*   (F3). This returns you to the INTUITY Main Menu. The next upgrade attempt starts the data transfer from the beginning.

Busying Out the Switch Data Link

⚠ CAUTION:

If the customer does not have a DEFINITY switch, do not complete these procedures. In that case, proceed to "Completing the Data Transfer" on page 5-17.

When the voice system is shut off for an upgrade, DEFINITY switches activate an alarm. If the customer has a DEFINITY switch, busy out the data link once the voice system is off and the upgrade has begun. For the purpose of busying out, DEFINITY switches are divided as follows:

- System 75, G1, and G3

- G2

Busying Out the Data Link on a System 75, G1, or G3 Switch

To busy out the data link, perform the following tasks on the switch administration terminal (SAT):

1. Enter **busy link *n***

   where ***n*** is the number of the link going to the Lucent INTUITY system. Valid input is an integer from 1 to 8.

   If additional information is needed, see the documentation associated with the DEFINITY switch.

2. Continue with the next procedure, "Starting the Final Transfer" on page 5-15.

Busying Out the Data Link on a G2 Switch

To busy out the data link, perform the following tasks:

1. Enter **proc650 test 3**

2. Enter **bo bo**

   If additional information is needed, see the documentation associated with the DEFINITY switch.

3. Continue with the next procedure, "Starting the Final Transfer" on page 5-15.

Starting the Final Transfer

> ⚠ **CAUTION:**
> *The in-service **data transfer must be on at least the second pass** before the final transfer is started.*
>
> *Additionally, this part of the transfer requires that the Release 2 or Release 3 system be out of service. Confirm with the customer that the temporary loss of service is acceptable. Typically, this part of the transfer is done during scheduled down time, as specified by the customer.*

When the final transfer is initiated, most of the customer data have been copied from the Release 2 or Release 3 system to the Release 4 system. The final data transfer must be completed with the Release 2 or Release 3 system out of service. The final data transfer copies:

- The voicemail database

- Any files that were not copied by the in-service data transfer

- Any new files created since the last incremental backup.

Before You Begin

The following tasks should have already been completed:

- The in-service data transfer has completed at least 2 complete passes

  The pass number is listed on the top of the In-Service Data Transfer Updates window (Figure 5-8) in the `Data Transfer` field.

- Alarm origination has been turned off on the Release 2 or Release 3 system (see page 3-5)

- The switch link has been busied out, if applicable (see page 5-14)

- *The customer is aware that their voice system will be out of service for at least 2 hours*

Starting the Final Transfer

To initiate the final transfer, perform the following tasks:

1. Starting from the In-Service Data Transfer Updates window (Figure 5-8 on page 5-11), press COMPLETE (F3).

   The system displays the Final Transfer Confirmation window (Figure 5-11).

```
                  Final Transfer Confirmation
The final data transfer will take the existing system out of
service for approximately    0.5 hours.

Please verify that this is acceptable before continuing.

To start the final data transfer.........Press <CONTINUE>(F3)

To return to previous screen.............Press <CANCEL>  (F6)
```
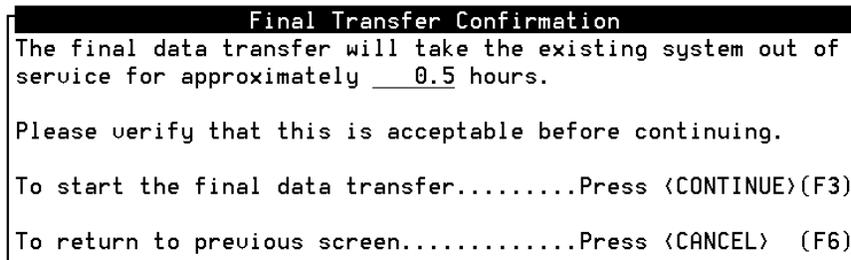
Figure 5-11.   Final Transfer Confirmation Window

2. *Verify with the customer that the temporary loss of service is acceptable* and press CONTINUE (F3).

   The system displays the following message:

   ```
   Checking AUDIX Status. Please Wait...
   ```

   After approximately 30 seconds, the system displays the following message:

   ```
   Voice system is being shut down on the existing
   machine...
   ```

   ➡ **NOTE:**
   The length of time that it takes for shutdown to occur depends on the number of users currently on the system.

3. Continue with the next procedure, "Completing the Data Transfer".

Completing the Data Transfer

When the final portion of the data transfer begins, the system displays the Out-of-Service Data Transfer Updates window (Figure 5-12).

```
              Out-of-Service Data Transfer Updates
A system to system data transfer is now in progress.

Audix Data                      Successfully Completed
Voice File Audit                Successfully Completed
Name Files                      In Progress
Voice Files                     Pending
Custom Anncs                    Pending
Platform                        Pending
Networking Data                 Pending
TCP/IP Machine Data             Pending
Upgrade                         Pending

Est. Total:  100.50 MB    Est. Done:   76.10 MB   %Complete:   75%
Upgrade Status: Working

THIS SCREEN UPDATES EVERY 30 SECONDS UNTIL THE UPGRADE IS COMPLETE.

To view the Upgrade Log............................Press <VIEW LOG>(F2)

To stop the data transfer..........................Press <CANCEL>  (F6)
```

Figure 5-12.   Out-of-Service Data Transfer Updates Window

When the data transfer is complete, the system displays the Data Transfer Completion window (Figure 5-13 on page 5-18).

The listing of modules on your screen may vary from this illustration

```
                    Data Transfer Completion
A system to system data transfer is now complete.

Audix Data                      Successfully Completed
Voice Cleanup                   Successfully Completed
Name Files                      Successfully Completed
Voice Files                     Successfully Completed
Custom Anncs                    Successfully Completed
Platform                        Successfully Completed
Networking Data                 Successfully Completed
TCP/IP Machine Data             Successfully Completed
Upgrade                         Successfully Completed

The data transfer is complete!

If you haven't already done so, please swing all appropriate
cables from the existing machine to this machine.

To view the Upgrade Log......................Press <VIEW LOG>(F2)

To perform a "reboot" now....................Press <CONTINUE>(F3)
```

Figure 5-13.   Data Transfer Completion Window

1. If anything other than `Successfully Completed` displays, contact the remote maintenance center.

2. At this point the technician should:

   a. Press (VIEW LOG) (F2) to access the View Log File window Figure 5-9 on page 5-12).

      > **NOTE:**
      > The log for the most recent pass is listed first. The order then reverts to ascending, starting from the first pass. For example, if the upgrade is on its fourth pass, the order of the logs will be fourth, first, second, third. Also, only six logs are kept. If the upgrade makes more than six passes, those logs are not shown.

   b. If no errors are found, press (CANCEL) (F6).

      If errors are found, contact the remote maintenance center.

   c. Continue with step 3.

3. Continue with the next procedure, "Rebooting the Lucent INTUITY Release 4 System to Effect Final System Changes" on page 5-19.

Rebooting the Lucent INTUITY Release 4 System to Effect Final System Changes

Now that all Release 2 or Release 3 system data have been transferred onto the Release 4 machine, you need to make final changes to the Release 4 system by rebooting the Release 4 system.

To perform a system reboot, perform the following tasks:

1. Press (CONTINUE) (F3).

   The system displays the message:

   ```
   Shutdown started.
   ```

   The Release 4 system automatically reboots and displays the console login.

2. Log in and verify the Release 4 system LAN settings match the settings for the Release 2 or Release 3 system that you wrote in Table 2-1 on page 2-8. From the Main Menu (Figure 5-1 on page 5-2), select:

   ```
   > Networking Administration
   ```

   ```
      >TCP/IP Administration
   ```

   The system displays the TCP/IP Administration window.

3. If the LAN settings match, proceed to step 5.

4. If the LAN settings do not match, administer them by performing the following tasks:

   a. Using the values in Table 2-1 on page 2-8 and information from the customer, enter:

   ■ The *Lucent INTUITY Release 4 server name* in the `UNIX Machine Name:` field. This is a case-sensitive field, so capital letters must be typed as capitals, and lowercase letters as lowercase.

   ⇒ **NOTE:**
   This name cannot contain any embedded spaces, for example, denver 1, and cannot start with a number.

   ■ The *IP (Internet Protocol) address* in the `IP Address:` field

■ The *subnet mask* in the `Subnet Mask:` field

This is an optional entry field. If you do not enter anything, the system will automatically use a default.

➤ **NOTE:**
The default value may conflict with the customer's LAN configuration. Check with the customer to ensure compatibility.

■ The *default gateway IP address* in the `Default Gateway IP Address:` field

This field should be left blank if the Lucent INTUITY system will only be communicating with other Lucent INTUITY systems on the same LAN.

b. Press (CHG-KEYS) (F8) and then (BRD CNFG) (F2).

The system displays the Ethernet Board Configuration window.

c. Press (CHOICES) (F2) to display a list of the network interface types.

d. Highlight the *network interface type* to be used on this system and press (RETURN).

e. Press (SAVE) (F3) to save the Ethernet Board configuration.

f. Press (CANCEL) (F6) to return to the TCP/IP Administration window.

g. Press (SAVE) (F3) to save the TCP/IP administration values.

h. Continue with the next step.

5. Press (CANCEL) (F6) repeatedly to return to the Main Menu.

6. Proceed to Chapter 6, "Verifying the In-Service or Out-of-Service Upgrade".

Verifying the In-Service or Out-of-Service Upgrade

6

Overview

This chapter describes procedures that verify the data transfer from a Lucent INTUITY Release 2 or Release 3 system onto the Lucent INTUITY Release 4 system.

This chapter is organized as follows:

- Checking for alarms that indicate an upgrade failure
- Verifying the Lucent INTUITY Release 4 system date and time

Purpose

At this point, all the customer's Lucent INTUITY Release 2 or Release 3 system data have been transferred to the Lucent INTUITY Release 4 system. Before the Release 2 or Release 3 system is removed from the customer site, it is necessary that the technician make sure the Release 4 system is capable of taking calls and operating properly. The procedures in this chapter provide the technician will the necessary information to determine the operational readiness of the Release 4 system.

Checking for Alarms that Indicate an Upgrade Failure

There are several alarms that can appear on the Release 4 system that indicate that the in-service or out-of-service upgrade was not successful and that the Release 4 system is not capable of operating. *If these alarms are generated DO NOT continue with the upgrade*.

In addition, there are several alarms generated during the in-service or out-of-service upgrade that can be ignored by the technician. These alarms indicate temporary conditions that will be corrected when the Lucent INTUITY Release 4 system is connected to the switch and placed in service.

To access the alarm log, perform the following tasks:

1. Place the A/B switch in the "B" position (the Release 4 system position).

2. Start at the Lucent INTUITY Main Menu (Figure 6-1).

```
        INTUITY (TM) Main Menu

AUDIX Administration
Customer/Services Administration
Networking Administration
Platform Upgrade
Switch Interface Administration
Upgrade
Voice System Administration
```
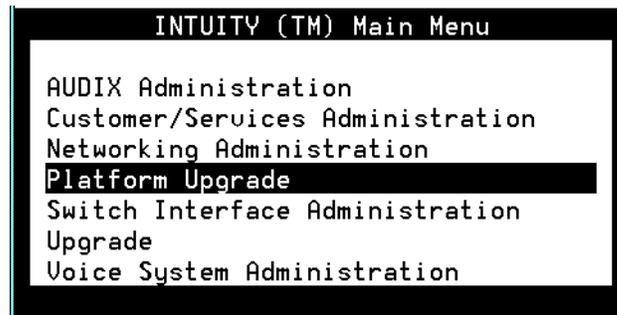
Figure 6-1.   Lucent INTUITY Main Menu

3. Select:

```
> Customer/Services Administration

    > Log Administration

        > Alarm Log
```
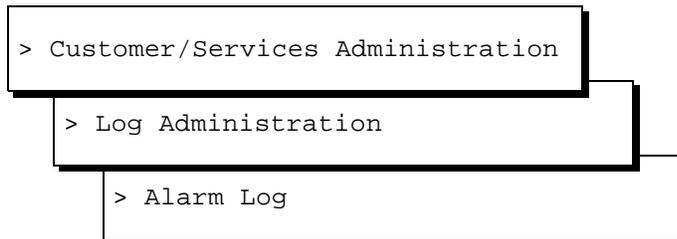
The system displays the Alarm Log Display Selection window (Figure 6-2).

```
┌─────────────────────────────────────────────────────────────────┐
│                     Alarm Log Display Selection                   │
│                                                                   │
│                            Alarm Log                              │
│                                                                   │
│                                                                   │
│       The following options control which alarms will be displayed. │
│                                                                   │
│           Alarm Type: A                                           │
│                                                                   │
│           Alarm Level:                                            │
│                 Major? Y              Minor? Y           Warning? Y │
│                                                                   │
│                                                                   │
│              Start Date: 09/05/95      Time: __:__    Application: __ │
│                                                                   │
│                                                                   │
│           Resource Type: _____   Location: ____ __ ___   Alarm Code: ____ │
└─────────────────────────────────────────────────────────────────┘
```

Figure 6-2.   Alarm Display Selection Window

4. Press ⌐SAVE⌐ (F3) to display the alarm log using the default display options (recommended) or enter information based on the following:

   ■ **A** (active) or **R** (resolved) in the `Alarm Type:` field

   ■ **Y** in the Alarm Level: `Major` field

   The system displays the Alarm Log window (Figure 6-3).

```
┌─────────────────────────────────────────────────────────────────┐
│                            Alarm Log                              │
│                            Alarm Log                              │
│                                                                   │
│  App Resource   Location    Alarm Alm Ack    Date/Time    Date/Time    Resolve │
│      Type                   Code  Lvl         Alarmed     Resolved     Reason  │
│                                                                   │
│  MT  DISK            sc      0     MAJ N 11/10/93 19:20            │
│                                                                   │
│  MT  MIRROR     N/A  -- --- 0     MAJ N 11/10/93 21:50            │
│                                                                   │
│  VP  SOFTWARE               4     MIN N 11/10/93 16:37            │
│                                                                   │
│  SW  DCIU_LINK              202   MIN N 11/10/93 16:37            │
│                                                                   │
│  VM  SOFTWARE               602   MIN N 11/10/93 16:38            │
│                                                                   │
│  VM  SOFTWARE               601   MIN N 11/10/93 16:38            │
│                                                                   │
│  VP  VOICE_PORT TR   CH 5   1     MIN N 11/10/93 20:20            │
│                                                                   │
│  NW  MSG_XMIT               1500  WRN N 11/10/93 16:39            │
└─────────────────────────────────────────────────────────────────┘
```

Figure 6-3.   Alarm Log Window

Alarms That Indicate a Failure of the Upgrade

The following alarms indicate a failure of the upgrade.

IF the Application Code (`App` column) reads:	AND the Alarm Level (`Alarm Lvl` column) reads:	Contact:
UP	(*any entry*)	remote maintenance center
VM	MAJ	
MT	MAJ	

5. If you received any of these alarms, contact the remote maintenance center.

   If none of these alarms display, proceed to "Alarms That Indicate a Failure of the Custom Announcement Set Transfer".

   Alarms That Indicate a Failure of the Custom Announcement Set Transfer

   ➡ **NOTE:**
   If the Release 2 or Release 3 system did not have custom announcement sets, *skip this section*. Proceed to "Alarms That Can Be Ignored".

   The following alarm is an indication that the transferring of custom announcements failed.

Application Code	Resource Type	Alarm Code	Alarm Level
VM	ANNC	4	MAJ

6. If you receive this alarm, contact the remote maintenance center.

   If none of these alarms display, proceed to "Alarms That Can Be Ignored".

   Alarms That Can Be Ignored

   The Lucent INTUITY Release 4 system will probably generate:

   - Networking alarms
   - Voice platform alarms
   - Switch alarms
   - Software alarms

   These alarms, along with any other alarm not specified in the sections above, can be ignored.

7. If there are no alarms that indicate an upgrade failure, press ⌷CANCEL⌷ (F6)
repeatedly to return to the Main Menu.

8. Continue with the next procedure, "Verifying the Lucent INTUITY
Release 4 System Date and Time."

Verifying the Lucent INTUITY Release 4 System Date and Time

Verifying the Lucent INTUITY Release 4 system date and time includes:

- Checking the UNIX Date and Time window

- Changing the date and time, if necessary

Setting the UNIX Date and Time Window

To check the UNIX Date and Time window, perform the following tasks:

1. Starting from the Main Menu (Figure 6-1), select:

```
> Customer/Services Administration
    > System Management
      > UNIX Management
        >UNIX Date and Time
```
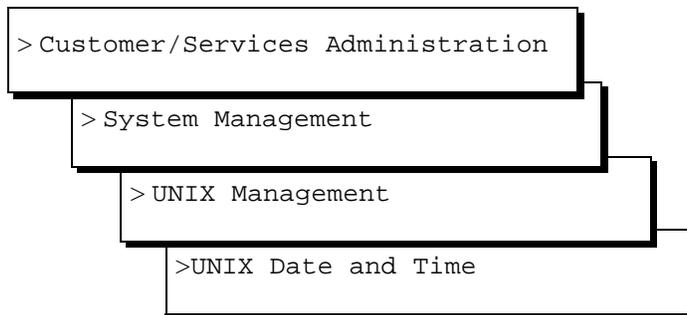
The system displays the UNIX Date and Time window (Figure 6-4).

```
            UNIX Date and Time

Date:                          October    16, 1995

Time:                          10:51

AM/PM:                         AM

Timezone:                      Eastern

Is Daylight Savings Time used?: YES
```
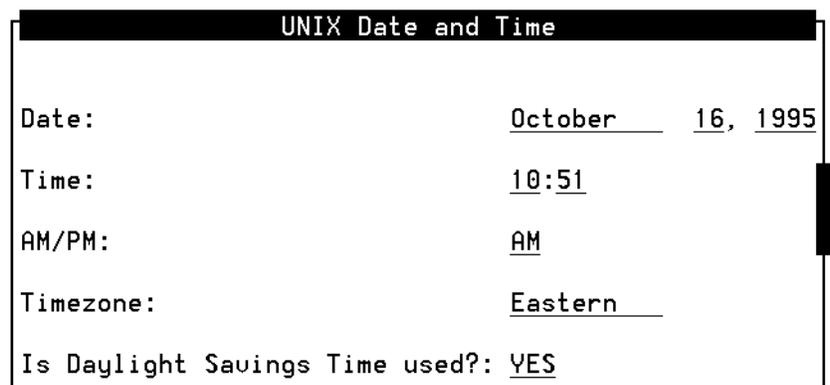
Figure 6-4.   UNIX Date and Time Window

2. Check the date and time information. If there are inaccuracies, continue according to the information in Table 6-1.

3. If there are no inaccuracies, press ⌈CANCEL⌉ (F6) repeatedly to return to the Main Menu.

Table 6-1. **Field Definitions: UNIX Date and Time window**

Field Name	Description/Procedure
Date: Valid Input: Month: First 3 alphabetic characters of the current month Day: Numeric value 1 – 31 Year: 4-digit number between 1996 – 2038	Type the *first 3 characters of the current month* and press ⌈TAB⌉. Type a *value from 1 – 31* and press ⌈TAB⌉. Type *the current year* and press ⌈TAB⌉.
Time: Valid Input: Hour: A number from 0 – 12 Minute: A number from 00 – 59.	Type in *the hour and minute* and press ⌈TAB⌉.
AM/PM Valid Input a or p	Type **a** or **p** and press ⌈TAB⌉.
Timezone: Valid Input: (see description at right)	Enter *a valid timezone* as follows: ■ Greenwich ■ Pacific ■ Atlantic ■ Yukon ■ Eastern ■ Alaska ■ Central ■ Bering ■ Mountain ■ Hawaii **NOTE**: Changes made to the timezone field will not take effect until you log out of the Lucent INTUITY system and then log back in.
Is Daylight Savings Time Used? Valid Input: y = yes n = no	Type **y** (yes) or **n** (no) to indicate whether the system clock is in a timezone that implements daylight savings time from April to October.

4. Press ⌈SAVE⌉ (F3) to save the UNIX system date and time changes.

The system logs a message to the Administrator's Log informing you of
any changes made to the UNIX date and time.

5. Press ⌕CANCEL⌕ (F6) repeatedly to reach the Main Menu.

6. Proceed to Chapter 7, "Completing the In-Service or Out-of-Service
Upgrade".

Completing the In-Service or Out-of-Service Upgrade

7

Overview

This chapter describes the procedures to follow after the files have been successfully copied from the existing system to the new Lucent INTUITY Release 4 system. All connections to the Release 2 or Release 3 system are removed and connected to their corresponding location on the Release 4 system. These procedures should be performed in the order that they are presented here.

This chapter is organized as follows:

- Shutting down the Lucent INTUITY Release 4 system

- Shutting down the Lucent INTUITY Release 2 or Release 3 system

- Removing the LAN Connection between the Lucent INTUITY systems

- Removing the switch box and cables

- Rearranging the Lucent INTUITY systems

- Moving the cables, including:

    — Moving the tip/ring cables

    — Connecting peripheral devices, using COM1, COM2, and the multi-port serial circuit card, if applicable

    — Connecting the GP-Synch or Eicon circuit card

    — Connecting the ACCX circuit card

    — Connecting the LAN circuit card

    — Moving the remote maintenance modem and cables

- Powering up the Lucent INTUITY Release 4 machine

- Releasing the switch data link, if applicable

- Turning alarm origination on

- Sending test alarm to register new Release 4 system

- Changing the default announcement set to a custom announcement set

- Testing the Lucent INTUITY Release 4 system

- Assigning passwords

- Additional administration, including:

    — Controlling call transfers

    — Setting IMAPI sessions

    — Removing the platform upgrade package

    — Backing Up the Release 4 system

- Removing the LAN circuit card from the Lucent INTUITY Release 2 or Release 3 system

- Repacking and returning the RUK

- Returning the Lucent INTUITY Release 2 or Release 3 system

Purpose

The purpose of this chapter is to ensure that the Lucent INTUITY Release 4 system is placed into service and the Lucent INTUITY Release 2 or Release 3 system is removed from the customer's site in an orderly manner.

Shutting Down the Lucent INTUITY Release 4 System

To shut down the Release 4 system, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "B" position (Release 4 system position).

2. Start from the Lucent INTUITY Main Menu (Figure 7-1).

```
        INTUITY (TM) Main Menu

AUDIX Administration
Customer/Services Administration
Networking Administration
Switch Interface Administration
Upgrade
Voice System Administration
```
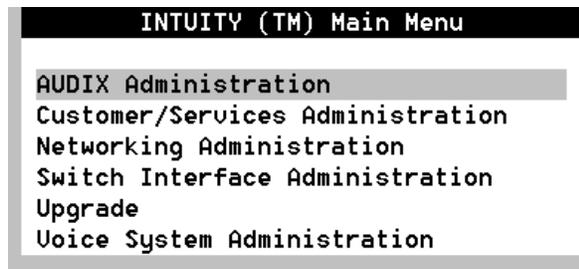
Figure 7-1.   Lucent INTUITY Main Menu for Release 4 with Platform Upgrade Option

3. Select:

```
> Customer/Services Administration
    > System Management
        > System Control
            >Shutdown System
```
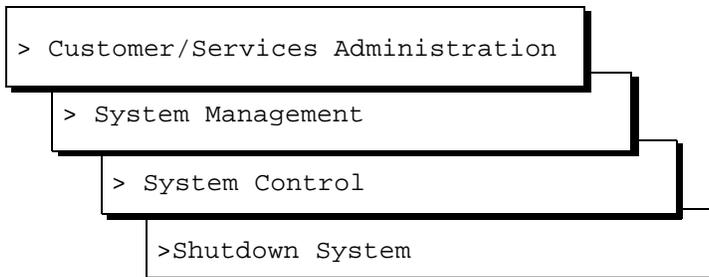
The system displays the Wait Time window.

4. Enter **0** (zero) to indicate that you would like an immediate shutdown.

5. Press (SAVE) (F3).

The system displays the message:

```
Shutdown started.
```

When the system is completely shut down, the system displays the message:

```
The system is down.
Press Ctrl-Alt-Del to reboot your computer.
```

6. Turn off the power to the Release 4 system.

7. Continue with the next procedure, "Shutting Down the Lucent INTUITY Release 2 or Release 3 System" on page 7-4.

Shutting Down the Lucent INTUITY Release 2 or Release 3 System

To shut down the Release 2 or Release 3 system, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "A" position (the Release 2 or Release 3 system position).

2. Start at the Lucent INTUITY Administration menu (Figure 7-2).

```
┌────────────────────────────────────┐
│     INTUITY (TM) Administration     │
│ AUDIX Administration                │
│ Customer/Services Administration    │
│ Networking Administration           │
│> Platform Pre-Upgrade               │
│ Switch Interface Administration     │
│ Upgrade                             │
│ Voice System Administration         │
└────────────────────────────────────┘
```
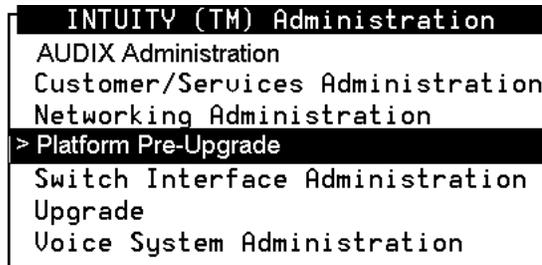
Figure 7-2.   Lucent INTUITY Administration Menu for Release 2 and Release 3

3. Select:
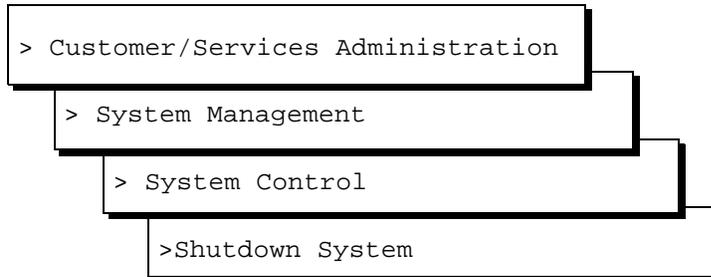
```
> Customer/Services Administration
    > System Management
        > System Control
            >Shutdown System
```

The system displays the message:

        Enter y to continue, n to quit.

4. Enter **y**

The system displays the message:

        Shutdown started.

When the system is completely shut down, the system displays the message:

        The system is down.
        Press Ctrl-Alt-Del to reboot your computer.

5. Turn off the power to the Release 2 or Release 3 system.

6. Continue with the next procedure, "Removing the LAN Connection Between the Lucent INTUITY Systems" on page 7-5.

Removing the LAN Connection Between the Lucent INTUITY Systems

The following procedures provide instructions for removing a:

- Direct connection
- Customer's LAN connection (see page 7-6)

Removing a Direct Connection

Figure 7-3 illustrates how the direct connection is attached.
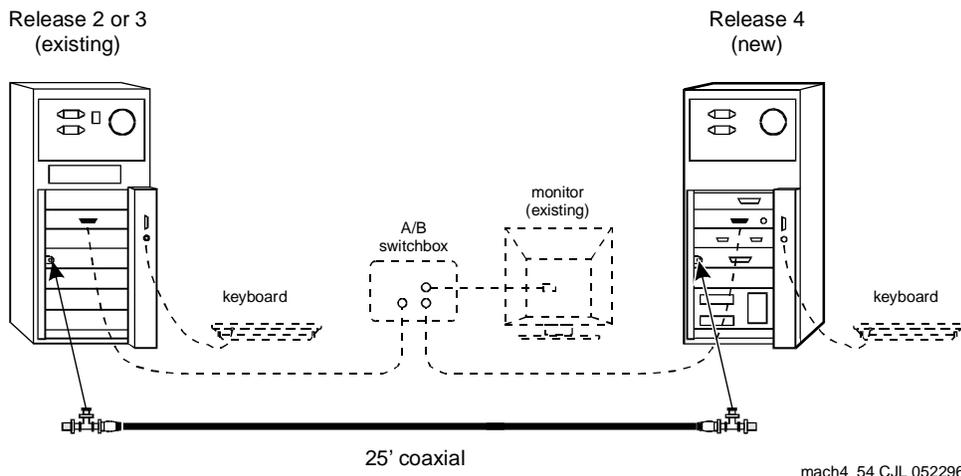
Figure 7-3.   Cabling for a Direct Connection

To remove a direct cable link between the Lucent INTUITY systems, perform the following tasks:

1. Remove the coaxial cable from the BNC connector on the Release 2 or Release 3 system.

2. Remove the coaxial cable from the BNC connector on the Release 4 system.

3. Repack the cable in the RUK.

4. Proceed to "Removing the Switch Box and Cables" on page 7-6.

**Removing a Connection through the
Customer's LAN**

Figure 7-4 illustrates the connection through the customer's LAN.
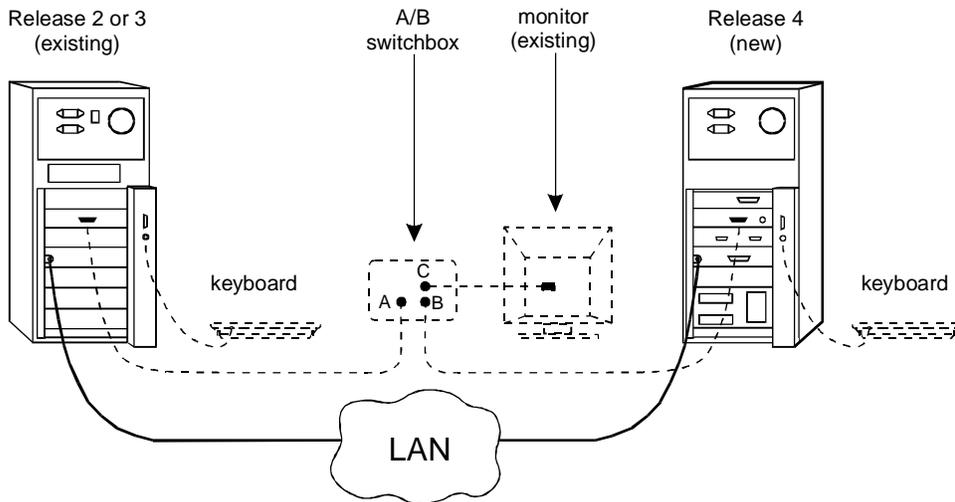
Figure 7-4.   Cabling for a Connection through the Customer's LAN

To remove a connection through the customer's LAN, perform the following tasks:

1. Disconnect the Release 4 system from the customer's LAN by removing the cable (provided by the customer) from the LAN.

2. Remove the cable from the Release 4 system.

3. Disconnect the LAN cable from the Release 2 or Release 3 system and *label the cable*.

4. Continue with the next procedure, "Removing the Switch Box and Cables".

Removing the Switch Box and Cables

You no longer need the switch box and cables. To remove them, perform the following tasks:

1. Remove the cable that goes from position "A" on the A/B switchbox to the Release 2 or Release 3 system (see Figure 2-2 on page 2-4).

2. Remove the cable that goes from position "B" on the A/B switchbox to the Release 4 system (see Figure 2-2 on page 2-4).

3. Disconnect the monitor from position "C" on the A/B switchbox and plug the cable to the Release 4 machine (see the illustration on page 7-8, page 7-9, or page 7-10; as appropriate).

4. Place the switchbox and cables back in the RUK.

5. Continue with the next procedure ''Rearranging the Lucent INTUITY Systems''.

Rearranging the Lucent INTUITY Systems

Once the upgrade has been verified and both Lucent INTUITY systems are down, the Release 4 system can be moved to the permanent location designated by the customer. The Release 2 or Release 3 system can be moved out of the way.

To rearrange the Lucent INTUITY systems, perform the following tasks:

1. Move the Release 2 or Release 3 system out of the way.

2. Move the Release 4 system to the place designated by the customer.

   ⇒ **NOTE:**
   The Release 4 system must be located so that all the cables that were attached to the Release 2 or Release 3 system can connect to the new system.

3. Continue with the next procedure ''Moving the Cables''.

Moving the Cables

You now need to move all the cables from the Release 2 or Release 3 system to their corresponding positions on the Release 4 system. This includes:

■ Moving the tip/ring cables (see page 7-11)

■ Connecting peripheral devices to:

— COM1 (see page 7-11)

— COM2 (see page 7-12)

— The multi-port serial circuit card (see page 7-12)

■ Connecting the GP-Synch or Eicon circuit card (see page 7-13)

■ Connecting the ACCX circuit card (see page 7-13)

■ Connecting the LAN circuit card (see page 7-13)

■ Removing the remote maintenance modem and cables (see page 7-14)

Figure 7-5 illustrates the back of a MAP/5 system.

Figure 7-6 on page 7-9 illustrates the back of a MAP/40s or MAP/40 system.

Figure 7-7 on page 7-10 illustrates the back of a MAP/100 system.

Use these illustrations as guides for recabling when following the procedures outlined in this section.
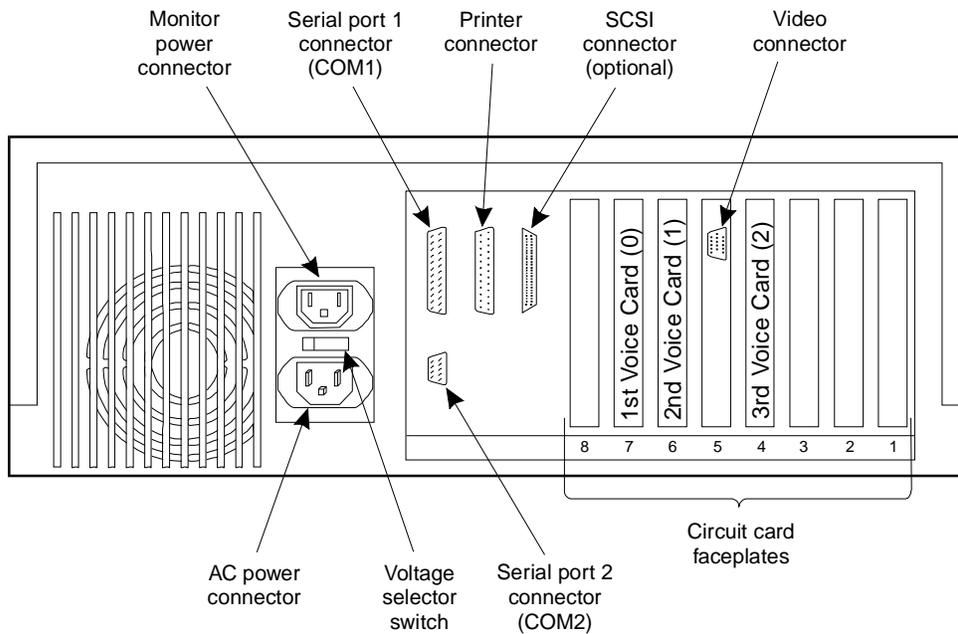
Figure 7-5.   Back View of the MAP/5

Accessory power outlet
(monitor 110V/230VAC)

AC voltage selection
switch

MAP/40
AC input receptacle

Power supply
exhaust vent

Video card
faceplate

External SCSI
connector card faceplate

External
SCSI I/O (terminator
resistor not shown)

CPU card
faceplate

Remote
maintenance
circuit card

Multi-port
serial card

GP-Synch
circuit card

Ethernet LAN
circuit card

ACCX
networking
circuit card

(2)

IVC6 (AYC10) (1)
Tip/Ring circuit cards

(0)

M40bkvw3 CJL 032596

Figure 7-6.   Back View of the MAP/40 or 40s
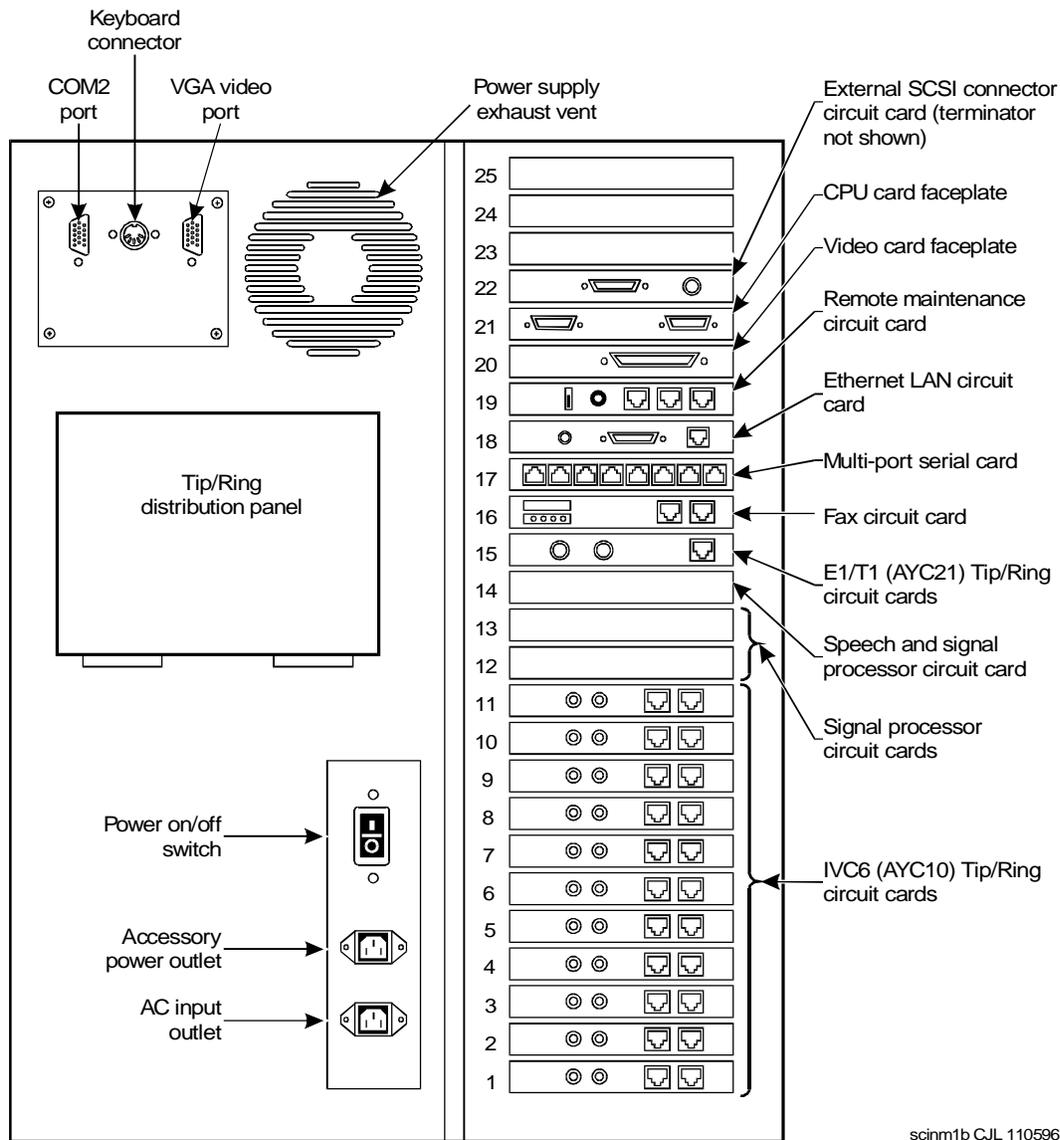
Figure 7-7.   Back View of a MAP/100

Moving the Tip/Ring Cables

The IVC6 Tip/Ring (AYC10) circuit card uses two 6-pin-conductor modular cords. These cords provide three lines for telephone hook-up.

⚠ CAUTION:

Maintain the appropriate channel mapping when performing this recabling. For example, if you take the cable out of channel 0 on the Release 2 or Release 3 system, put in into channel 0 on the Release 4 system.

1. After completing the recabling, remove any slack in the cable and use cable ties, if necessary, to dress the cables neatly.

2. Continue with the next procedure, "Connecting Peripheral Devices" on page 7-11.

Connecting Peripheral Devices

There are two ways to connect the Lucent INTUITY Release 4 system to a terminal, modem, or other DTE or DCE devices via an asynchronous link:

- Using COM1, an asynchronous port on the rear of the Lucent INTUITY Release 4 system

- Using the additional asynchronous ports on the optional multi-port serial card (see page 7-12)

⇒ NOTE:

The Lucent INTUITY Release 4 system provides two asynchronous ports, COM1 and COM2. However, COM2 is reserved for Lucent remote maintenance and typically is not available to use for asynchronous connections.

Connecting COM1

A 9-pin D subminiature male connector is provided on the rear panel of the Lucent INTUITY Release 4 system for COM1. This connector connects internally to the CPU.

1. Remove the cable from COM1 on the Release 2 or Release 3 system and plug it into COM1 on the Release 4 system.

2. Continue to the next procedure, "Connecting COM2" on page 7-12.

Connecting COM2

On the Release 4 system, COM2 is typically used for Lucent remote maintenance through a modem. Typically, Release 2 and Release 3 systems have a remote maintenance modem connected to COM2.

1. *If your Release 4 system has a modem*, take — from the Release 2 or Release 3 system — the RS232 that is plugged into the modem, and plug it into COM 2 on the Release 4 system. The remote maintenance modem will continue to be the remote access device.

   If your Release 4 system has a remote maintenance board, take the Tip/Ring cable out of the remote maintenance modem and plug it into the remote maintenance board on the Release 4 system.

2. If your configuration includes multi-port serial cards, proceed to ''Connecting the Multi-Port Serial Card''.

   If your configuration does not include multi-port serial cards, proceed to ''Connecting the GP-Synch or Eicon Circuit Card''.

Connecting the Multi-Port Serial Card

> **NOTE:**
> If your configuration does not include the optional multi-port serial card, skip this section. Proceed to ''Connecting the GP-Synch or Eicon Circuit Card''.

> ⚠ **CAUTION:**
> *Maintain the appropriate port mapping when performing this recabling. For example, if you take the cable out of port 3 on the Release 2 or Release 3 system, put in into port 3 on the Release 4 system.*

1. After completing the recabling, remove any slack in the cable and use cable ties, if necessary, to dress the cables neatly.

2. Continue with the next procedure, "Connecting the GP-Synch or Eicon Circuit Card" on page 7-13.

Connecting the GP-Synch or Eicon Circuit Card

The GP-Synch or Eicon circuit card connects to Lucent switches through an X.25 link. If your system has an Eicon board, there should be a gender-changer connected to the circuit card (refer to the appropriate illustration for your platform on page 7-8, page 7-9, or page 7-10. The circuit card is labelled GP-Synch circuit card).

1. If the circuit card is a GP-Synch card, attach the cable directly.

   If the circuit card is an Eicon card, and there is no gender changer on the Release 4 system, you will need to provide a Female-to-Male gender changer and then attach the cable. (You will know if it's an Eicon card, because you will not be able to attach the existing cable without a gender-changer.)

2. After completing the recabling, continue with the next procedure, "Connecting the ACCX Circuit Card".

Connecting the ACCX Circuit Card

⚠️ **CAUTION:**
Maintain the appropriate card order and breakout when performing this recabling. For example, if you take the cable out of channel 3 on the Release 2 or Release 3 system, put in into channel 3 on the Release 4 system.

1. After completing the recabling, continue with the next procedure, "Connecting the LAN Circuit Card".

Connecting the LAN Circuit Card

1. Take the cable you labelled as part of the procedure "Removing a Connection through the Customer's LAN" on page 7-6 and connect it to the LAN card on the Release 4 system.

2. Continue with the next procedure, "Moving the Remote Maintenance Modem and Cables" on page 7-14.

Moving the Remote Maintenance Modem and Cables

The Release 4 system uses a modem to provide dial-up capability for remote access sessions. To attach the modem to the Release 4 system, perform the following tasks:

1. Remove the cables from the Release 2 or Release 3 system.

2. Connect to the Release 4 system.

3. Continue with the next procedure, "Powering Up the Lucent INTUITY Release 4 Machine".

Powering Up the Lucent INTUITY Release 4 Machine

The Release 4 system should now be in position and completely reconnected to the telephone circuit cards, switch, network, and any peripheral devices. You can now restore power to the machine.

1. Power up the Release 4 machine. You are now ready to release the switch link (if applicable) and perform some final Lucent INTUITY administration.

2. If the customer is using a DEFINITY switch, continue with the next procedure "Releasing the Switch Data Link" on page 7-15.

   If the customer is not using a DEFINITY switch, proceed to "Changing the Default Announcement Set to a Custom Announcement Set" on page 7-18.

Releasing the Switch Data Link

⚠ **CAUTION:**

If the customer does not have a DEFINITY switch, do not complete these procedures. Proceed to "Changing the Default Announcement Set to a Custom Announcement Set" on page 7-18.

For the purpose of releasing the data link, DEFINITY switches are divided as follows:

- System 75, G1, and G3
- G2

Releasing the Data Link on a System 75, G1, or G3 Switch

To release the data link, perform the following tasks on the switch administration terminal (SAT):

1. Enter **release link *n***

   where ***n*** is the number of the link going to the Lucent INTUITY system. Valid input is an integer from 1 to 8.

   If additional information is needed, see the documentation associated with the DEFINITY switch.

2. Continue with the next procedure "Turning Alarm Origination On" on page 7-16.

Releasing the Data Link on a G2 Switch

To release the data link, perform the following tasks:

1. Enter **proc650 test 3**

2. Enter **rb**

   If additional information is needed, see the documentation associated with the DEFINITY switch.

3. Continue with the next procedure "Turning Alarm Origination On" on page 7-16.

Turning Alarm Origination On

1. Starting from the Main Menu (Figure 7-1 on page 7-3), select:

> ```
> > Customer/Services Administration
> ```
> ```
>     > Alarm Management
> ```

The system displays the Alarm Management window (Figure 7-8).

The settings on your screen may vary from this illustration

```
                     Alarm  Management
  Product ID                        1234567890

  Alarm Destination                 9998887777

  Alarm Origination                 ACTIVE

  Alarm Level                       MAJOR

  Alarm Suppression                 INACTIVE

  Clear Alarm Notification          ACTIVE
```

Figure 7-8.   Alarm Management Window

2. Enter **ACTIVE** in the `Alarm Origination` field.

3. Press `SAVE` (F3).

4. Press `CANCEL` (F6) repeatedly to return to the Main Menu (Figure 7-1 on page 7-3).

5. Continue with the next procedure, "Sending Test Alarm to Register New Release 4 System" on page 7-17.

Sending Test Alarm to Register New Release 4 System

To register the new Release 4 system with the remote maintenance center, perform the following tasks:

1. Starting from the Main Menu (Figure 7-1 on page 7-3), select:

```
> AUDIX Administration
```

The system displays the AUDIX Administration screen (Figure 7-9).

```
AUDIX             Active          Alarms: _____           Logins: 1




















enter command:
```
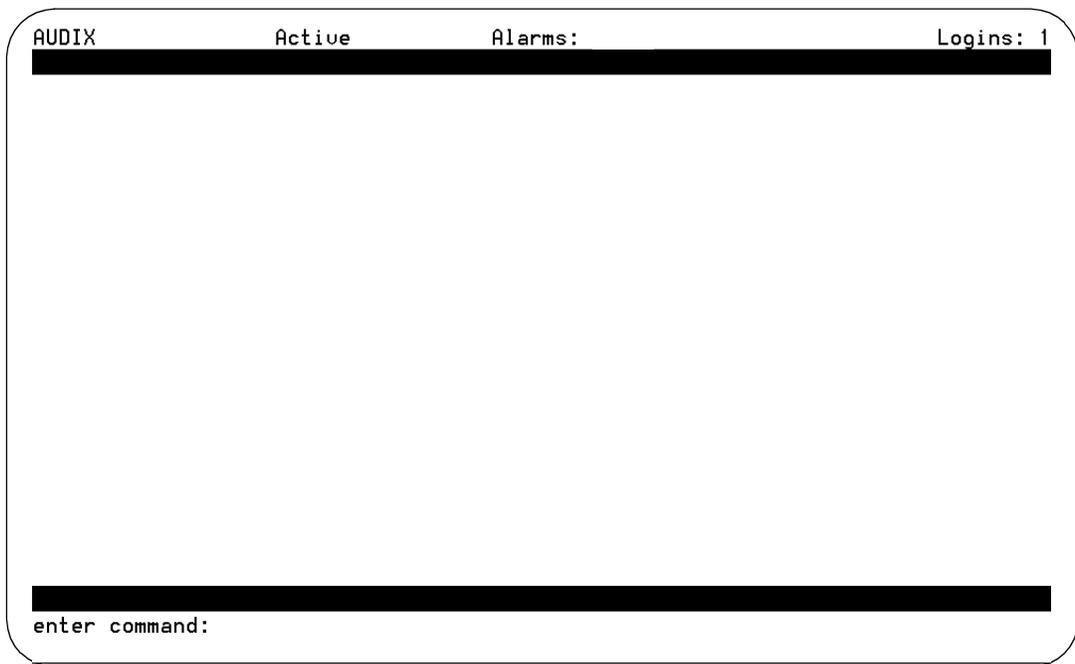
Figure 7-9.   AUDIX Administration Screen

2. At the `enter command:` prompt, enter **test alarm origination**

The system sends an alarm to the remote maintenance center that registers the new Release 4 system as the system of record.

➡ NOTE:
This will raise a warning alarm. However, the alarm will be resolved when the remote maintenance center registers the new system and acknowledges the alarm.

3. Continue with the next procedure, "Changing the Default Announcement Set to a Custom Announcement Set" on page 7-18.

Changing the Default Announcement Set to a Custom Announcement Set

> ⚠ **CAUTION:**
> *If the Release 2 or Release 3 system did not use a custom announcement set as the default, do not complete the procedures listed in this section. Continue with "Turning Alarm Origination On" on page 7-16.*

1. Starting from the Main Menu (Figure 7-1 on page 7-3), select:

   ```
   > AUDIX Administration
   ```

   The system displays the AUDIX Administration screen (Figure 7-9 on page 7-17).

2. At the `enter command:` prompt, enter either:

Full Command Version	Short Command Version
change system-parameters features	**ch sys f**

   The system displays the System-Parameters Features screen.

3. Press NEXTPAGE (F7) twice.

   The system displays page 3 of the System-Parameters Features screen (Figure 7-10).

```
┌────────────────────────────────────────────────────────────────────────┐
│AUDIX              Active              Alarms:                  Logins: 1 │
│change system-parameters features                            Page 3 of 4 │
│                      SYSTEM-PARAMETERS FEATURES                          │
│                                                                          │
│CALL TRANSFER OUT OF AUDIX                                                │
│ Transfer Type: none_____       Transfer Restriction: subscribers│
│ Covering Extension: _____                                           │
│                                                                          │
│ANNOUNCEMENT SETS                                                         │
│            System: us-eng_____            Administrative: _____ │
│                                                                          │
│RESCHEDULING INCREMENTS FOR UNSUCCESSFUL MESSAGE DELIVERY                 │
│ Incr 1: 0_ days  0_ hrs 5_ mins      Incr 2: 0_ days 0_ hrs 15 mins     │
│ Incr 3: 0_ days  0_ hrs 30 mins      Incr 4: 0_ days 1_ hrs 0_ mins     │
│ Incr 5: 0_ days  2_ hrs 0_ mins      Incr 6: 0_ days 6_ hrs 0_ mins     │
│ Incr 7: 1_ days  0_ hrs 0_ mins      Incr 8: 2_ days 0_ hrs 0_ mins     │
│ Incr 9: 7_ days  0_ hrs 0_ mins      Incr10: 14 days 0_ hrs 0_ mins     │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                                          │
│enter command: change system-parameters features                         │
└────────────────────────────────────────────────────────────────────────┘
```

Figure 7-10.   System-Parameters Features Screen

4. Press `TAB` until the cursor is in the `Announcement Sets, System:` field.

5. Enter the *name of the custom announcement set the customer would like to use as the system default*.

   This is the name you wrote down in Table 2-3 on page 2-12.

6. Press `SAVE` (F3) to save the information in the system database.

   The system displays the message `Command Successfully Completed`, and the cursor returns to the command line.

7. Type **exit** and press `ENTER` to leave AUDIX Administration.

8. Continue with the next procedure, "Testing the Lucent INTUITY Release 4 System" on page 7-20.

Testing the Lucent INTUITY Release 4 System

A final series of system tests ensure full system functionality.

1. See *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s System Installation, 585-310-169* or *Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 System Installation, 585-310-173* for the test procedures.

2. If the customer's configuration included custom announcements, test that the custom announcements are correct.

   ⚠ **CAUTION:**
   You must also test any peripheral devices or applications, such as Switch Administration Terminal (SAT) access or Message Manager. The customer must provide you with a listing of such devices or applications. Refer to device or application documentation for test procedures.

3. When those procedures are complete, continue with the next procedure, "Assigning Passwords".

Assigning Passwords

Use the default craft password to change the password for the sa, vm, craft, and/or cas (call accounting system) logins.

1. Starting from the Main Menu (Figure 7-1 on page 7-3), select:

```
> Customer/Services Administration

   > System Management

      > Password Administration

         > Assign/Change Password
```

The system displays the Assign/Change Password window (Figure 7-11).

```
              Assign/Change Password

                  Login:
```

Figure 7-11. Assign/Change Password Window

2. Press ⌊CHOICES⌋ (F2) to display a list of options and select the login for which you would like to change the password.

3. Press ⌊SAVE⌋ (F3).

    The system displays the message:

    ```
    You are about to change the password for
    'selectedlogin'.
    Press <y> to confirm.
    Press <n> to cancel.
    ```

4. Enter **y** to change the password.

    The system displays the message:

    ```
    Changing password command for selectedlogin
    New Password:
    ```

5. Enter the new password exactly as it is provided by the customer. If the customer is available, have them type in the passwords directly.

    The password must adhere to the following guidelines:

    ■ Use 6–11 alphanumeric characters. The password must include at least 1 numeric and 2 alpha characters.

    ■ The password cannot be a sequential alpha or numeric string, for example, 123456, or a repetitive string, such as bbbbbb.

    ■ Never use obvious or trivial passwords, such as a phone extension, room number, employee identification number, social security number, or easily guessed numeric or letter combinations (for example, denver or audix).

    ⇒ **NOTE:**
    To increase system security, we recommend that the customer's system administrator administer the system to age the password, thus forcing a periodic change of password (at least once per month). See *Lucent INTUITY™ Messaging Solutions Release 4 Administration, 585-310-564* for more information.

    The system asks you to confirm the password.

6. Enter the new password again.

   ➡ **NOTE:**
   If you make a mistake in typing the new password and the two
   password entries do not match, the system prompts you again for
   the new password.

7. Repeat step 2 through step 6 for each remaining login password you wish
   to change.

8. Press `CANCEL` (F6) repeatedly to reach the Main Menu (Figure 7-1 on page
   7-3).

9. Continue with the next procedure, "Additional Administration".

Additional Administration

Additional administration is required to address some enhanced features and
capabilities of the Release 4 system, including:

- Controlling call transfers

- Setting IMAPI sessions

- Removing the platform upgrade package

- Backing up the Release 4 system

Controlling Call Transfers on the
Lucent INTUITY Release 4 System

The following procedures describe how to deny transfers to certain numbers out
of the AUDIX system and enable transfers to others. Setting up control on call
transfers requires that you:

- Deny call transfers to some numbers

- Allow call transfers to other numbers

Denying Call Transfers

To deny call transfers, perform the following tasks:

1. Starting from the Main Menu (Figure 7-1 on page 7-3), select:

```
> Voice System Administration

   > Transfer Security

      > Denied Numbers

         >Add Denied Transfer Numbers
```
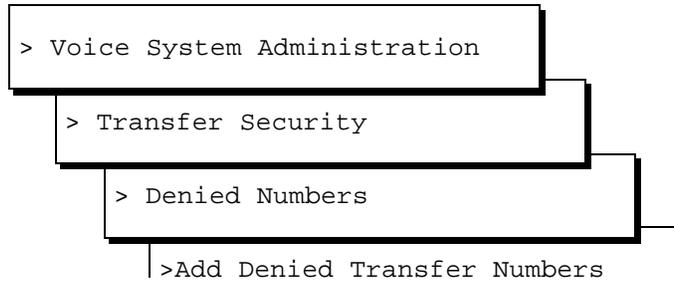
The system displays the Add Denied Transfer Numbers window (Figure 7-12). In the window are two fields with the cursor in the first of the two fields.

```
          Add Denied Transfer Numbers

                    From              To
   Transfer Numbers:
```

Figure 7-12.   Add Denied Transfer Numbers Window

2. Enter either:

   - **all** in the `From` and `To` fields to *deny all transfers*. Most administrators choose to deny all transfers, then `allow` a few numbers or range of numbers that do not endanger the system.

     OR

   - A *starting extension* in the `From` field and an *ending extension* in the `To` field to *deny a range of numbers*.

     For example, entering 4000 in the `From` field and 5999 in the `To` field would restrict 4-digit transfers to any numbers between 4000 and 6000.

     $\Longrightarrow$ **NOTE:**
     No two restricting entries can overlap each other.

3. When you finish entering transfer number information, press `SAVE` (F3) to save the information in the system database.

4. To confirm that your entries will have the correct accumulated effect, you can display the ranges together. Press (CANCEL) (F6) to back up to the *Denied Numbers* menu.

5. Select *Display Denied Numbers* to view the extension ranges you have selected. Verify that all the extensions you would like to deny are included in the displayed ranges.

6. Continue with the next procedure, ''Allowing Call Transfers''.

Allowing Call Transfers

To allow call transfers, perform the following tasks:

1. Starting from the Main Menu (Figure 7-1 on page 7-3), select:

> Voice System Administration

> Transfer Security

>Allowed Numbers

>Add Allowed Transfer Numbers
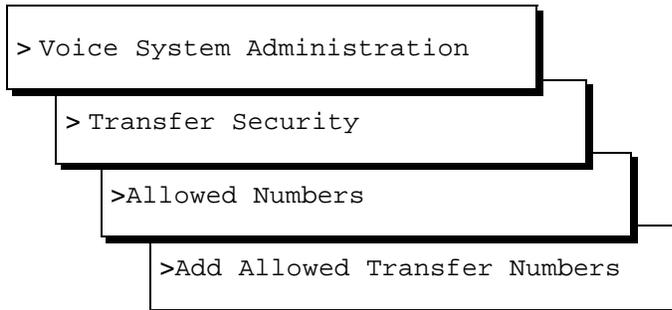
The system displays the Add Allowed Transfer Number window which is very similar to the one just described (Figure 7-13).

In the window are two fields with the cursor in the first of the two fields.

```
              Add Allowed Transfer Numbers

                        From              To
      Transfer Numbers:
```
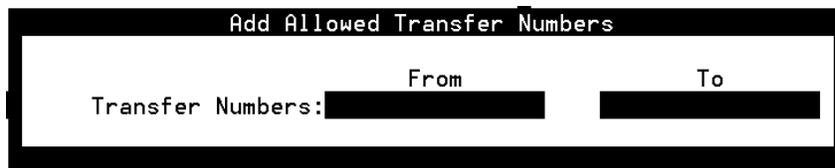
Figure 7-13.   Add Allowed Transfer Numbers Window

2. Enter either:

- A *starting extension* in the `From` field and an *ending extension* in the `To` field to *allow a range of numbers*. (Most administrators choose to deny all transfers as described on page 7-23, then use this window to specify the few numbers or classes of numbers that do not endanger the system.)

   For example, entering 4000 in the `From` field and 5999 in the `To` field would allow 4-digit transfers to any numbers between 4000 and 6000.

   OR

- **all** in the `From` and `To` fields to *allow all transfers*.

   ⇒ **NOTE:**
   No two allowed transfer entries can overlap each other.

3. Press `SAVE` (F3) to save the information in the system database, and continue entering ranges of numbers until you have allowed the necessary numbers.

4. To confirm that your entries will have the correct accumulated effect, you can display the ranges together. Press `CANCEL` (F6) to back up to the *Allowed Numbers* menu.

5. Select *Display Allowed Numbers* to view the extension ranges you have selected. Verify that all the extensions you would like to allow are included in the displayed ranges.

6. Press `CANCEL` (F6) repeatedly to return to the Main Menu.

7. Continue with the next procedure, "Setting the Number of Simultaneous IMAPI Sessions".

Setting the Number of Simultaneous IMAPI Sessions

IMAPI, the software that allows access to INTUITY AUDIX mailboxes through the LAN, allows up to 96 active sessions simultaneously, depending on the system purchased. For IMAPI to function, some number of the purchased sessions must be available for use simultaneously.

To set the number of simultaneous IMAPI sessions, perform the following tasks:

1. Starting from the Main Menu (Figure 7-1 on page 7-3), select:

```
> AUDIX Administration
```

2. At the `enter command:` prompt, enter either:

Full Command Version   Short Command Version

change system-parameters imapi-options   ch sy i

The system displays the System-Parameters IMAPI-Options screen (Figure 7-14).

```
change system-parameters imapi-options                        Page 1 of 1
                    SYSTEM-PARAMETERS IMAPI-OPTIONS


NUMBER OF IMAPI SESSIONS

                              Total Sessions Purchased: 32

                        Maximum Simultaneous Sessions: 32_
Simultaneous Sessions Available for Trusted Server Access: 6__


IMAPI PARAMETERS

                      IMAPI Session Timeout (minutes): 5__
              Trusted Server Session Timeout (minutes): 5_
                                Check New Messages? n
                                Deliver CA Message? n
                                   Message Transfer? y



enter command: change system-parameters imapi-options
```

Figure 7-14.   System-Parameters IMAPI-Options Screen, Page 1

3. In the `Maximum Simultaneous Session:` field, enter a *value equal to the number in the* `Total Sessions Purchased` *field*.

4. Press (ENTER) (F3) to save this information to the system database.

   The cursor returns to the command line, and the system displays the message `Command Successfully Completed`.

5. Continue with the next procedure, "Removing the Platform Upgrade Package" on page 7-27.

Removing the Platform Upgrade Package

Before turning the Lucent INTUITY Release 4 system over to the customer, remove the platform upgrade package. This gives the customers more available space on their systems.

To remove the platform upgrade package, perform the following tasks:

1. Starting from the Main Menu (Figure 7-1 on page 7-3), select:

> Customer/Services Administration

>System Management

>UNIX Management

>Software Remove

The system displays the Software Remove screen (Figure 7-15).

```
The following packages are available:
 1  APPLset      AUDIX(R) Application Set
                 (AUDIX) 4.0-7
 2  AUDIXset     INTUITY Platform AUDIX Set
                 (i486) FID7-i.1.0
 3  AUDIXtune    INTUITY Platform AUDIX Tuning
                 (i486) i.1.0-FID7
 4  DCIUset      INTUITY Platform DCIU Set
                 (i486) i.1.0-FID7
 5  INTUNIX      UnixWare 1.1.2 Enhancement Set
                 (486) 1.0
 6  INTUNIX1     UnixWare 1.1.2 Platform Enhancements Extension
                 (486) 1.0
 7  IVC6DI       AT&T Intuity IVC6 Device Interface for softFAX 2.0
                 (x86sur4_wicd1) i.1.0-FID7
 8  TSM          INTUITY Transaction State Machine Package
                 (i486) i.1.0-FID7
 9  VM           AUDIX(R) Module marker file
                 (AUDIX) NA
10  VM-dfltdb    AUDIX(R) Default db
                 (AUDIX) 4.0-7

... 69 more menu choices to follow;
<RETURN> for more choices, <CTRL-D> to stop display:
```

Figure 7-15.   Software Remove Screen

2. Select `platupg` (Upgrade Package).

⚠ CAUTION:

Do **not** select `pltupg` (Upgrade).

3. Type in the number to the left of the package name.

4. Press ⌈ENTER⌋ .

   The system asks you to confirm that you would like to delete the Upgrade Package, `platupg`.

5. Enter **y**

6. Press ⌈CANCEL⌋ repeatedly until you log out of the system.

7. Log in and verify that Platform Upgrade longer appears as an option on the Main Menu (Figure 7-1 on page 7-3).

8. Continue with the next procedure, "Backing Up the Lucent INTUITY Release 4 System".

Backing Up the Lucent INTUITY Release 4 System

To back up the Release 4 system, perform the following tasks:

1. Starting from the Main Menu (Figure 7-1 on page 7-3) select:

> Customer/Services Administration

> Backup/Restore

> Backup

The system displays the Backup window (Figure 7-16).

```
┌────────────────── Backup ──────────────────┐
│                                             │
│  System Data _____    Yes   │
│                                             │
│  AUDIX Announcements _____   Yes   │
│                                             │
│  AUDIX Names _____   Yes   │
│                                             │
│  Greetings and Messages _____   Yes   │
│                                             │
│  _____   ___    │
│                                             │
│  _____   ___    │
│                                             │
│  _____   ___    │
│                                             │
│  _____   ___    │
│                                             │
└─────────────────────────────────────────────┘
```
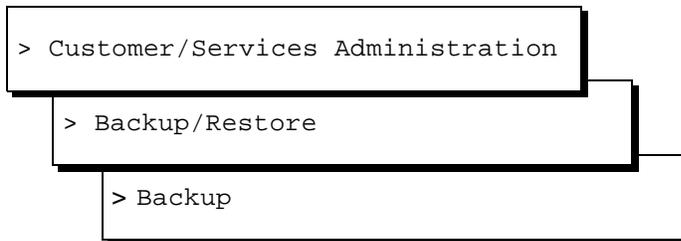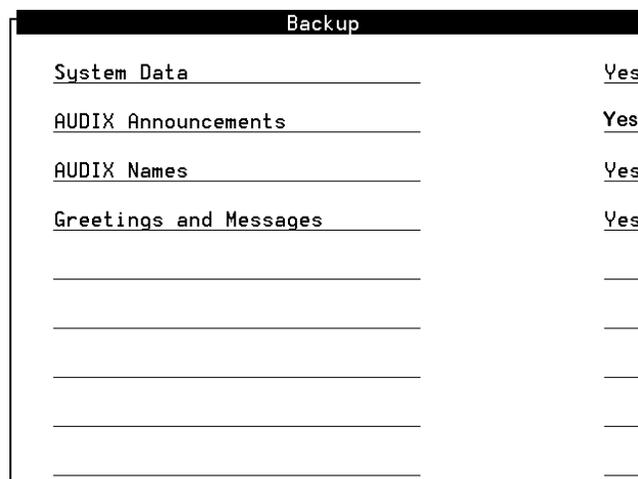
Figure 7-16.   Backup Window

2. Enter **y** in all fields to indicate you would like a full system back-up.

   ➡ **NOTE:**
   The fields displayed on the Backup window are based on the system's configuration. Therefore, the window you see may look different than the one shown here.

3. Press ⌷SAVE⌷ (F3) to initiate the back up of system data.

   The system calculates the number of tapes needed, and displays the message:

   ```
   the backup will need:
   x yyy MB cartridge tape(s)
   ```

   Where *x* is the number of tapes and *yyy* is the size of the tapes. Make sure that you have enough cartridge tapes to accommodate the backup.

   The system displays the message:

   ```
   Verify whole backup tape(s) will double the amount
   of backup time. Do you really want to verify
   tape(s)? (Strike y or n)
   ```

   The system verifies a backup tape by reading back the entire set of data written to the tape during the backup. *Verification increases the time it takes for a backup process to complete to approximately 3 hours*. This verification step is not necessary to ensure a good backup tape.

4. If time is an issue, press **n**. If time is not an issue, press **y**

   The system displays the message:

   ```
   please insert a tape into the tape drive to backup
   press <Enter> when tape is inserted
   press <Esc> key to terminate the backup
   ```

   ➡ **NOTE:**
   If you insert an uninitialized tape, the system displays the message `brand new tape(s) need to be initialized by using Format UNIX Floppy/Tape`. Press ⌷ESC⌷ and initialize the tape before continuing.

5. Insert the first cartridge tape in the tape drive.

   It takes approximately 3 hours to back up one tape with the verify option turned on. If the verify option is not on, it takes approximately 1-1/2 hours to back up one tape.

6. Press ⌷ENTER⌷ when the light on the tape drive goes off.

   The tape drive light flashes when a backup is occurring and various status messages are displayed on the screen.

7. If you are prompted for another tape, remove the current tape, label it with the current date and back up data type(s), and insert the next tape.

   When the backup is complete, the system displays the message:

   ```
   backup process has been completed successfully
   press any key to continue.
   ```

8. Press ENTER to continue.

9. The Lucent INTUITY Release 4 system verifies a backup tape by reading back the entire set of data it has just written on the tape.

   When the verification is complete the system displays the message

   ```
    verification has been completed successfully
   press any key to continue.
   ```

10. Press ENTER to continue.

11. Press CANCEL repeatedly to return to the Main Menu (Figure 7-1 on page 7-3).

12. *If you installed a LAN circuit card* on the Release 2 or Release 3 system, continue with the next procedure "Removing the LAN Circuit Card from the Lucent INTUITY Release 2 or Release 3 System" on page 7-31.

    If you did not install a LAN circuit card on the Release 2 or Release 3 system, you have completed the upgrade. Proceed to "Repacking and Returning the RUK" on page 7-32.

Removing the LAN Circuit Card from the Lucent INTUITY Release 2 or Release 3 System

> ⚠️ **CAUTION:**
> *If you did not install the LAN circuit card in the Release 2 or Release 3 system, do not complete these procedures. Continue with "Repacking and Returning the RUK" on page 7-32.*

To remove the LAN circuit card from the Release 2 or Release 3 system, perform the following tasks:

> ⚠️ **CAUTION:**
> *Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See Chapter 4, "Getting Inside the Computer" in Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171 or Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 Maintenance, 585-310-174 for detailed electrostatic discharge precautions.*

1. Access the circuit card cage. See the appropriate appendix for the correct procedures for shutting down and getting inside of your platform.

2. Remove the LAN circuit card from the Release 2 or Release 3 system.

3. Place the LAN circuit card in the reusable upgrade kit so it can be used at the next upgrade site.

4. Replace any circuit cards you removed to make room for the LAN circuit card.

5. Close the circuit card cage. See the appropriate appendix for the correct procedures for closing your platform.

6. Continue with the next procedure, "Repacking and Returning the RUK" on page 7-32.

Repacking and Returning the RUK

⚠ **CAUTION:**

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See Chapter 4, "Getting Inside the Computer" in Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171 or Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 Maintenance, 585-310-174 for detailed electrostatic discharge precautions.

Repack the RUK components in the box in which they were provided and ship it to the remote maintenance center. Use Table 7-1 to ensure all components of the RUK are included.

Table 7-1.   RUK Components

Component	✓
A/B switch box	
Video cables (2)	
Ethernet LAN circuit card	
25-foot coaxial cable with two "T" adapters and terminators	
Pre-upgrade software package	
Upgrade documentation	
Red 8-pin modular cable	

Returning the Lucent INTUITY Release 2 or Release 3 System

Pack the Release 2 or Release 3 system in the box the Release 4 system came in and ship it to the remote maintenance center.

You have completed all of the required system upgrade tasks.

Installing a LAN Circuit Card in the MAP/5
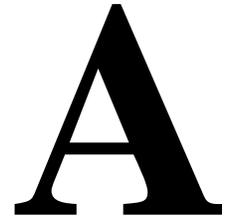
A

Installing the LAN Circuit Card

To install a LAN circuit card, you must complete the following tasks:

- Stop the voice system

- Shut down the Lucent INTUITY system

- Remove power from the computer

- Access the circuit card cage

- Prepare the LAN circuit card

- Install the LAN circuit card

- Close the computer

- Restore power to the computer

- Reboot to effect LAN driver change

⚠ CAUTION:

If you are reading this appendix because you were directed here (from "Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System" on page 3-14), the first procedures are already complete. In that case, proceed to "Accessing the Circuit Card Cage" on page A-7.

Stopping the Voice System

Before doing any work inside any electrical device, the power must be off. Before powering down the Release 2 or Release 3 system, you must perform a graceful stop of the voice system and then a shutdown of the entire Release 2 or Release 3 system.

⚠ CAUTION:

When the voice system is stopped all calls in progress will be disconnected. Users calling AUDIX will hear a fast busy signal. Callers sent to AUDIX coverage will hear ringing but there will be no answer.

To stop the voice system, perform the following tasks:

1. Place the A/B switch in the "A" position (the Release 2 or Release 3 system position).

2. Start at the Lucent INTUITY Administration menu (Figure A-1).

```
     INTUITY (TM) Administration
  AUDIX Administration
  Customer/Services Administration
  Networking Administration
> Platform Pre-Upgrade
  Switch Interface Administration
  Upgrade
  Voice System Administration
```

Figure A-1.   Lucent INTUITY Administration Menu for Release 2 or Release 3
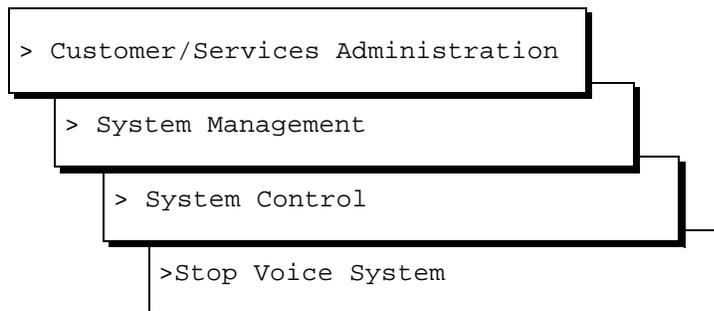
3. Select:

```
> Customer/Services Administration

    > System Management

        > System Control

            >Stop Voice System
```

The system displays the message:

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

4. Enter **y**

   The system displays the following message:

   ```
   The Voice System is now stopping.

   Initiating request to clear all calls in the next 60
   seconds.

   Orderly idling of the system succeeded.

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

   The Voice System has stopped.

   Press Enter to Continue.
   ```

5. Press ENTER.

6. Continue with the next procedure, "Shutting Down the Lucent INTUITY
   Release 2 or Release 3 System" on page A-4.

Shutting Down the Lucent INTUITY Release 2 or Release 3 System

With the voice system stopped, you can proceed to shut down the Release 2 or Release 3 system.

1. Starting from the Administration Menu (Figure A-1 on page A-2) select:
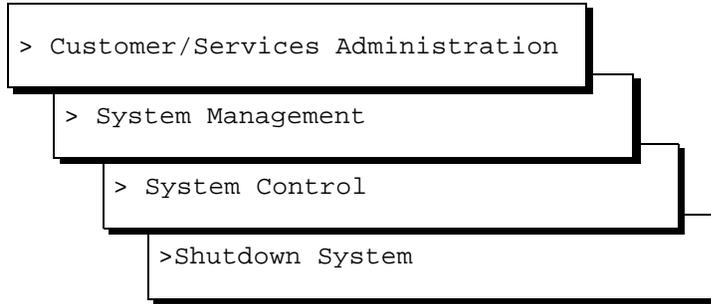
```
> Customer/Services Administration
    > System Management
        > System Control
            >Shutdown System
```

The system displays the following message:

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

2. Enter **y**

The system displays the following message:

```
Shutdown started.
```

When the system is completely shut down, the system will display the following message.

```
The system is down.
Press Ctrl-Alt-Del to reboot your computer.
```

3. You have completed shutting down the Lucent INTUITY system. Continue with the next procedure, "Removing Power From the Computer" on page A-5.

Removing Power From the Computer

The MAP/5 requires a dedicated circuit with a dedicated circuit breaker. The power cord connects to the rear of the MAP/5 at the point labeled AC input receptacle (Figure A-2).
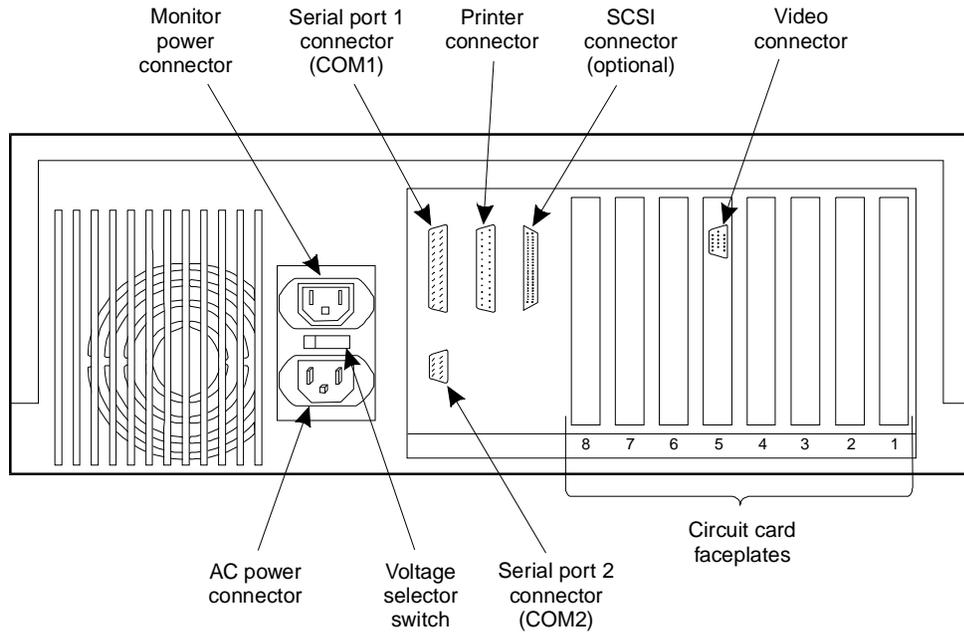
Figure A-2.   Back View of the MAP/5

To remove power from the MAP/5, perform the following tasks:

1. Turn off the monitor's power switch.

   The green or amber lamp on the front bottom of the monitor should be off.

2. Turn off the power switch on the front of the MAP/5 next to the cartridge tape drive (Figure A-3).
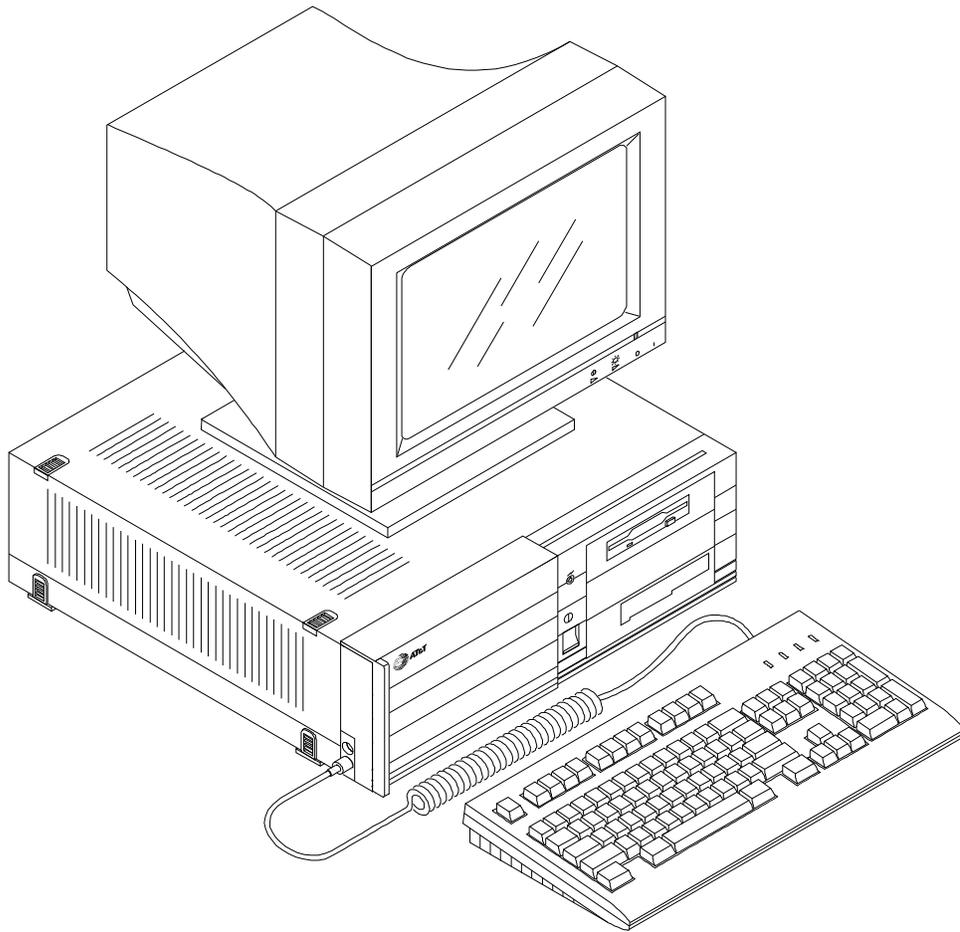
Figure A-3.   Front View of the MAP/5

3. Remove the incoming AC line (Figure A-2).

4. Disconnect keyboard cord (Figure A-3).

5. Disconnect monitor cord (Figure A-2).

6. Observe the correct lock-out/tag-out precautions for isolating power as outlined in the Lucent lock-out/tag-out procedure.

7. Continue with the next procedure, "Accessing the Circuit Card Cage" on page A-7.

Accessing the Circuit Card Cage

In order to access the circuit card cage, you must remove the:

■ Front panel

■ Top cover

Removing the Front Panel

To remove the front panel, perform the following tasks:

1. Place the MAP/5 on its rear panel (Figure A-4).

   The bottom of the unit should face toward you. The front panel latches should also face you.

Tabs

Tab slots
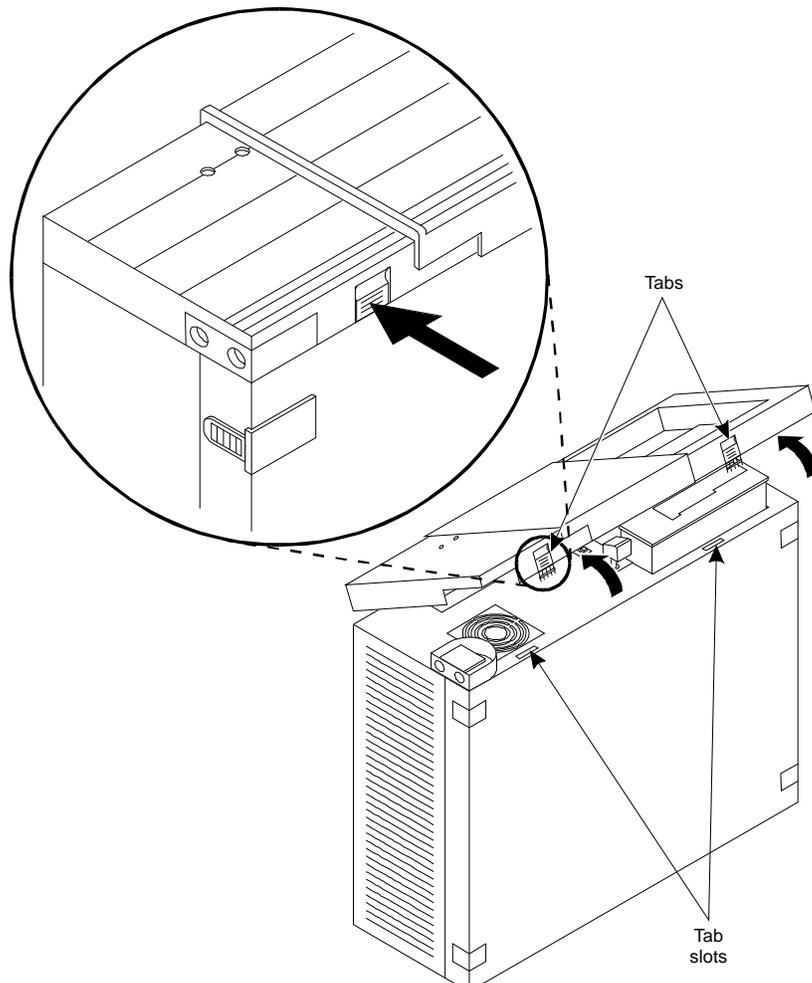
Figure A-4. Removing the MAP/5 Front Panel

2. Push inward and upward on the two front panel latches to release the bottom edge of the front panel (Figure A-4).

   The front panel is flexible enough for you to press one latch and then the other.

3. When the bottom of the front panel is loose, rotate the panel away from you and lift it to remove.

4. Return the unit to its correct desktop position.

5. Continue with the next procedure, "Removing the Top Cover".

Removing the Top Cover

To remove the top cover, perform the following tasks:

1. Unlock the system unit by inserting the key in the lock and turning it counter-clockwise to the unlocked position.

   A case lock is located next to the floppy disk drive on the front of the unit (Figure A-5). Keys are included with the system. The case lock must be in the open position in order to remove the top cover.

2. Press the holding tabs outward while pushing the top cover away from you.

   The locking tabs are located on either side of the front of the unit.
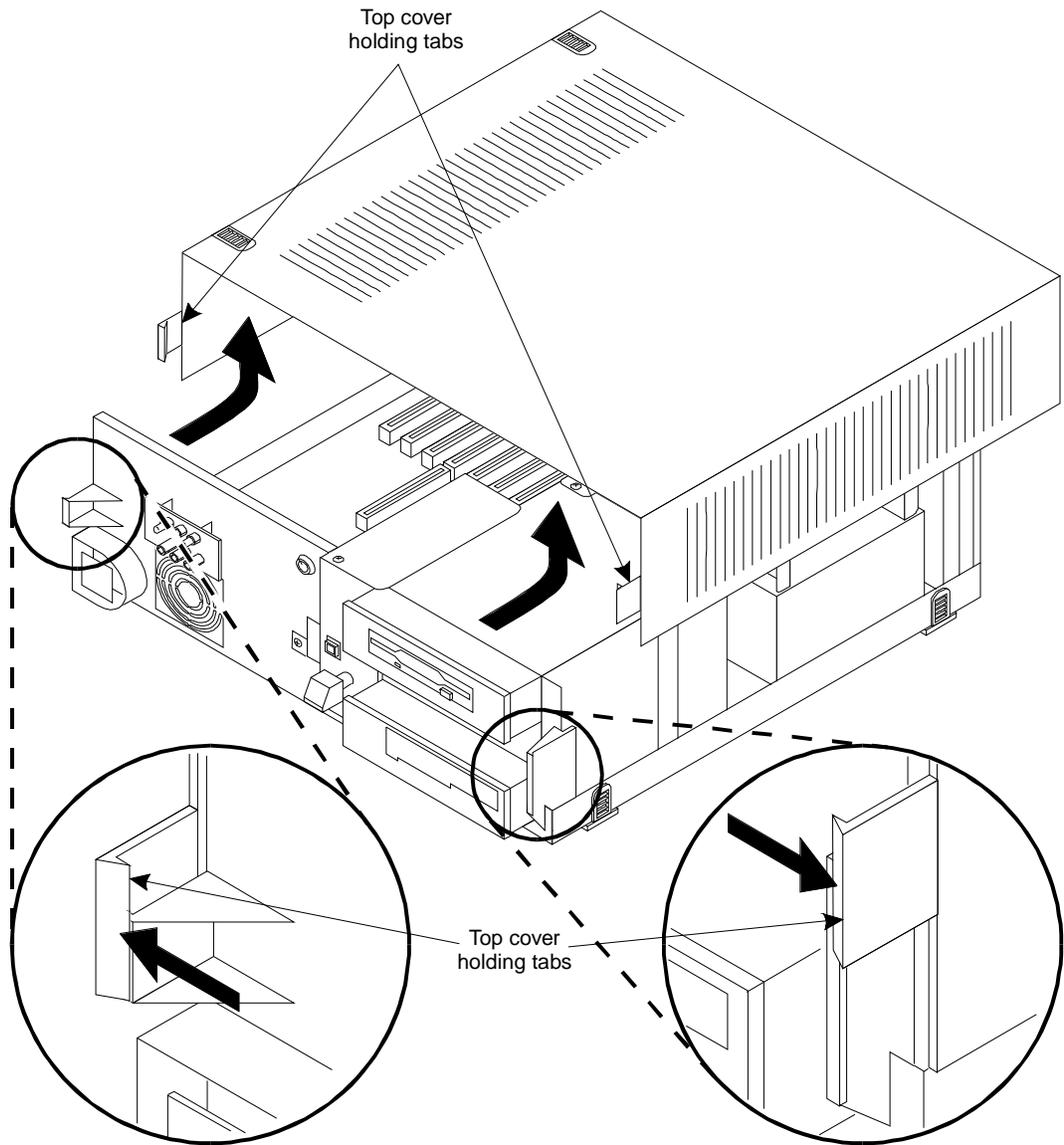
Figure A-5.   Removing the MAP/5 Top Cover

3. Slide the top cover as far back as it will go, which is about 1/2-inch.

4. Lift the top cover straight up to remove.

5. Continue with the next procedure, "Preparing the LAN Circuit Card" on page A-10.

Preparing the LAN Circuit Card

> ⚠ **CAUTION:**
> *Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See Chapter 4, "Getting Inside the Computer" in Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 Maintenance, 585-310-174 for detailed electrostatic discharge precautions.*

The Ethernet LAN circuit card has one jumper, W1, to set the I/O base address, IRQ channel, RAM base address, and ROM base address. Figure A-6 shows the location of the jumper. (The 8416 has no jumper.)
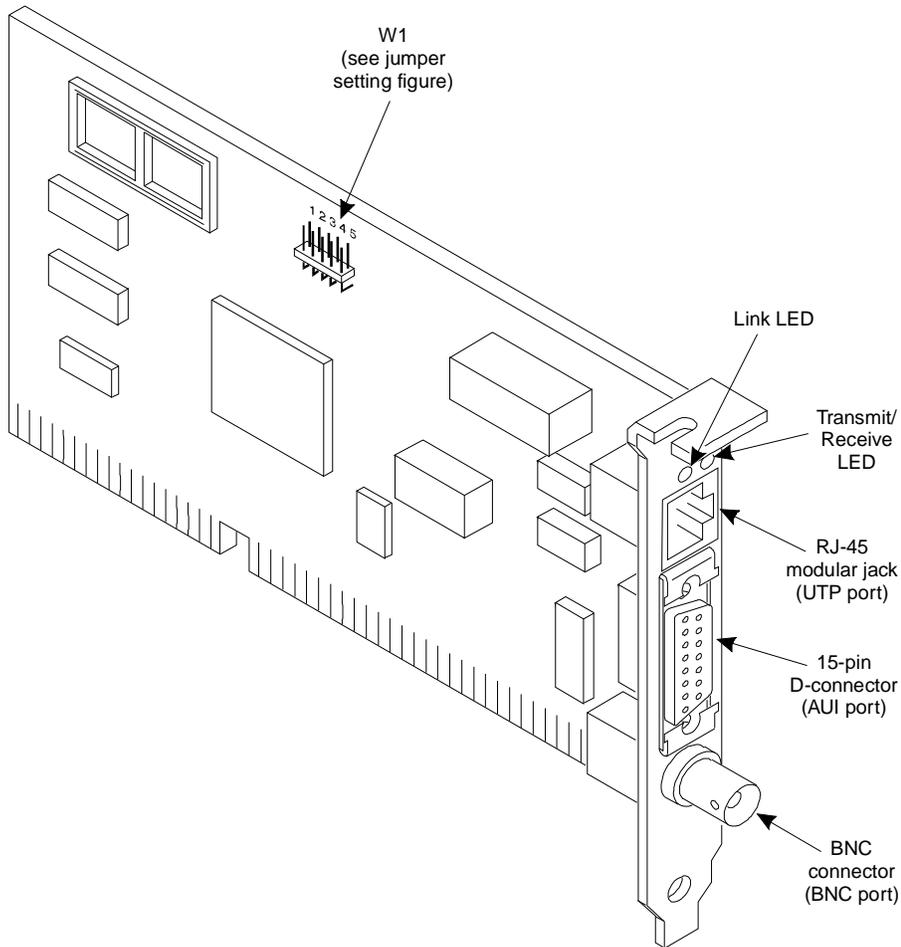
Figure A-6.   The Ethernet LAN Interface Card with Jumper Location

Switches

There are no switches to set on the LAN card.

Jumpers

The LAN card has one jumper, W1, to set the I/O base address, IRQ channel, and RAM base address. See Figure A-7 for the location of W1.

The Lucent INTUITY software configuration is as follows:

- IRQ — 10
- I/O base address — 280
- RAM base address — C8000

The jumper default setting for W1 is "1". This setting configures the card to be software programmable beginning at the default settings. Figure A-7 illustrates the placement of the jumper.
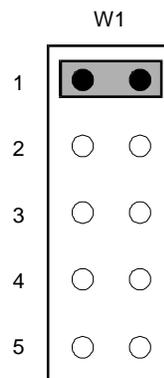
Figure A-7.   LAN Card Jumper Setting

1. Set the jumper in W1.

2. Continue with the next procedure, "Installing the LAN Circuit Card" on page A-12.

Installing the LAN Circuit Card

1. Locate Slot 2. (Figure A-8).
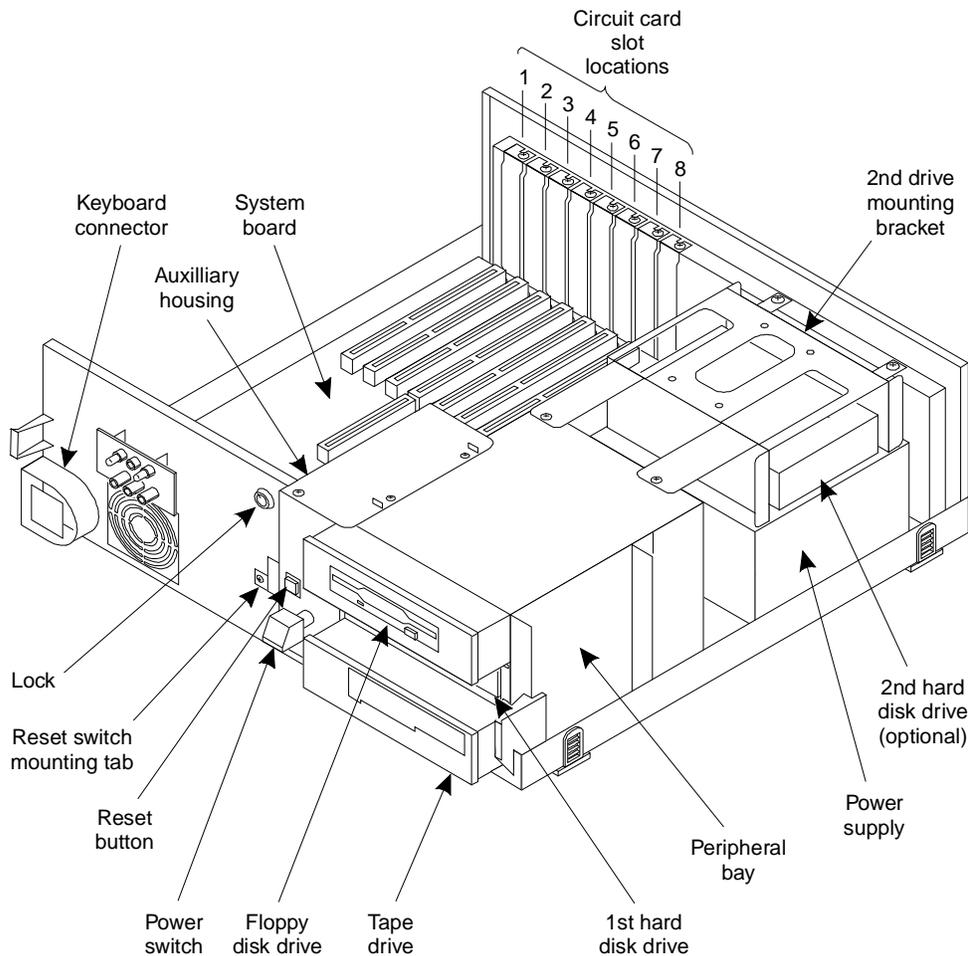
Figure A-8. Internal View of the MAP/5

2. Holding the circuit card by its upper corners, slide the card into the backplane connector slot .

3. Apply even pressure to both corners of the circuit card until it is locked into the backplane.

4. Secure the circuit card faceplate into position by replacing the retaining screw.

5. You have completed the procedure for installing the LAN circuit card. Continue with the next procedure, "Closing the Computer" on page A-13.

Closing the Computer

To close the computer, perform the following tasks:

1. Align the top cover with the MAP/5 so that the front of the top cover is about 1/2-inch from the front of the MAP/5 (Figure A-5 on page A-9).

2. Lower the cover over the MAP/5 until the cover is parallel with the bottom of the MAP/5.

3. Pull the top cover toward you until it snaps into the locking tabs located on either side of the front of the MAP/5.

4. Lock the MAP/5 by inserting the key into the lock and turning clockwise to the locked position.

5. Place the MAP/5 on its rear panel. The bottom of the MAP/5 will be facing you (Figure A-4 on page A-7).

6. Align the front panel with the front of the MAP/5 and hook the top flanges of the panel underneath the top cover.

7. Lower the panel and snap into position so that the panel latches have caught.

8. Return the MAP/5 to its correct desktop position.

9. Continue with the next procedure, "Restoring Power to the Computer".

Restoring Power to the Computer

To restore power to the computer, perform the following tasks:

1. Place the MAP/5 power cord in the AC input receptacle on the rear of the unit (Figure A-2).

2. Plug the MAP/5 power cord into the designated power outlet.

3. Turn on the power switch on the front of the MAP/5 (Figure A-3).

   The green lamp — labeled POWER ON — on the front of the unit should be lit.

4. Turn on the monitor's power switch.

   The green or amber lamp on the front bottom of the monitor should be lit.

5. The Lucent INTUITY system will automatically boot and the voice system will be started.

6. Continue with the next procedure, "Rebooting to Effect LAN Driver Change" on page A-14.

Rebooting to Effect LAN Driver Change

Before you can continue the upgrade, the system must recognize the LAN driver for the new LAN card. To reboot the system to effect the LAN driver changes, perform the following tasks:

1. Log into the system as *craft*.

   The system displays the Main Menu (Figure A-1 on page A-2).

2. Select:

```
> Customer/Services Administration
    > System Management
        > System Control
            >Shutdown System
```

The system displays the Wait Time window.

3. Enter **0** (zero) to indicate you would like an immediate shutdown.

4. Press ⌑SAVE⌑ (F3).

   The system displays the message:

        Shutdown started.

   When the system is completely shut down, it displays the message:

        The system is down.
        Press Ctrl-Alt-Del to reboot your computer.

5. Press ⌑CTRL-ALT-DEL⌑.

   The system performs a power-on self test (POST). The system lists the various hardware components and the status of the tests performed on those components.

   When the reboot is complete, the system displays the message:

        Startup of the Voice System is complete.
        Console Login:

6. Log into the system as *craft*.

> ⚠ **CAUTION:**
> *If you performed these procedures because you were directed to do so (from "Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System" on page 3-14), return to step 5 on page 3-15.*

Installing a LAN Circuit Card in the MAP/40

B

Installing the LAN Circuit Card

To install a LAN circuit card you must complete the following steps:

■ Stop the voice system

■ Shut down the Lucent INTUITY system

■ Remove power from the computer

■ Access the circuit card cage

■ Prepare the LAN circuit card

■ Install the LAN circuit card

■ Close the computer

■ Restore power to the computer

■ Reboot to effect LAN driver change

⚠ CAUTION:

If you are reading this appendix because you were directed here (from "Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System" on page 3-14), the first procedures are already complete. In that case, proceed to "Accessing the Circuit Card Cage" on page B-6.

Stopping the Voice System

Before doing any work inside any electrical device, the power must be off. Before powering down the Release 2 or Release 3 system, you must perform a graceful stop of the voice system and then a shutdown of the entire Release 2 or Release 3 system.

⚠ CAUTION:

When the voice system is stopped all calls in progress will be disconnected. Users calling AUDIX will hear a fast busy signal. Callers sent to AUDIX coverage will hear ringing but there will be no answer.

To stop the voice system, perform the following tasks:

1. Place the A/B switch in the "A" position
   (the Release 2 or Release 3 system position).

2. Start at the Lucent INTUITY Administration menu (Figure B-1).

```
   INTUITY (TM) Administration
 AUDIX Administration
 Customer/Services Administration
 Networking Administration
> Platform Pre-Upgrade
 Switch Interface Administration
 Upgrade
 Voice System Administration
```

Figure B-1.   Lucent INTUITY Administration Menu for Release 2 or Release 3
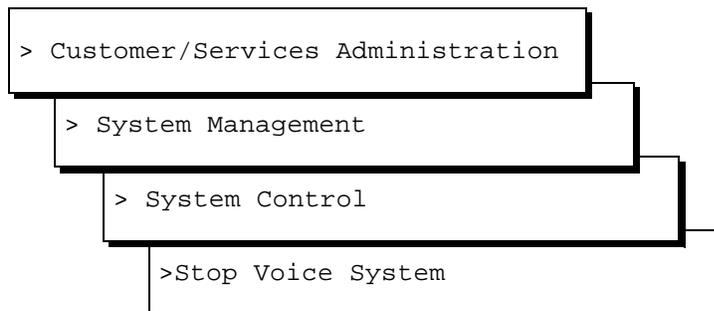
3. Select:

```
> Customer/Services Administration

    > System Management

        > System Control

            >Stop Voice System
```

The system displays the message:

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

4. Enter **y**

   The system displays the following message:

   ```
   The Voice System is now stopping.

   Initiating request to clear all calls in the next 60
   seconds.

   Orderly idling of the system succeeded.

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

   The Voice System has stopped.

   Press Enter to Continue.
   ```

5. Press ⌜ENTER⌟.

6. Continue with the next procedure, "Shutting Down the Lucent INTUITY Release 2 or Release 3 System" on page B-4.

Shutting Down the Lucent INTUITY Release 2 or Release 3 System

With the voice system stopped, you can proceed to shut down the Release 2 or Release 3 system.

1. Starting from the Administration Menu (Figure B-1 on page B-2) select:

```
> Customer/Services Administration
    > System Management
        > System Control
            >Shutdown System
```

The system displays the following message:

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

2. Enter **y**

The system displays the following message:

```
Shutdown started.
```

When the system is completely shut down, the system will display the following message.

```
The system is down.
Press Ctrl-Alt-Del to reboot your computer.
```

3. You have completed shutting down the Lucent INTUITY system. Continue with the next procedure, "Removing Power From the Computer" on page B-5.

Removing Power From the Computer

The MAP/40 requires a dedicated circuit with a dedicated circuit breaker. The power cord connects to the rear of the MAP/40 at the point labeled AC input receptacle (Figure B-2).

Accessory power outlet
(monitor 110V/230VAC)

AC voltage selection
switch

MAP/40
AC input receptacle

Power supply
exhaust vent

Video card
faceplate

External SCSI
connector card faceplate

CPU card
faceplate

Multi-port
serial card

Ethernet LAN
circuit card

IVC6 (AYC10)
Tip/Ring circuit cards

External
SCSI I/O (terminator
resistor not shown)

Remote
maintenance
circuit card

GP-Synch
circuit card

ACCX
networking
circuit card

Figure B-2.   Back View of the MAP/40 or 40s

To remove power from the MAP/40, perform the following tasks:

1. Turn off the monitor's power switch.

   The green or amber lamp on the front bottom of the monitor should be off.

2. Turn off the power switch on the front of the MAP/40.

   The green lamp, labeled POWER ON, on the front of the unit should be off.

3. Unplug the MAP/40 from the power outlet.

4. Remove the MAP/40 power cord from the AC input receptacle on the rear of the MAP/40 (Figure B-2).

5. Observe the correct lock-out/tag-out precautions for isolating power as outlined in the Lucent lock-out/tag-out procedure.

6. Continue with the next procedure, "Accessing the Circuit Card Cage".

Accessing the Circuit Card Cage

In order to access the circuit card cage, you must remove the:

■ Dress cover

■ Circuit card cage access panel

■ Circuit card cage retaining bracket

Removing the Dress Cover

To remove the dress cover, perform the following tasks:

1. Ensure that the MAP/40 tower configuration is in an upright position on the support base.

2. Locate the two screws on both the bottom left and right corners of the dress cover (Figure B-3).

Chassis
dress cover

Peripheral bay
bezel cover

Bottom bezel
(chassis filter
located behind)
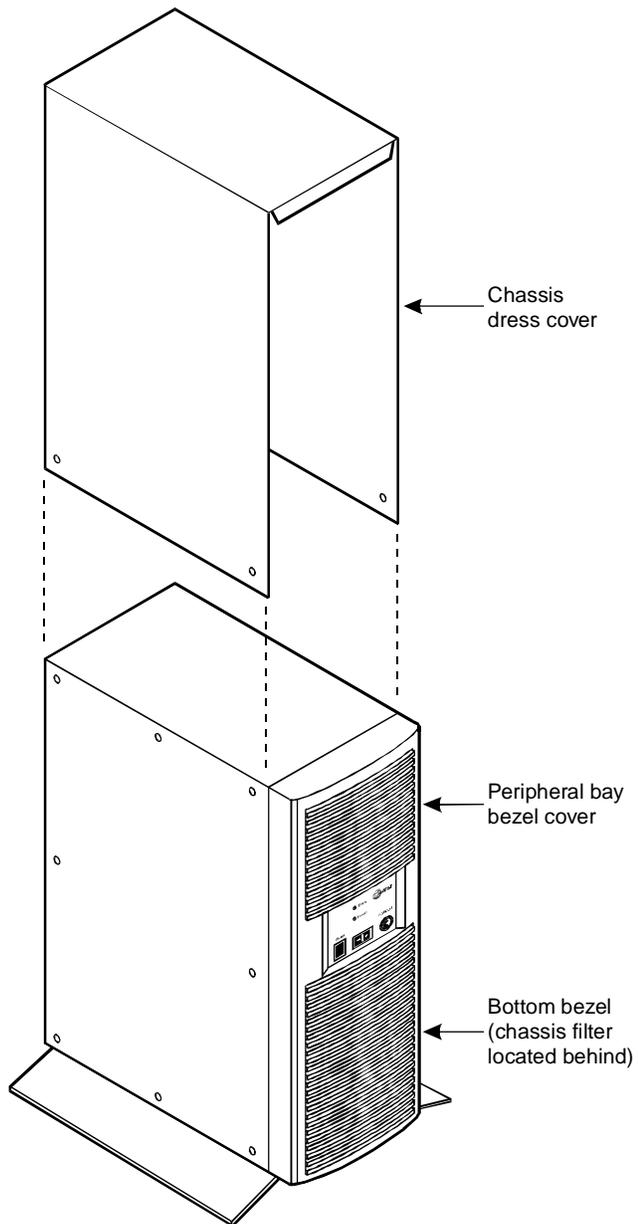
Figure B-3. Removing the Dress Cover

3. Remove the screws.

4. Remove the front bezel by pulling it forward.

5. Slide the dress cover forward and then up to remove it from the MAP/40.

> **⚠ CAUTION:**
> *As more of the dress cover is removed, it may begin to collapse inward from the pressure. Move your hands downward on the dress panel to reduce the pressure as as you lift it.*

6. Continue with the next procedure, "Removing the Circuit Card Cage Access Panel".

Removing the Circuit Card Cage Access Panel

To remove the circuit card cage access panel, perform the following tasks:

1. Place the MAP/40 on one side. The circuit card cage area is more accessible if the MAP/40 (tower configuration) is on its side. Use one of the following methods to place the MAP/40 on its side:

   a. If you have cables attached to the MAP/40 and want to leave the computer on the floor

      ■ Place two books the size of large telephone books or a similar form of support on the floor.

      ■ Turn the MAP/40 on its side, resting the side of the computer opposite from the support base on the two books (Figure B-4).

   b. If you do not have cables attached to the MAP/40 or 40s or currently have it sitting on a table, place the MAP/40 or 40s (tower configuration) on its side with the support base over the edge of the table (Figure B-5).

2. Use the Phillips screwdriver to loosen the 1/4-in. flathead screws by *two turns only.*

   > **⇒ NOTE:**
   > You only need provide adequate clearance. It is not necessary to remove the screws.

3. Apply gentle downward pressure to the access cover with the palms of your hands.

4. Push into the chassis with your palms and slide the access cover back toward the chassis area.

5. Lift and remove the access cover once you have cleared the screw heads.

Support base

Books used
to level box
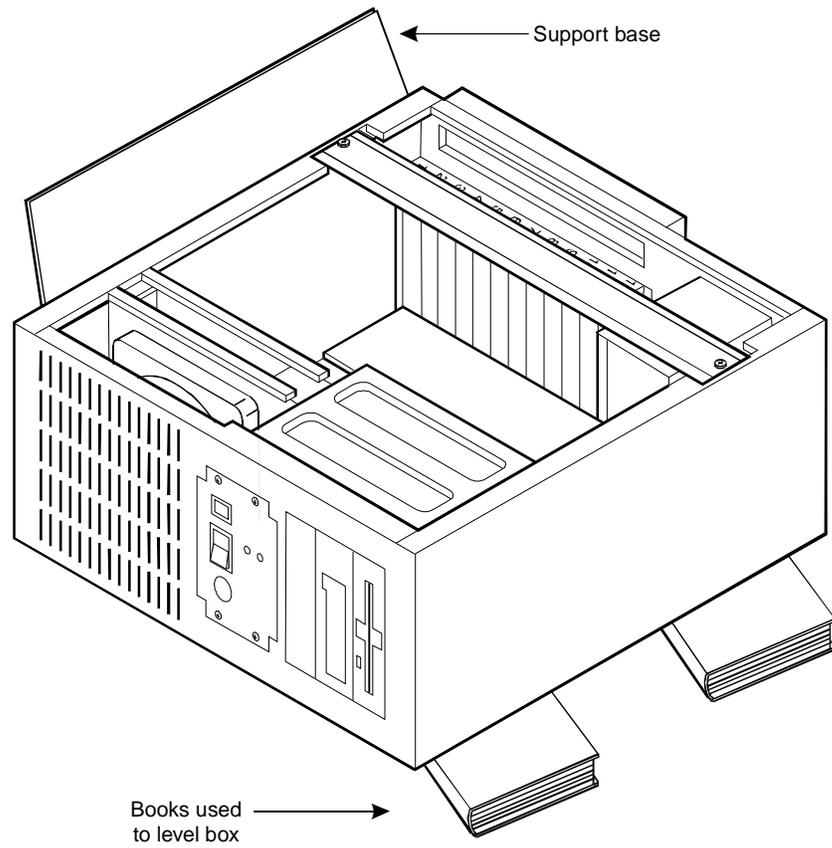
Figure B-4.   Working Within the Card Cage — Floor Position

Access cover

Retainer
circuit
card
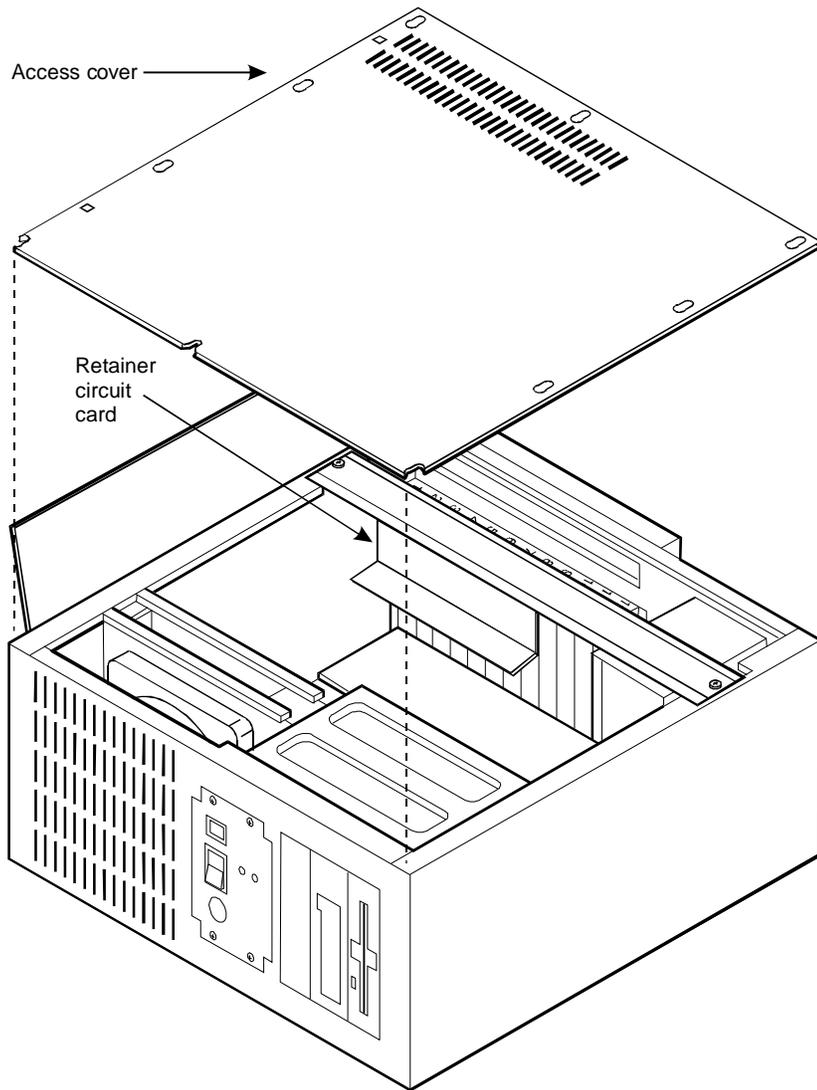
Figure B-5.   Removing the Access Panel

6. Continue with the next procedure. "Removing the Circuit Card Cage
Retaining Bracket" on page B-11.

Removing the Circuit Card Cage Retaining Bracket

To remove the circuit card cage retaining bracket, perform the following tasks:

1. Use a Phillips #2 screwdriver to loosen and remove the two screws in the retaining bracket (Figure B-6).

Remove 2 screws
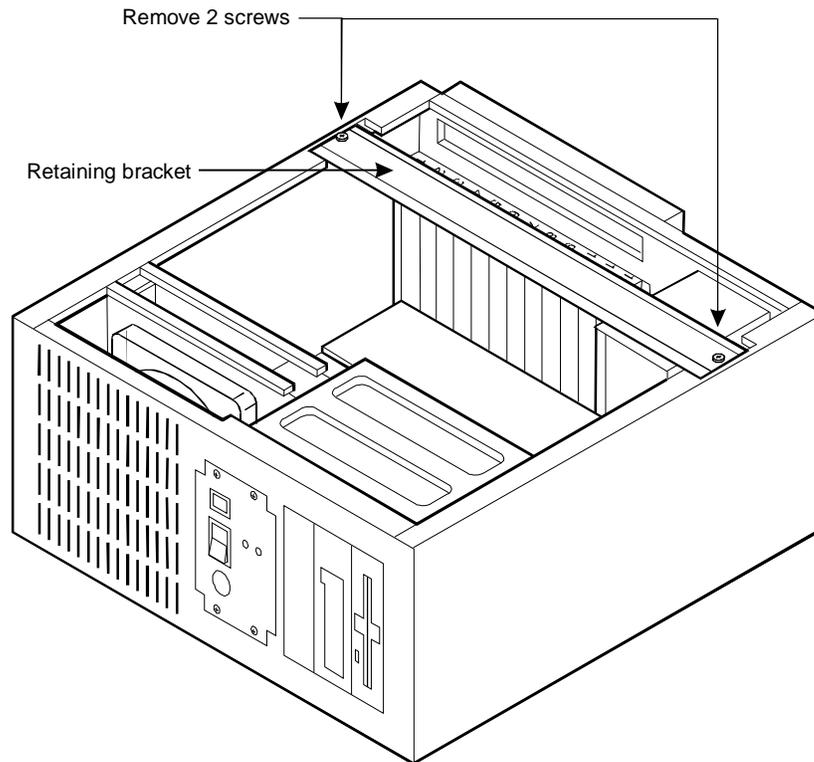
Retaining bracket

Figure B-6. Removing Screws in the Retaining Bracket.

2. Lift the retaining bracket and remove it from the MAP/40.

3. You have completed removing the circuit card cage retaining bracket. Continue with the next procedure, "Preparing the LAN Circuit Card" on page B-12.

Preparing the LAN Circuit Card

> ⚠ **CAUTION:**
>
> *Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See Chapter 4, "Getting Inside the Computer" in Lucent Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171 for detailed electrostatic discharge precautions.*

The Ethernet LAN circuit card has one jumper, W1, to set the I/O base address, IRQ channel, RAM base address, and ROM base address. Figure B-7 shows the location of the jumper. (The 8416 has no jumper.)
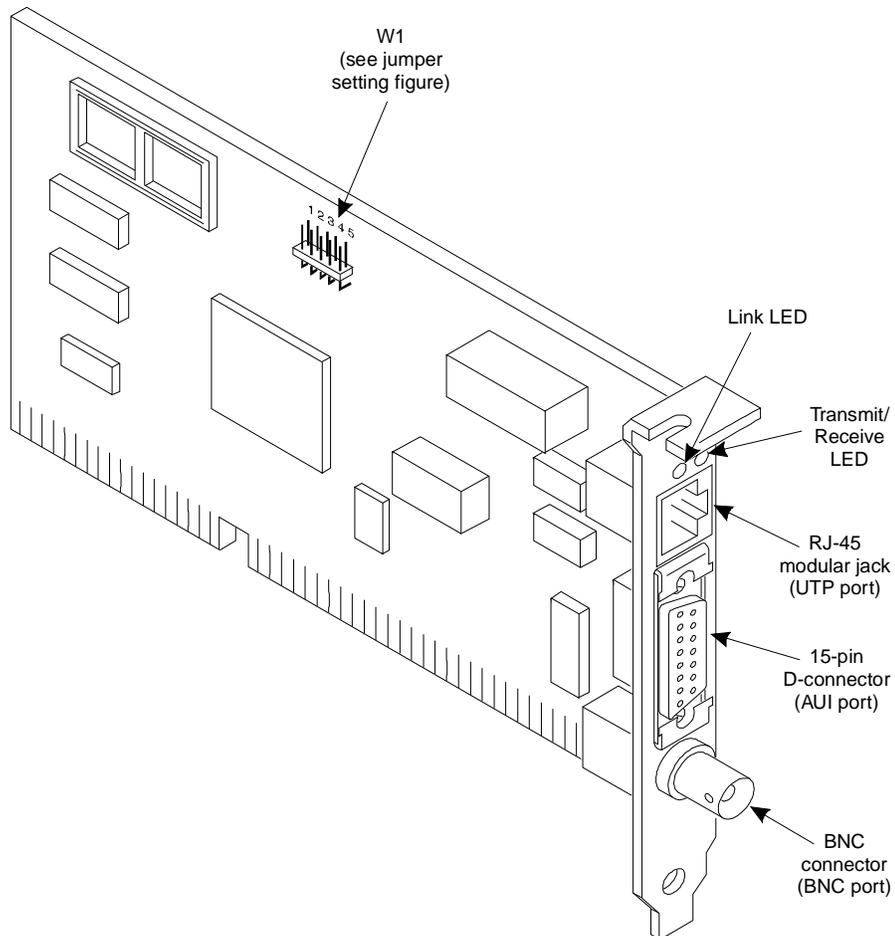
Figure B-7. The Ethernet LAN Interface Card with Jumper Location

Switches

There are no switches to set on the LAN card.

Jumpers

The LAN card has one jumper, W1, to set the I/O base address, IRQ channel, and RAM base address. See Figure B-8 for the location of W1.

The Lucent INTUITY software configuration is as follows:

- IRQ — 10

- I/O base address — 280

- RAM base address — C8000

The jumper default setting for W1 is "1". This setting configures the card to be software programmable beginning at the default settings. Figure B-8 illustrates the placement of the jumper.
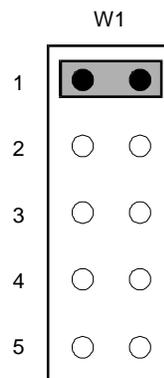
Figure B-8.   LAN Card Jumper Setting

1. Set the jumper in W1.

2. Continue with the next procedure, "Installing the LAN Circuit Card" on page B-14.

Installing the LAN Circuit Card

1. Determine the slot in which the LAN circuit card should be placed.

   - If the Slot 7 is empty, place the LAN circuit card in Slot 7.

   - If Slot 7 is not empty, place the LAN circuit card in the highest available slot.

   - If no slots are empty, remove the Tip/Ring circuit card in the highest slot and place the LAN circuit card in its place.

2. Holding the circuit card by its upper corners, slide the card into the backplane connector slot .

3. Apply even pressure to both corners of the circuit card until it is locked into the backplane.

4. Secure the circuit card faceplate into position by replacing the retaining screw.

5. Continue with the next procedure, "Closing the Computer".

Closing the Computer

To close the computer, perform the following tasks:

1. Place the MAP/40 on one side.

2. Remount the circuit card cage retaining bracket across the circuit cards using two screws (Figure B-6). Leave the two screws only partially tightened to provide adequate clearance for the access panel.

3. Place the access panel on top of the MAP/40. Align the access panel so that it slides over the eight screws on the MAP/40 (Figure B-5).

4. Apply pressure gently on the access panel.

5. Push in and slide the access panel into place.

6. Tighten the eight access panel screws and the two retaining bracket screws.

7. Place the MAP/40 in the upright position.

8. Slide the dress cover over the unit.

9. Replace and tighten the four dress cover retaining screws.

10. Continue with the next procedure, "Restoring Power to the Computer" on page B-15

Restoring Power to the Computer

To restore power to the computer, perform the following tasks:

1. Place the MAP/40 power cord in the AC input receptacle on the rear of the unit (Figure B-2 on page B-5).

2. Plug the MAP/40 power cord into the designated power outlet.

3. Turn on the power switch on the front of the MAP/40.

   The green lamp, labeled POWER ON, on the front of the unit should be lit.

4. Turn on the monitor's power switch.

   The green or amber lamp on the front bottom of the monitor should be lit.

5. The Lucent INTUITY system will automatically boot and the voice system will be started.

6. Continue with the next procedure, "Rebooting to Effect LAN Driver Change"

Rebooting to Effect LAN Driver Change

Before you can continue the upgrade, the system must recognize the LAN driver for the new LAN card. To reboot the system to effect the LAN driver changes, perform the following tasks:

1. Log into the system as *craft*.

   The system displays the Main Menu (Figure B-1 on page B-2).

2. Select:

```
> Customer/Services Administration

  > System Management

    > System Control

      >Shutdown System
```

   The system displays the Wait Time window.

3. Enter **0** (zero) to indicate you would like an immediate shutdown.

4. Press ⌷SAVE⌷ (F3).

   The system displays the message:

   ```
   Shutdown started.
   ```

When the system is completely shut down, it displays the message:

```
The system is down.
Press Ctrl-Alt-Del to reboot your computer.
```

5. Press CTRL-ALT-DEL.

The system performs a power-on self test (POST). The system lists the various hardware components and the status of the tests performed on those components.

When the reboot is complete, the system displays the message:

```
Startup of the Voice System is complete.
Console Login:
```

6. Log into the system as *craft*.

⚠ CAUTION:

If you performed these procedures because you were directed to do so (from "Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System" on page 3-14), return to step 5 on page 3-15.

Installing a LAN Circuit Card in the MAP/100

C

Installing the LAN Circuit Card

To install a LAN circuit card you must complete the following steps:

- Stop the voice system

- Shut down the Lucent INTUITY system

- Remove power from the computer

- Access the circuit card cage

- Prepare the LAN circuit card

- Install the LAN circuit card

- Close the computer

- Restore power to the computer

- Rebooting to effect LAN driver change

⚠ CAUTION:

If you are reading this appendix because you were directed here (from "Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System" on page 3-14), the first procedures are already complete. In that case, proceed to "Accessing the Circuit Card Cage" on page C-7.

Stopping the Voice System

Before doing any work inside any electrical device, the power must be off. Before powering down the Release 2 or Release 3 system, you must perform a graceful stop of the voice system and then a shutdown of the entire Release 2 or Release 3 system.

⚠ CAUTION:

When the voice system is stopped all calls in progress will be disconnected. Users calling AUDIX will hear a fast busy signal. Callers sent to AUDIX coverage will hear ringing but there will be no answer.

To stop the voice system, perform the following tasks:

1. Place the A/B switch in the "A" position
   (the Release 2 or Release 3 system position).

2. Start at the Lucent INTUITY Administration menu (Figure C-1).

```
     INTUITY (TM) Administration
   AUDIX Administration
   Customer/Services Administration
   Networking Administration
 > Platform Pre-Upgrade
   Switch Interface Administration
   Upgrade
   Voice System Administration
```

Figure C-1.   Lucent INTUITY Administration Menu for Release 2 or Release 3
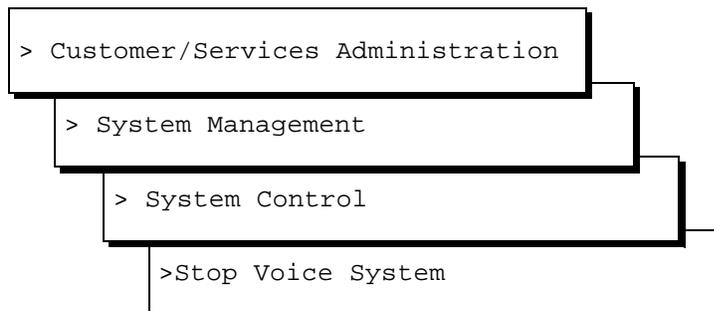
3. Select:

```
> Customer/Services Administration
   > System Management
      > System Control
         >Stop Voice System
```

The system displays the message:

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

4. Enter **y**

    The system displays the following message:

    ```
    The Voice System is now stopping.

    Initiating request to clear all calls in the next 60
    seconds.

    Orderly idling of the system succeeded.

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

    The Voice System has stopped.

    Press Enter to Continue.
    ```

5. Press ENTER.

6. Continue with the next procedure, "Shutting Down the Lucent INTUITY Release 2 or Release 3 System" on page C-4.

Shutting Down the Lucent INTUITY Release 2 or Release 3 System

With the voice system stopped, you can proceed to shut down the Release 2 or Release 3 system.

1. Starting from the Administration Menu (Figure C-1 on page C-2) select:
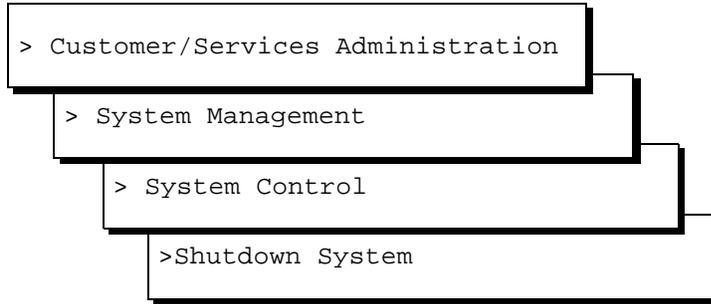
```
> Customer/Services Administration
    > System Management
        > System Control
            >Shutdown System
```

The system displays the following message:

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

2. Enter **y**

The system displays the following message:

```
Shutdown started.
```

When the system is completely shut down, the system will display the following message.

```
The system is down.
Press Ctrl-Alt-Del to reboot your computer.
```

3. You have completed shutting down the Lucent INTUITY system. Continue with the next procedure, "Removing Power from the Computer" on page C-5.

Removing Power from the Computer

The MAP/100 requires a dedicated power line. The power cord connects to the rear of the MAP/100 at the point labeled AC power input receptacle (Figure C-2). Before you begin any work in the MAP/100 you must disconnect the incoming power.
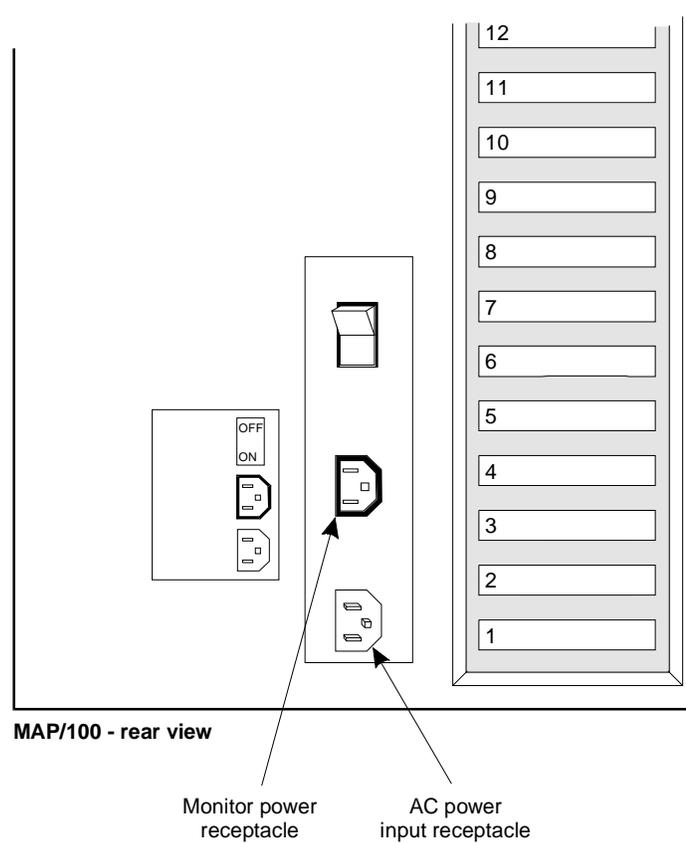
Figure C-2. MAP/100 Power Connections

To remove power from the MAP/100, perform the following tasks:

1. Turn off the monitor's power switch.

   The green or amber lamp on the front bottom of the monitor should be off.

2. Turn off the power switch on the lower front of the MAP/100 peripheral bay (Figure C-3).
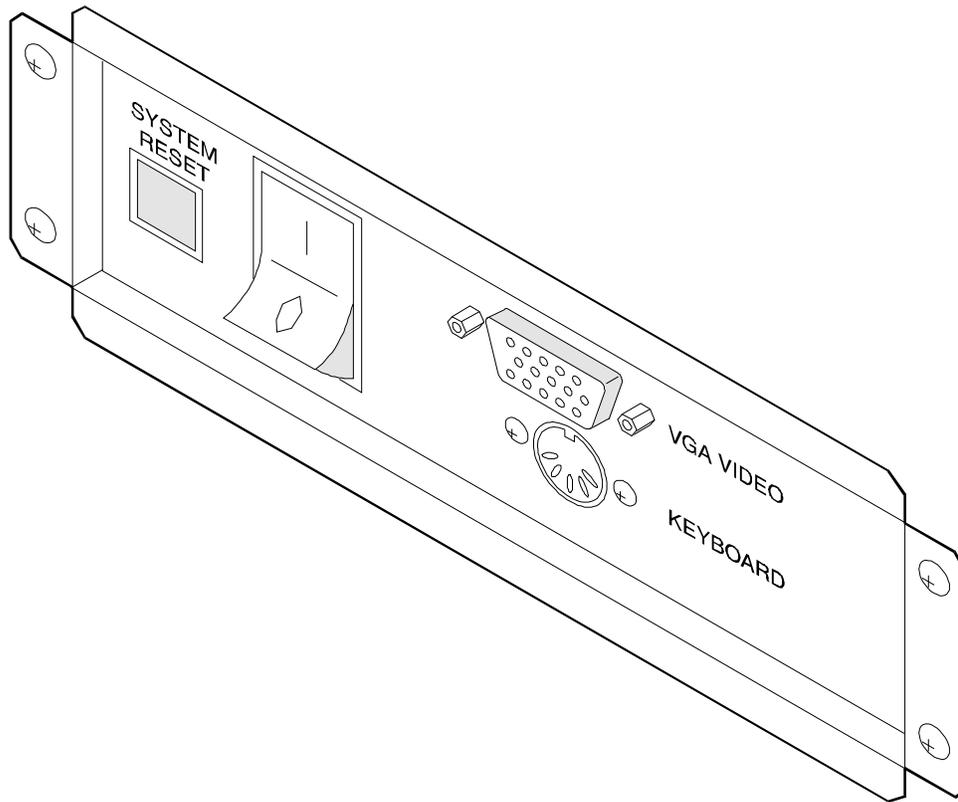
Figure C-3.   MAP/100 Power Switch

3. Turn off the circuit breaker on the back of the MAP/100 (Figure C-2).

4. Unplug the MAP/100 from the power outlet.

5. Remove the MAP/100 power cord from the AC power input receptacle on the rear of the MAP/100 (Figure C-2).

6. Observe the correct lock-out/tag-out precautions for isolating power as outlined in the Lucent lock-out/tag-out procedure.

7. Continue with the next procedure, "Accessing the Circuit Card Cage" on page C-7.

Accessing the Circuit Card Cage

In order to access the circuit card cage, you must remove the

- Dress cover
- Circuit card cage access panel
- Circuit card cage retaining bracket

Removing the Dress Cover

To remove the side dress cover, do the following:

1. Place your fingertips at the top of the side dress cover.

2. Gently pry off the dress cover by pulling out at each corner.

3. Continue with the next procedure, "Removing the Circuit Card Cage Access Panel".

Removing the Circuit Card Cage Access Panel

To remove the circuit card cage access panel, do the following:

1. Loosen the eight 1/4-turn fasteners around the card cage access door (Figure C-4).

2. Open the door.

card cage access door
1/4-turn fasteners
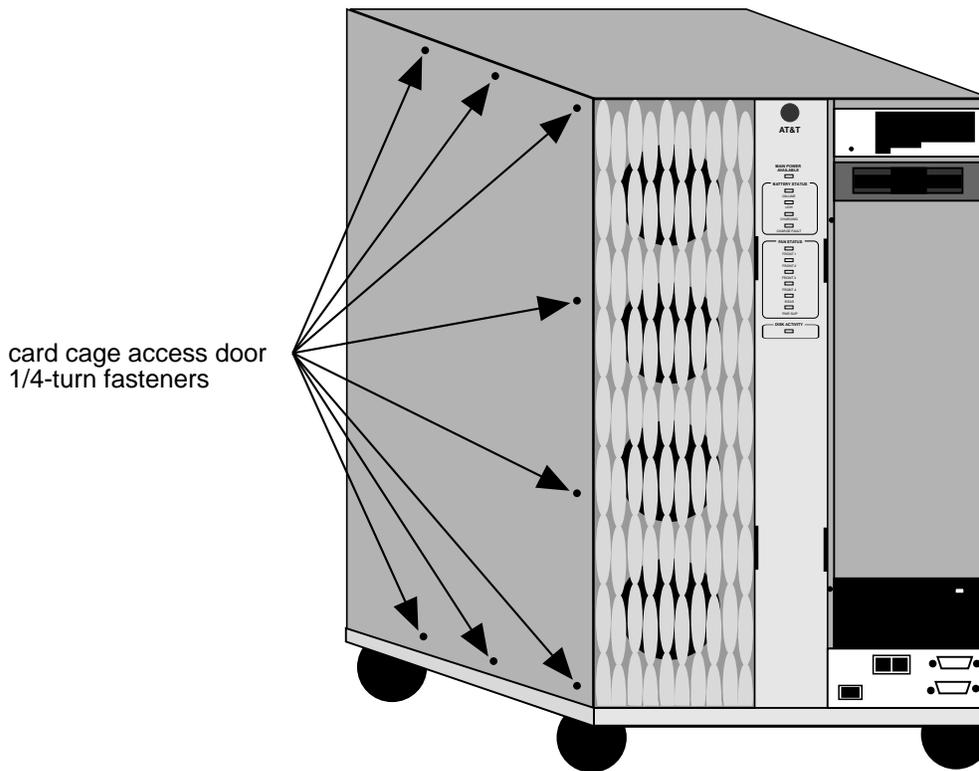
Figure C-4.   Fasteners Around the Card Cage Access Panel

> 3. Continue with the next procedure, "Preparing the LAN Circuit Card"

Preparing the LAN Circuit Card

> ⚠️ **CAUTION:**
> *Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See Chapter 4, "Getting Inside the Computer" in Lucent Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 Maintenance, 585-310-174 for detailed electrostatic discharge precautions.*

The Ethernet LAN circuit card has one jumper, W1, to set the I/O base address, IRQ channel, RAM base address, and ROM base address. Figure C-5 shows the location of the jumper. (The 8416 has no jumper.)

W1
(see jumper
setting figure)

1 2 3 4 5

Link LED

Transmit/
Receive
LED

RJ-45
modular jack
(UTP port)

15-pin
D-connector
(AUI port)

BNC
connector
(BNC port)
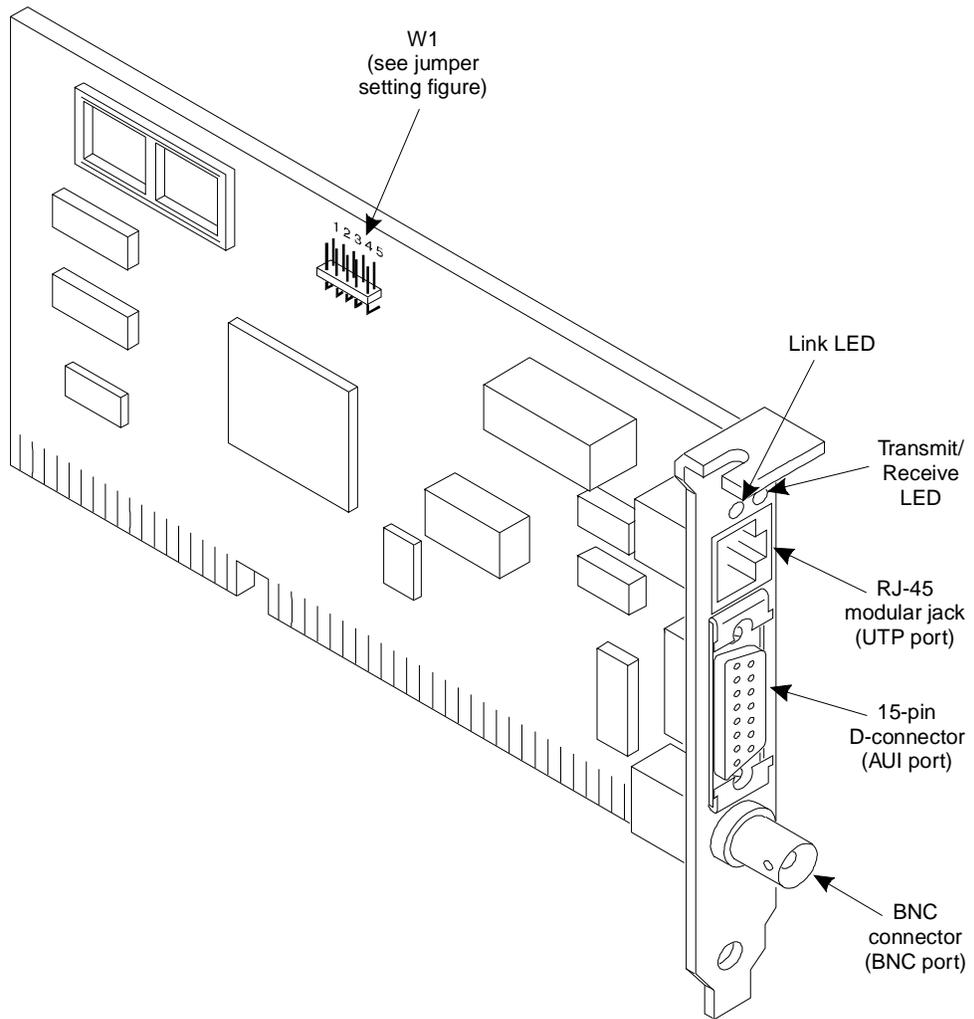
**Figure C-5.   The Ethernet LAN Interface Card with
                Jumper Location**

Switches

There are no switches to set on the LAN card.

Jumpers

The LAN card has one jumper, W1, to set the I/O base address, IRQ channel, and RAM base address. See Figure C-6 for the location of W1.

The Lucent INTUITY software configuration is as follows:

- IRQ — 10

- I/O base address — 280

- RAM base address — C8000

The jumper default setting for W1 is "1," which configures the card to be software programmable beginning at the default settings. Figure C-6 illustrates the placement of the jumper.
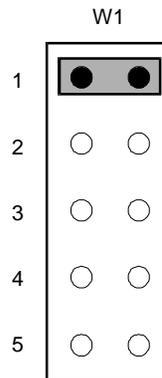
Figure C-6. LAN Card Jumper Setting

1. Set the jumper in W1.

2. Continue with the next procedure, "Installing the LAN Circuit Card" on page C-11.

Installing the LAN Circuit Card

The LAN circuit card must be placed in Slot 15. If this slot is currently occupied call the remote maintenance center.

To install the LAN circuit card, perform the following tasks:

1. Holding the circuit card by its upper corners, slide the card into the backplane connector slot .

2. Apply even pressure to both corners of the circuit card until it is locked into the backplane.

3. Secure the circuit card faceplate into position by replacing the retaining screw.

4. Continue with the next procedure, "Closing the Computer".

Closing the Computer

To close the computer, perform the following tasks:

1. Close the circuit card cage access door.

2. Tighten the eight 1/4-turn fasteners around the card cage access door (Figure C-4 on page C-8).

3. Replace the dress cover as follows:

   a. Align the holes on the back of the cover with the pegs on the MAP/100.

   b. Push the cover on by pressing in at each of the corners.

   c. Continue to step 4.

4. Continue with the next procedure, "Restoring Power to the Computer".

Restoring Power to the Computer

To restore power to the computer, perform the following tasks:

1. Place the MAP/100 power cord in the AC input receptacle on the rear of the unit (Figure C-2).

2. Plug the MAP/100 power cord into the designated power outlet.

3. Turn on the circuit breaker on the back of the MAP/100 (Figure C-2).

4. Turn on the power switch on the lower front of the MAP/100 peripheral bay (Figure C-2).

   The green lamp – labeled "Main Power Available" – on the front of the unit should be lit (Figure C-7 on page C-12).
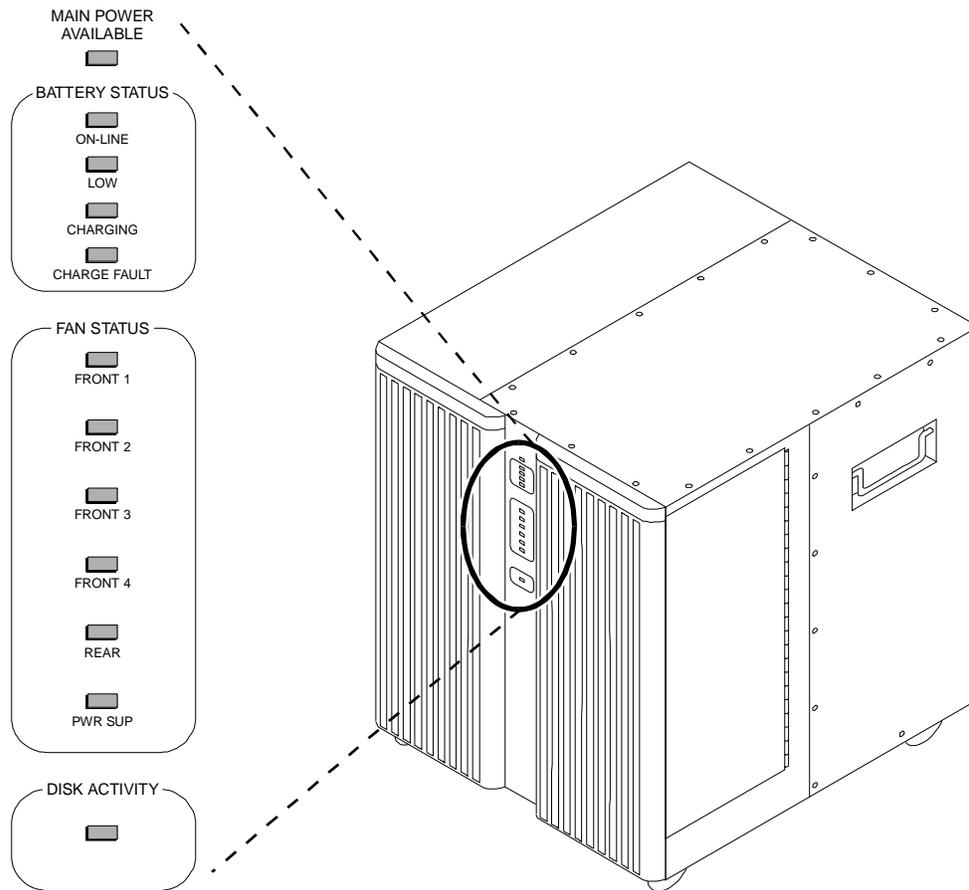
Figure C-**7.** **MAP/100 Monitoring Panel**

5. Turn on the monitor's power switch.

    The green or amber lamp on the front bottom of the monitor should be lit.

6. The Lucent INTUITY system will automatically boot and the voice system will be started.

7. Continue with the next procedure, "Rebooting to Effect LAN Driver Change" on page C-13.

Rebooting to Effect LAN Driver Change

Before you can continue the upgrade, the system must recognize the LAN driver for the new LAN card. To reboot the system to effect the LAN driver changes, perform the following tasks:

1. Log into the system as *craft*.

   The system displays the Main Menu (Figure C-1 on page C-2).

2. Select:

   ```
   > Customer/Services Administration
       > System Management
           > System Control
               >Shutdown System
   ```

   The system displays the Wait Time window.

3. Enter **0** (zero) to indicate you would like an immediate shutdown.

4. Press SAVE (F3).

   The system displays the message:

   > Shutdown started.

   When the system is completely shut down, it displays the message:

   > The system is down.
   > Press Ctrl-Alt-Del to reboot your computer.

5. Press CTRL-ALT-DEL.

   The system performs a power-on self test (POST). The system lists the various hardware components and the status of the tests performed on those components.

   When the reboot is complete, the system displays the message:

   > Startup of the Voice System is complete.
   > Console Login:

6. Log into the system as *craft*.

⚠ CAUTION:

If you performed these procedures because you were directed to do so (from "Installing a LAN Circuit Card on the Lucent INTUITY Release 2 or Release 3 System" on page 3-14), return to step 5 on page 3-15.

Preparing for the Transfer of Custom Announcement Sets

D

⚠ CAUTION:

> *If the Lucent INTUITY Release 2 or Release 3 system does not have custom announcement sets, do not complete the procedures listed in this appendix.*

Overview

If you are reading this appendix, you were likely directed here after completing the procedure under "Checking the Lucent INTUITY Release 2 or Release 3 System for Custom Announcements" on page 2-9. If so, you will need the list of custom announcement sets you wrote down in Table 2-3 on page 2-12.

Before the upgrade can continue, the technician (or the remote maintenance center) must prepare for the transfer of custom announcement sets by doing the following:

- Identifying the base announcement set for each custom announcement set. If the customer does not know, or is unsure of, this information, see "Identifying the Base Announcement Set on a pre-Release 4 System" on page D-2.

- Adding (to the Lucent INTUITY Release 4 system) the name of the custom announcement set(s) that is/are presently on the Lucent INTUITY Release 2 or Release 3 system.

- Copying the appropriate base announcement set into each newly-created custom announcement set on Lucent INTUITY Release 4 system.

⚠ CAUTION:

> *The customer must have any non-English announcements sets available to proceed. Check with an account representative for available announcement sets.*

Purpose

The procedures described in this chapter will allow technicians to copy many simple custom announcement sets from existing Lucent INTUITY systems to Lucent INTUITY Release 4 systems. *These procedures are, however, limited in their effectiveness. They are not guaranteed to work for all custom announcement sets.*

Identifying the Base Announcement Set on a pre-Release 4 System

When a customer develops a custom announcement set, they first make a copy of one of the standard Lucent INTUITY announcement sets and save the copy under a new name. Then, the customer re-records individual fragments of the new announcement set, thereby creating a custom announcement set. The standard announcement set on which the custom announcement set is based is called the *base announcement set*.

If the customer knows that the base announcement set for each of their custom announcement sets, proceed to "Adding the Custom Announcement Set Name to the Lucent INTUITY Release 4 System" on page D-4.

If the customer is not sure of, or does not know, the base announcement set, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "A" position (the Release 2 or Release 3 system position).

2. Start from the Lucent INTUITY Administration menu (Figure D-1).

```
+█████  INTUITY (TM) Administration  █+
|>AUDIX Administration               |
| Call Accounting System             |
| Customer/Services Administration|
| Networking Administration          █
| Switch Administration              █
| Switch Interface Administration █
| Upgrade                            |
| Voice System Administration        |
+--------------------------------+
```

Figure D-1.   Lucent INTUITY Administration Menu for Release 2 or Release 3

3. Select:

```
> AUDIX Administration
```

The system displays a blank AUDIX Administration screen.

4. At the `enter command:` prompt, enter either:

Full Command Version	Short Command Version
list annc-set	**li an**

The system displays the Announcement Sets screen (Figure D-2).

```
dr                    Active              Alarms: MmwA                    Logins: 4
list annc-sets                                                              Page 1

                        ANNOUNCEMENT SETS

      us-eng                               us-eng-t












Press [NextPage], [PrevPage] or [Cancel]
enter command: list annc-sets
1Cancel    2Refresh  3Enter    4ClearFld 5Help      6Choices  7NextPage 8PrevPage
```

Figure D-2. Announcement Sets Screen

5. Typically, the announcement set names `us-eng` and `us-eng-t` are shown. With Table 2-3 in front of you, work with the customer and write down the base announcement set that was used for each custom announcement set in the space provided in Table 2-3.

6. If the customer is unsure which announcement set they used to create a custom announcement set, call the remote maintenance center for assistance.

7. Press (CANCEL) (F1).

The cursor returns to the command line.

8. Type **exit** at the `enter command:` prompt and press (ENTER) (F3).

The system displays the Lucent INTUITY Administration menu (Figure D-1 on page D-2).

9. Continue with the next procedure, "Adding the Custom Announcement Set Name to the Lucent INTUITY Release 4 System" on page D-4.

Adding the Custom Announcement Set Name to the Lucent INTUITY Release 4 System

At this point, you must add a name for each custom announcement set to the Release 4 system. You need to do this before you can add the actual announcement set. (The same way that you must create a directory on a PC before you can put files into it.) To add an announcement set to the Release 4 system, perform the following tasks:

1. Place the A/B switch on the A/B switch box in the "B" position (the Release 4 system position).

2. Start at the Lucent INTUITY Main Menu (Figure D-3).

```
       INTUITY (TM) Main Menu

AUDIX Administration
Customer/Services Administration
Networking Administration
Switch Interface Administration
Upgrade
Voice System Administration
```
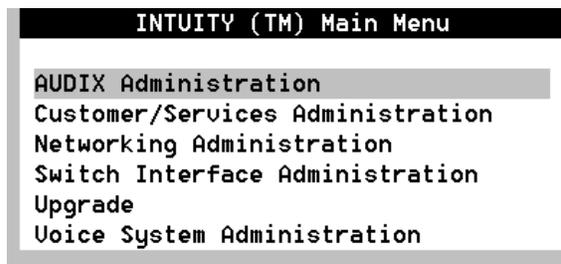
Figure D-3.   Lucent INTUITY Main Menu for Release 4

3. Select:

```
> AUDIX Administration
```

The system displays the AUDIX Administration screen.

4. At the `enter command:` prompt, enter either:

Full Command Version	Short Command Version
add announcement-set *annc-set-name*	**ad an *annc-set-name***

where **annc-set-name** is the name of the announcement set(s) you wrote down in Table 2-3 on page 2-12.

5. Press (ENTER) (F3).

The system displays the Announcement Set screen, with the name of the new announcement set listed (Figure D-4). In this case, the announcement set is `custom`.

```
AUDIX              Active              Alarms: MmwA              Logins: 1
add annc-set custom                                             Page 1 of 1

                          ANNOUNCEMENT SET


        Announcement Set : custom













 Press [ENTER] to execute or press [CANCEL] to abort
 enter command: add annc-set custom
```

Figure D-4. Announcement Set Screen

6. Press ⌷ENTER⌷ (F3) to add the set.

   The system displays the message `Command Successfully Completed`, and the cursor returns to the command line.

   ➤ **NOTE:**
   The announcement set you just named is empty until you copy the announcements from another set into it, as described in the next procedure.

7. Repeat step 4 through step 6 for all of the custom announcement sets written in Table 2-3.

8. Continue with the next procedure, "Copying the Base Announcement Set into the Lucent INTUITY Release 4 System Custom Announcement Set" on page D-6.

Copying the Base Announcement Set into the Lucent INTUITY Release 4 System Custom Announcement Set

After you have added the name(s) of the custom announcement set on the Release 4 system, you must copy the appropriate base announcement set into its corresponding custom announcement set name. Then, as the upgrade proceeds, the custom fragments will replace the corresponding base fragments, and the custom announcement sets will be restored.

To copy the appropriate base announcement set to its custom announcement set on the Release 4 system, do the following:

1. Starting from the AUDIX Administration screen `enter command:` prompt, enter either:

Full Command Version	Short Command Version
copy annc-set	**co annc**

   The system displays the Copy Announcement Set screen (Figure D-5).

```
AUDIX              Active            Alarms: MmwA              Logins: 1
copy annc-set                                               Page 1 of 1
                     COPY ANNOUNCEMENT SET

  From Announcement Set: Appropriate base announcement set as listed in Table 2-3.

   To Announcement Set: Appropriate custom announcement set as listed in Table 2-3.




















enter command: copy annc-set
```

Figure D-5.   Copy Announcement Set Screen

2. With Table 2-3 in front of you, enter *the first base announcement set name* in the `From Announcement Set:` field.

3. Enter the *name of the corresponding custom announcement set* in the `To Announcement Set:` field.

4. Press $\boxed{\text{ENTER}}$ (F3) to save the information to the system database.

The system displays the message `Command Successfully Completed`, and the cursor returns to the command line.

5. Repeat step 1 through step 4 for all custom announcement set names created in "Adding the Custom Announcement Set Name to the Lucent INTUITY Release 4 System" on page D-4.

⚠ CAUTION:

If the customer customized an announcement set by replacing a fragment with silence or a 'blank' (typically, a fragment is customized by re-recording the fragment verbiage), the upgrade software will not recognize that the fragment has been customized. In that case, the fragment will be replaced with the Release 4 standard fragment and the customer will have to re-customize that fragment to again be silence or blank.

6. Continue with the upgrade process. Proceed to Chapter 3, "Connecting the Lucent INTUITY Systems for an In-Service or Out-of-Service Upgrade" in this book.

Running a Software Upgrade
(Release 4.0 to Release 4.n)

E

⚠ **CAUTION:**
The procedures in this appendix refer only to running an upgrade from Lucent INTUITY Release Version 4.0 to Lucent INTUITY Release Version 4.n. **Do not use these procedures for any other type of upgrade**.

Overview

This appendix describes procedures to be followed for executing a Release 4 software upgrade. This upgrade increments the software and platform packages from Lucent INTUITY Release 4.0 to Release 4.n.

This appendix is organized as follows:

- Materials and information needed before you begin
- Potential Problem Points in the Software Upgrade
- Performing a Full System Back-Up
- Running the Upgrade Package
- Using the Upgrade Flowchart
- Completing the Upgrade
- Viewing the Upgrade Logs
- Rebooting the Release 4 System

Purpose

The purpose of this appendix is to provide the necessary information and instruction to enable the technician to complete a software upgrade of a Release 4 system.

Software Upgrade Process Overview

This software upgrade is very different from software upgrades you may have used in the past. This section describes the preparation required for the software upgrade and provides an overview of the process, including tips for understanding potential problems.

Before You Begin; Materials and Information Needed

Before starting the process of a software upgrade, the following should be available/complete:

- The *Upgrade Set*, that can contain the:

    — INTUITY Platform AUDIX tape

    — AUDIX R4 Voice Messaging tape

    — AUDIX *Announcement_Set_Name* Announcement tape

    — Additional tapes and/or diskettes, depending on the customer site configuration and purchased features, such as:

        ■ Switch integration software

        ■ Remote Field Update (RFU)

        ■ INTUNIX

        ■ System Programming Maintenance (SPM)

        ■ Call Accounting System (CAS)

    ⇒ **NOTE:**
    You may not have all of these upgrade tapes and/or diskettes. The customer's system configuration and software components determine what materials are sent.

- Several initialized, *blank cartridge tapes*

- If the Upgrade Set includes hardware upgrades, *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171* or *Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 Maintenance, 585-310-174*, as appropriate for the Lucent INTUITY system you are upgrading

- *The customer is aware that their system will be unavailable for at least 30 minutes* during the course of the upgrade, and that there might be multiple instances of system unavailability

Software Upgrade Process

The software upgrade starts with a full system backup. Once the backup is complete, you will use with the tapes in the Upgrade Set, a box with up to 8 tapes. The software upgrade is designed to be intuitive and user-friendly, with descriptive prompts and explanations displayed on the screen.

What Tapes Do I Need?

The software packages that need to be upgraded are on a base set of 3 tapes that come to the customer's site in the *Upgrade Set*:

- INTUITY Platform AUDIX tape

- AUDIX R4 Voice Messaging tape

- AUDIX *Announcement_Set_Name* Announcement tape

Not all sites will require all 3 tapes. The remote maintenance center accesses the customer's system remotely and determines the software components that will require an upgrade. Therefore, the tapes you see in the Upgrade Set for a customer are all the tapes you need.

Depending on the customer's site configuration and existing or requested options, there could be several more tapes in the Upgrade Set, including:

- Switch integration software

- Remote Field Update (RFU)

- INTUNIX

- System Programming Maintenance (SPM)

- Call Accounting System (CAS)

Again, only those tapes the customer's system requires are included in the Upgrade Set.

How Long Does a Software Upgrade Take?

The length of time for a software upgrade depends on the platform the customer has (that is, a MAP/40s, MAP/40, or MAP/100), the amount of user data and activity, the number of components that must be upgraded, and on additional, optional components, such as mirrored disks.

At a minimum, the software upgrade will take 2 hours (not including the time required to back up the system). However, a software upgrade can easily take 3 to 4 hours or more, if the customer has a large system such as a mirrored MAP/100 with a substantial amount of user data or if you encounter a problem during the course of the upgrade.

The upgrade asks you what tapes you have, analyzes the packages on each
tape and on the system, and upgrades only those packages that require
upgrading. Each package install takes between 5 and 15 minutes. You do not
need to be present during the package installs for the upgrade to complete
successfully (for example, you could leave and get a bite to eat and come back
in 30 minutes or so).

Stopping the Software Upgrade

Only stop the software upgrade if an installation failure has occurred. If
necessary, however, you can stop the upgrade at any time during the process by
pressing the `DELETE` or `BREAK` keys.

Once an upgrade has been interrupted, you must start the upgrade process
over, that is, you must choose the Upgrade option from the Lucent INTUITY Main
Menu. *However, that does not mean you must re-install all the software packages
again*. The upgrade will perform its analysis of each tape and compare the
software components on the tape with those on the system. The upgrade will
prompt you that certain components do not need to be upgraded, will skip over
those components that have been upgraded, and will pick up the upgrade
process from the point at which you interrupted the process.

Potential Problem Points in the
Software Upgrade

The following section describes situations that could cause confusion during the
software upgrade process.

- Some versions of the upgrade software respond differently to the
  Release 4 software. One response is a known bug that makes the
  upgrade behave as if it's completing when it is not. The way you can
  identify the 'buggy' copy of the upgrade software is by looking for the
  system message:

  The MACH4 Intermediate Upgrade

  at the beginning of the upgrade process. *If you see this message, follow
  the special instructions provided in this appendix*.

- Most of the software packages take under 20 minutes to install. If a
  package is taking considerably longer than 20 minutes to install, check
  the drive light on the tape drive. If the drive light is flashing, the installation
  is still in progress. If the drive light remains lit for more than 10 seconds,
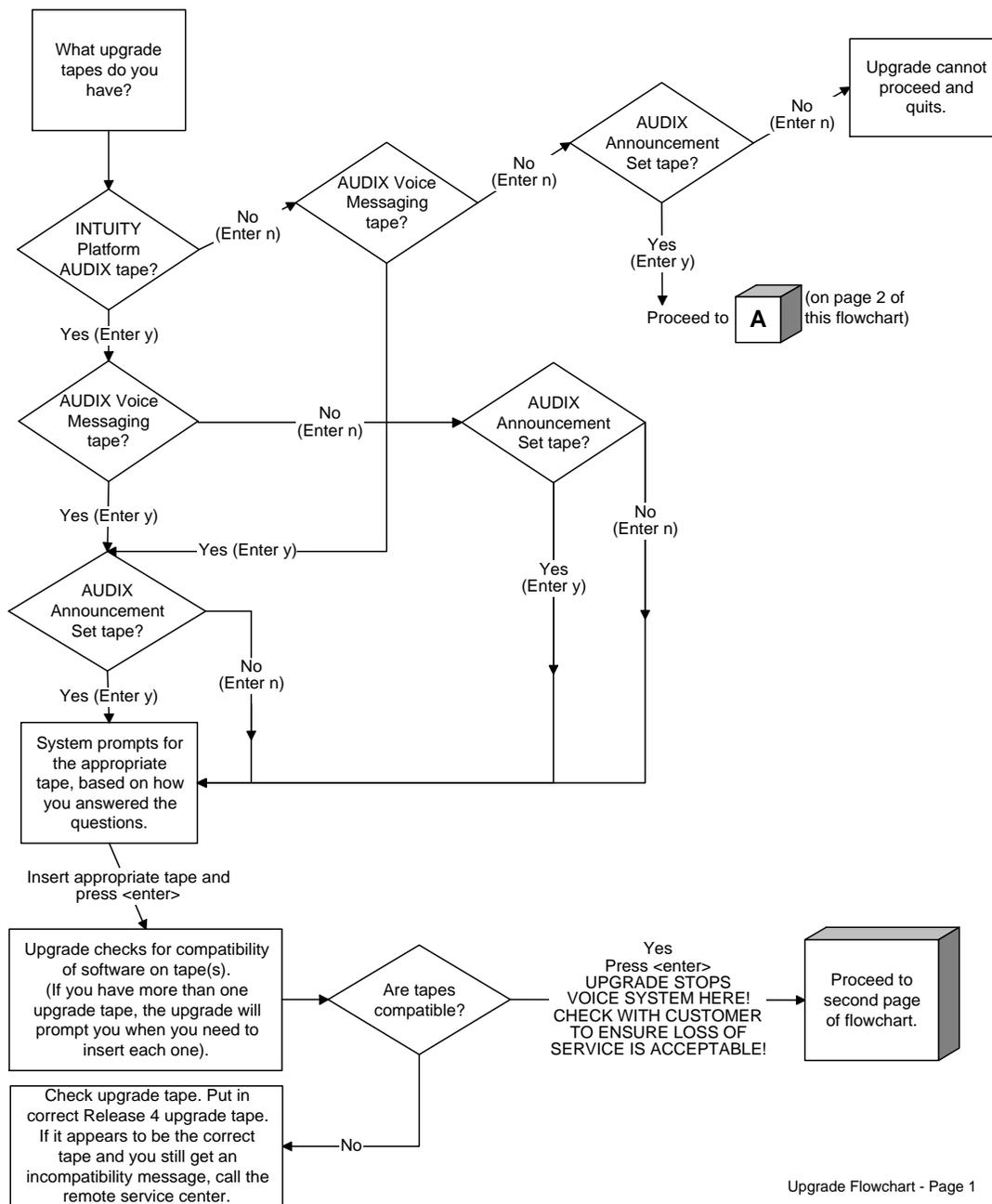 the upgrade could be 'frozen'. In that case, call the remote service center.

■ During the installation of the software packages, the upgrade displays an error message that indicates a failure. However, the message does not signify any condition that should cause alarm. If you see the message:

```
prismlog    Ux:ps: ERROR: ftw (   ) failed:
no such file or directory
```

disregard it. The upgrade will proceed normally.

Performing a Full System Back-Up
on the Lucent INTUITY System

A backup is the only way to ensure the system can recover in the event of an
unforeseen catastrophic failure, such as equipment or power failure, or problems
with the upgrade itself.

Starting the Release 4 System Back-Up

To perform a full system backup, perform the following tasks:

1. Log into the Release 4 system as *craft*.

    The system displays the Lucent INTUITY Main Menu (Figure E-1).

```
          INTUITY (TM) Main Menu

 AUDIX Administration
 Customer/Services Administration
 Networking Administration
 Switch Interface Administration
 Upgrade
 Voice System Administration
```
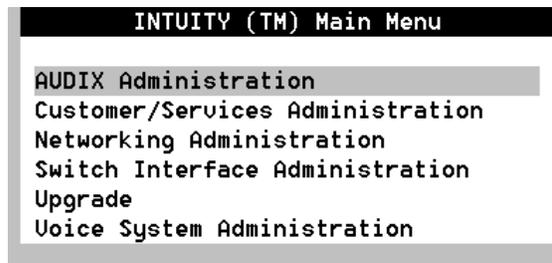
Figure E-1.   Lucent INTUITY Main Menu for Release 4

2. Select:

```
> Customer/Services Administration

   > Backup/Restore

      > Backup
```
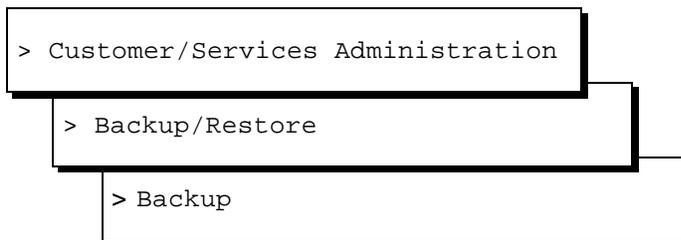
The system displays the Backup window (Figure E-2).

```
┌──────────────────────────────────────────────────────┐
│                        Backup                          │▐│
│                                                        │ │
│    System Data                              Yes        │ │
│                                                        │ │
│    AUDIX Announcements                      No         │ │
│                                                        │ │
│    AUDIX Names                              Yes        │ │
│                                                        │ │
│    Greetings and Messages                   Yes        │▐│
│                                                        │█│
│                                                        │█│
│                                                        │ │
│                                                        │ │
│                                                        │ │
└──────────────────────────────────────────────────────┘
```

The fields that display on your screen are based on the system's configuration and may be different from this illustration

Figure E-2.   Backup Window

3. Enter **n** in the AUDIX Announcements field.

4. Enter **y** in all other fields.

5. Press [SAVE] (F3).

   The system displays the message.

   ```
   backup started
   calculating approximate number of tape(s) required
   please wait

   the backup will need approximately:
   x yyy MB cartridge tape(s)
   ```

   Where x is the number of blank tapes you will need and yyy is the tape capacity (for example 525 Mb).

6. Make sure that there are enough cartridge tapes to accommodate the backup.

   The system displays the message:

   ```
   Verify whole backup tape(s) will double the amount
   of backup time.
   Do you really want to verify tape(s)?
   (Strike y or n)
   ```

   The Lucent INTUITY system verifies a backup tape by reading back the entire set of data just written on the tape.

   ➡ **NOTE:**
   Verifying the backup tape increases the total time for backup from 1-1/2 hours to 3 hours. While it is available, verification is not necessary to ensure a good backup tape.

7. To *verify the backup tape*, press **y**.
   If you *do not wish to verify the backup tape*, press **n**.

   The system displays the following message:

   ```
   please insert a tape into the tape drive to back up
   tape 1
   press <Enter> when tape is inserted
   press <Esc> key to terminate the backup
   ```

8. Press the button on the upper right corner of the drive to open the drive
   door.

9. Insert an initialized blank tape.

10. Close the door to push in the tape.

11. Press ENTER when the tape drive is idle. (If you pressed ENTER before
    you inserted the tape into the drive, you must press ENTER again after the
    tape is in the drive.)

    The system displays a series of messages indicating what is being stored
    on the backup tape.

12. If *another tape is necessary*:

    a. Press the button on the upper right corner of the drive to open the
       drive door.

    b. Remove the current tape.

    c. Label the tape with the current date and backup data type(s).

    d. Insert the next tape.

    e. Press ENTER when the tape drive is idle.

    If *another tape is not necessary, continue with step 13*.

    When the backup is complete and the system displays the following
    message:

    ```
    backup process has been completed successfully
    press any key to continue
    ```

13. Press ENTER.

14. Press CANCEL repeatedly to return to the Main Menu (Figure E-1 on page
    E-6).

15. Continue with the next procedure, "Running the Upgrade Package".

Running the Upgrade Package

⚠ CAUTION:
This is a new upgrade package and procedures are very different from upgrade packages you may have used in the past. Please read the screen information and these procedures carefully.

To run the platform upgrade package, perform the following tasks:

1. Starting from the Main Menu (Figure E-1 on page E-6), select:

```
> Upgrade
```

The upgrade software executes and displays the main Upgrade menu (Figure E-3).

```
                ***** Upgrade *****
        1) README
        2) Invoke Upgrade
        3) View Upgrade Logs
        4) Exit

        Enter selection number [1]:
```

Figure E-3.   Main Upgrade Menu for Software Upgrades

➡ NOTE:
To terminate the upgrade at any time during the process, press
DELETE or BREAK

2. Choosing *1)* displays information regarding the procedure, including how the software works, what is upgraded, and more. When you are finished reading the README file, continue with the next step.

➡ NOTE:
Depending on the version of your current upgrade software, you can press the SPACEBAR or ENTER to advance to another page of the README file.

3. Enter **2**

⚠ **DANGER:**

*At this point, the upgrade software responds differently to different
version of the Release 4 software. Proceed based on the response
as follows:*

■ *If the upgrade installs the upgrade software (this takes a few
minutes) and displays a screen with*

```
*** IMPORTANT *** IMPORTANT *** IMPORTANT ***
```

across the top, proceed to "Using the Upgrade Flowchart" on
page E-11.

■ **If the upgrade displays a message containing:**

Fri Oct 25 10:05:42 MDT 1996 (current date/time/etc.)
Begin INTUITY Upgrade

**IF YOU SEE THIS LINE IN
THE SYSTEM MESSAGE,
PROCEED TO "Special
Upgrade Instructions" on
page E-29.**

The MACH4 Intermediate Upgrade

proceed to "Special Upgrade Instructions" on page E-29.

Using the Upgrade Flowchart

At this point you should see a screen with

```
 *** IMPORTANT *** IMPORTANT *** IMPORTANT ***
```

across the top.

To continue the software upgrade, perform the following tasks:

1. Read the instructions on the screen.

2. Press the button on the upper corner of the drive to open the drive door.

3. *Insert the tape the upgrade prompts you for* and close the door to push in the tape.

4. Press ⎡ENTER⎤ to continue.

   The upgrade software now compares each upgrade tape and determines if the software on each tape is compatible. Additionally the upgrade compares the packages on each tape with the packages on the Release 4 system to determine what packages on the Release 4 system need to be upgraded. How the upgrade proceeds depends on what upgrade tapes you have.

   Because of the multiple-choice nature of the next portion of the upgrade, step-by-step instructions are not provided. The screen instructions are quite thorough and explicit.

   Therefore, the next section of this document will be a "quick reference" flowchart, outlining the major decision points and general flow of the remaining portion of the upgrade (not including any diskettes or hardware upgrades that may be included).

   ### ⚠ CAUTION:
   There are a couple of items that could cause confusion during the course of the upgrade.

   — *Most of the software packages take under 20 minutes to install. If a package is taking considerably longer than 20 minutes to install, check the drive light on the tape drive. If the drive light is flashing, the installation is still in progress. If the drive light remains lit for more than 10 seconds, the upgrade could be 'frozen'. In that case, call the remote service center.*

   — *During the installation of the software packages, the upgrade displays an error message that indicates a failure. However, the message does not signify any condition that should cause alarm. If you see the message:*

   ```
   prismlog    Ux:ps: ERROR: ftw (   ) failed:
   no such file or directory
   ```

   disregard it. The upgrade will proceed normally.

5. Use the flowchart below and on page E-13 as a guide and *follow the
    screen prompts* to complete the next phase of the upgrade.

**THIS FLOWCHART IS INTENDED FOR USE AS A QUICK REFERENCE GUIDE ONLY!
READ AND FOLLOW ALL SCREEN INSTRUCTIONS CAREFULLY!**

Figure E-4.   Software Upgrade Flowchart – Page 1

Flowchart (continued) → Upgrade lists what packages are to be upgraded.

Appropriate packages are upgraded. (Takes 1 - 15 minutes per package) If you have more than 1 upgrade tape, the upgrade will prompt you when it needs the next tape.

After all platform and voice mail package intallations are complete, press <enter>

Do you see the message, "Successful completion of INTUITY upgrade"? —Yes→ Proceed to "Viewing the Upgrade Logs to Verify the Software Upgrade" on page E-14

No

A

Installing new or existing AUDIX Announcement set? —New→ Insert 1st tape —Press <enter>→ Upgrade check software compatibilitiy → Is software compatible?

No→ Check that the Announcement Set tape is a Release 4 tape. If it appears to be the correct tape, but you still get an incompatibility message, call the remote service center.

Existing

Voice system must be stopped. If you have a platform or voice mail tape, the voice system is already stopped. If you are only upgrading announcements, you will be prompted to press <enter> to stop the voice system.

When voice system stops, press <enter>

Yes

Announcement set upgraded. If you have more than 1 Announcement set tape, the upgrade will prompt you when it needs the next tape.

Proceed to "Viewing the Upgrade Logs to Verify the Software Upgrade" on page E-14

Upgrade Flowchart - Page 2

Figure E-5.   Software Upgrade Flowchart – Page 2

Viewing the Upgrade Logs to Verify
the Software Upgrade

As part of the upgrade process, the upgrade application logs all its activities and
all technician input. You view these logs to verify what software components were
upgraded.

To view the upgrade logs, perform the following tasks:

1. From the Main Upgrade Menu (Figure E-3 on page E-9), enter **3**

   The upgrade displays the View Upgrade Logs menu (Figure E-6).

```
                  View Upgrade Logs

      1) Upgrade Log
      2) Voice Mail data base Upgrade Log
      3) Announcement customizations
      4) Summary of packages installed and removed
         by the Upgrade
      5) Old Upgrade Logs
      6) Old Voice Mail data base Upgrade Logs
      7) Cumulative history of announcement
         customizations

      8) Exit

      Enter selection number [1]:
```

Figure E-6.   View Upgrade Logs; Software Upgrades

2. Enter **1** to view the Upgrade Log. Scroll through the pages of log
   information to check that the package_install messages indicate a
   successful installation.

   If you encounter any messages indicating an installation failure, contact
   the remote service center.

3. View any other logs, as desired, or as directed by the remote service
   center. The various logs record information as follows:

   ■ *Upgrade Log* – contains a running log of all technician input and all
      upgrade and system actions

   ■ *Voice Mail data base Upgrade Log* – contains From/To information if
      a data base upgrade is performed

   ■ *Announcement Customizations* – lists all custom announcement set
      names. You will need to enter in a package name, if available, and
      the log will list the customized fragments.

■ *Summary of packages installed and removed by the Upgrade* – contains a running log of all platform, application software, and announcement components either removed or re-installed as a part of the upgrade

■ *Old Upgrade Logs* – contains the upgrade logs of previous upgrades to serve as a historical reference

■ *Old Voice Mail data base Upgrade Logs* – contains the voice mail data base upgrade logs of previous upgrades to serve as a historical reference

■ *Cumulative history of announcement customization* – contains a log of previous customized announcements to serve as a historical reference

4. When finished viewing the logs, enter **8**

The system displays the Main Upgrade Menu (Figure E-3 on page E-9).

5. Enter **4**

The system displays the Main Menu (Figure E-1 on page E-6).

6. Continue with the next procedure, "Completing the Upgrade".

Completing the Upgrade

The appropriate voice, platform, and announcement set packages have now been installed. Part of the upgrade process can include the installation of other hardware and software components. Check your Upgrade Set for other tapes and/or diskettes and for any additional hardware.

The following tasks potentially must be completed. You may have to install:

■ Switch integration software (DCIU)

■ Remote Field Update (RFU)

■ INTUNIX

■ System Programming Maintenance (SPM)

■ Call Accounting System (CAS)

■ New hardware

Install only those tapes that are included in the Upgrade Set and skip procedures that do not apply.

To complete the upgrade, perform the following tasks:

1. If *additional software and/or hardware must be installed*, continue with
   step 2.

   If *no other software and/or hardware must be installed,* press ENTER twice
   and exit the Upgrade. Then proceed to "Rebooting the Release 4 System"
   on page E-27.

2. The upgrade provides prompts about what to do for hardware or
   additional software installation and ends with the message:

   ```
   Fri Oct25 10:05:42 MDT 1996 (you will see your date/time/etc.)
   Successful completion of INTUITY Upgrade.
   Press [enter] to continue.
   ```

3. Press ENTER to continue.

   The upgrade displays the message:

   ```
        Press [enter] to return to the Main Upgrade Menu.
   ```

4. Press ENTER again.

   The upgrade returns you to the Main Upgrade Menu (Figure E-3 on page
   E-9).

5. Enter **4**

   The Lucent INTUITY Main Menu displays (Figure E-1 on page E-6).

6. Continue with the next procedure, "Installing DCIU Switch Integration
   Software" on page E-16.

Installing DCIU Switch Integration Software

> **NOTE:**
> If your Upgrade Set does not include any switch software tapes or
> diskettes, skip this section and proceed to "Installing an RFU" on page
> E-23.

The following section includes procedures for installing:

- Lucent System 75, G1, G3i, G3r, and G3s, and Lucent System 85 and G2

- 5ESS Centrex, DMS-100, Northern Telecom, NEAX, ROLM, Mitel
  (see page E-20)

- Standalone configuration (see page E-20)

Installing Switch Integration Software on Lucent Switches

The following procedures are used for installing the software associated with Lucent INTUITY systems that use one of the following switches:

- Lucent System 75, G1, and G3i, G3r, G3s
- Lucent System 85 and G2

⚠ CAUTION:

The system will fail if you install this software on Lucent INTUITY systems integrated with a Centrex switch, a SID, or a translator. If the site you're upgrading has a non-Lucent switch, see "Install Switch Integration Software for Other Switches (PBXs Only)" on page E-20

Before You Begin.

Before installing the switch integration software, you need to know:

- The switch type, that is 75 or 85
- Whether the Lucent INTUITY platform you're upgrading has a *GP-Synch circuit card* or an *Eicon circuit card*

  The Eicon card has a green LED located on its backplate, while the GP-Synch card has no LED.

To install the DCIU switch integration software, perform the following tasks:

1. Starting at the Main Menu (Figure E-1 on page E-6) select:

```
> Customer/Services Administration
    > System Management
        > UNIX Management
            >Software Install
```

The system displays the Software Install menu (Figure E-7).

```
 Software Install
 Floppy drive
>Tape drive
```

Figure E-7. Software Install Menu

2. Insert the *DCIU Switch Software tape* into the tape drive with the label
   facing up. (The exact name on the tape varies, depending on the switch
   type.)

3. Close the tape drive door.

4. Select.

```
> Tape Drive
```

The system displays the message:

> Installation in progress. Do not remote the
> cartridge.
>
> The following sets are available:
>   1   DCIUset   INTUITY Platform DCIU Set (v2)
>   (i486) *version_number*
>
> Select package(s) you wish to process (or 'all' to
> process all packages). (default: all) [?,??,q]

$\Longrightarrow$ **NOTE:**

If you receive a device open failure message, the tape was
inserted *after* you selected Tape Drive or the system did not see
the tape. In that case, enter **q** , remove and re-insert the tape, and
return to step 4.

5. Press (ENTER) to select **all**.

The system displays the message:

> Select your INTUITY DCIU card type:
>
> 1) DCIU (Eicon) card [card has a green LED on the
>   faceplate]
> 2) GP-Synch card
>
>   Enter 1 or 2: [1]

6. Enter **1** if the customer's system has an Eicon board installed. (An Eicon
   board has a green LED on the backplate.)

   Enter **2** if the customer's system has a GP-Synch board installed.

   The system displays the message:

> Select your host switch type:
>   1) 75, G1, G3r, G3i
>   2) 85, G2
>
> Enter 1 or 2: [1] :

7. Enter **1** for System 75, G1, G3r, or G3i switches.

   Enter **2** for System 85 or G2 switches.

   The system processes the package information and loads the different packages that make up the DCIU set.

   When the process is complete, the system displays the message:

   ```
   Installation of Enhanced Services Messages Switch
   Link (ehs)was successful.

   Processing of <INTUITY Platform DCIU Set> is
   completed.

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

   ⇒ **NOTE:**
   Ignore the following error:

   ```
   s25adm not currently running
   s25act: System error
   ```

   This error occurs because the software is not operational until after the system is rebooted.

8. Enter **q**.

   The system returns to the Software Install menu.

9. Remove the cartridge tape from the tape drive.

10. Press CANCEL (F6) repeatedly to return to the Main Menu (Figure E-1 on page E-6).

11. Proceed to "Installing an RFU" on page E-23.

Install Switch Integration Software for
Other Switches (PBXs Only)

> ☞ **NOTE:**
> If your Upgrade Set does not include any switch software tapes or
> diskettes, skip this section and proceed to "Installing an RFU" on page
> E-23.

Because the Lucent INTUITY system retains the switch integration parameter
settings during the upgrade, you do not have to perform any switch integration
administration. This procedure applies to these switch integrations:

- 5ESS Centrex

- DMS-100

- Northern Telecom

- NEAX

- ROLM

- Mitel

- Standalone configuration

> ⚠ **CAUTION:**
> *Do not install this software on any system not listed above. If you install this
> software on Lucent INTUITY systems integrated with a System 75 or a
> System 85 PBX, the system will fail.*

1. Starting at the Main Menu (Figure E-1 on page E-6) select:

```
> Customer/Services Administration
    > System Management
        > UNIX Management
            >Software Install
```

The system displays the Software Install menu (Figure E-7).

```
Software Install
>Floppy drive
 Tape drive
```

Figure E-8.   Software Install Menu

2. Insert the *first switch integration diskette* into the floppy drive.

3. Select.

```
> Floppy Drive
```

The system displays the message:

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

The following pkgs are available:
 1   xxx     Switch Integration Package Name
             (i386) Release y

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

Where *xxx* represents the package abbreviation and *y* represents the switch integration package release number. This information will vary from integration to integration.

⇒ **NOTE:**
If you receive a `device open` failure message, the tape was inserted *after* you selected `Tape Drive` or the system did not see the tape. In that case, enter **q** , remove and re-insert the tape, and return to step 3.

4. Press (ENTER) to select **all**.

The system displays the message:

```
Four types of host switches are available. They
are:
1) NEAX
2) ROLM
3) MITEL
4) NORTHERN
Select type of switch:
1) NEAX
2) ROLM
3) MITEL
4) NORTHERN
Enter selection:
```

⇒ **NOTE:**
If you are installing the Lucent INTUITY Switch Integration Package (SID), you must choose the type of switch.

5. Enter **1**, **2**, **3**, or **4** to indicate the type of switch.

The system asks you to confirm your selection.

6. Enter **y** to confirm your selection.

   If you enter **n**, the system allows you to enter another selection.

   The system processes the switch integration software packages contained on the first floppy. After installing the software from the first diskette, the system displays the message:

   ```
   READY TO PROCESS:

   Package: Switch Integration Package Name diskette
   2 of 2

   Insert diskette 2 of 2 into Floppy Drive 1.

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

   ![NOTE arrow] **NOTE:**
   This message does not display for integrations with a standalone configuration.

7. Remove the first diskette from the floppy drive.

8. Insert the *second switch integration diskette* into the floppy drive.

9. Press ⟨ENTER⟩ to install the second diskette.

   The system displays the Switch Link Administration screen (Figure E-9).

The settings for your system may differ from this illustration.

Figure E-9.   Switch Link Administration Screen

10. Press ⌜CANCEL⌝ (F6) to exit the Switch Link Administration screen without making any changes.

⚠ CAUTION:
Do not make any changes to the Switch Link Administration screen. If you do, you may need to re-administer the switch integration package so that the system will accept calls.

When the software installation is complete the system displays the message:

```
Installation of Switch Integration Package(xxx)was
successful.

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

11. Remove the diskette from the tape drive.

12. Enter **q**

The system displays the Software Install menu.

13. Press ⌜CANCEL⌝ (F6) repeatedly to return to the Main Menu (Figure E-1 on page E-6).

14. Continue with the next procedure, ''Installing an RFU''.

Installing an RFU

⇒ NOTE:
If your Upgrade Set does not include any RFU software diskettes, skip this section and proceed to "Installing INTUNIX" on page E-25.

To install a new RFU, perform the following tasks:

1. Starting at the Main Menu (Figure E-1 on page E-6) select:

```
> Customer/Services Administration
    > System Management
        > UNIX Management
            >Software Install
```

The system displays the Software Install menu (Figure E-7 on page E-17).

2. Insert the tape labelled *Lucent INTUITY RFU Software* into the tape drive
   with the label facing up.

3. Close the tape drive door.

4. Select.

```
> Tape Drive
```

The system displays the message:

```
Installation in progress. Do not remote the
cartridge.

The following pkgs are available:
   1   xxxrfu+x   Remote Field Update x for xxxx
                     (486) 3.0-xx

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

Where *x* is the IP load number for the software and the letter
designation (*a*, *b*, *c*,...) represent the RFU.

➡ NOTE:

If you receive a `device open` failure message, the tape was
inserted *after* you selected `Tape Drive` or the system did not see
the tape. In that case, enter **q** , remove and re-insert the tape, and
return to step 4.

5. Press (ENTER) to select **all**.

The system processes the packages on the tape and displays several
status messages. When the installation is complete, the system displays
the message:

```
Processing of <Remote Field Update X for xxxx> is
completed.

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

6. Enter **q**

7. Remove the tape from the tape drive.

8. Press (CANCEL) (F6) repeatedly to return to the Main Menu (Figure E-1 on
   page E-6).

9. Continue with the next procedure, "Installing INTUNIX" on page E-25.

Installing INTUNIX

The INTUNIX update adds or changes software for the UNIX operating system. All systems require an INTUNIX update.

To install the INTUNIX update, perform the following tasks:

1. Starting at the Lucent INTUITY Main Menu (Figure E-1 on page E-6), select:

```
> Customer/Services Administration
    > System Management
      >UNIX Management
          > Software Install
```

The system displays the Software Install menu (Figure E-7 on page E-17).

2. Insert the tape labelled *Lucent INTUITY INTUNIX* into the tape drive with the label facing up.

3. Close the tape drive door.

4. Select.

```
> Tape Drive
```

The system displays the message:

```
Installation in progress. Do not remove tape.

    The following pkgs are available:
      1   INTUNIX INTUITY UnixWare 1.1.2 Enhancement
          Set - Update C

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

➡ NOTE:
If you receive a `device open` failure message, the tape was inserted *after* you selected `Tape Drive` or the system did not see the tape. In that case, enter **q** , remove and re-insert the tape, and return to step 4.

5. Press ENTER to select **all**.

   The system displays a listing of all of the software packages on the tape
   and end with the message:

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

6. Press ENTER to select **all**.

   The system displays the message:

   ```
   A version of the LAN driver is already installed.
   Do you want to overlay that driver and re-use the
   kernel options for the driver? The overlay option,
   which is often used during field upgrades, will
   preserve the network environment.

    y) to overlay
    q) to quit    (default:  quit)
   ```

   Do you want to overlay the driver?

7. Enter **y**

   The system displays the message:

   ```
   The board type currently installed in the system
   is the XXXX LAN adapter.

     1) 8216 LAN adapter.

     2) 8416 LAN adapter.

     q) To abort installation.

   Please enter the board type you wish to use:
   ```

   where XXXX is the board type for the system you're upgrading.

8. Note the board type in the first line of the system message and enter
   1 or *2*, as appropriate.

   ⚠ **CAUTION:**
   *The board type numbers are very similar. Read the system message
   carefully before selecting the board type.*

   The system processes the packages on the tape and displays several
   status messages. When the processing is completed, the system displays
   the following message:

   ```
   Installation of INTUITY UnixWare 1.1.2 Enhancement
   Set (INTUNIX) was successful.

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

9. Enter **q**

10. Remove the tape from the tape drive.

11. Press CANCEL (F6) repeatedly to return to the Main Menu (Figure E-1 on page E-6).

12. Check the Upgrade Set.

   If the customer's configuration includes SPM or CAS, refer to the appropriate guide for installation procedures. When you have completed those procedures, continue with the next procedure, "Rebooting the Release 4 System" on page E-27.

   If the customer's configuration includes any additional hardware upgrades, refer to *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171* or *Lucent INTUITY™ Messaging Solutions Release 4 MAP/100 Maintenance, 585-310-174* for procedures. When you have completed those procedures, continue with the next procedure, "Rebooting the Release 4 System" on page E-27.

   If the customer's configuration does not include any additional software or hardware upgrades, continue with the next procedure, "Rebooting the Release 4 System" on page E-27.

Rebooting the Release 4 System

For all of the changes implemented by the upgrade to take effect, you must reboot the system.

To reboot the system, perform the following tasks:

1. Starting at the Main Menu (Figure E-1 on page E-6) select:

```
> Customer/Services Administration
    > System Management
        > System Control
            >Shutdown System
```
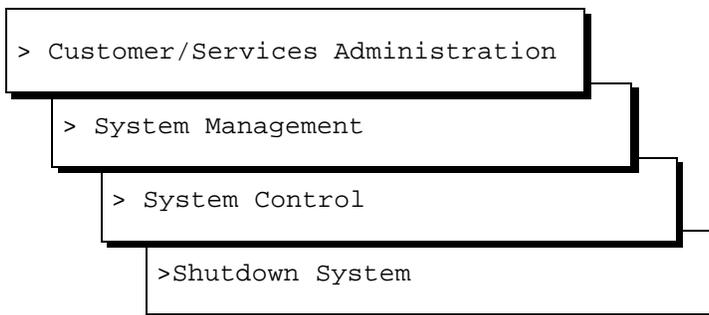
The system displays the Wait Time window (Figure E-10 on page E-28).

```
                    ┌─────────────────────────┐
                    │      Wait Time          │
                    │                         │
                    │     Seconds: ███        │
                    │                         │
                    └─────────────────────────┘
```

Figure E-10.   Wait Time Window

2. *Ensure with the customer that the loss of service is acceptable* and enter **0** (zero) to indicate you would like an immediate shutdown.

3. Press ⌷SAVE⌷ (F3).

   The system displays the following message:

   ```
   Voice system is already stopped.
   Shutdown started.
   ```

   When the system is completely shut down, the system will display the following message.

   ```
   The system is down.
   Press Ctrl-Alt-Del to reboot your computer.
   ```

4. Ensure that there is no tape in the tape drive.

5. Press ⌷Ctrl-Alt-Del⌷ .

   The system performs a Power-On Self Test (POST). The screen lists various hardware components and the status of the tests performed on those components.

   ### ➡ NOTE:
   If the system displays the message:

   ```
   WARNING ixfs:UX_unmounted  root file system is busy
   and cannot be unmounted cleanly
   ```

   ignore it. The reboot will continue normally.

   When the reboot is complete, the system displays the following prompt:

   ```
   Startup of the Voice System is complete.
   Console Login:
   ```

6. Make some test calls to ensure system availability.

7. You are finished with the upgrade. If the customer system administrator wishes, s/he can log back onto the system at this time.

You have completed all tasks for performing a software upgrade. The customer's system administrator should take charge of the tapes and/or diskettes that came in the Upgrade Set.

Special Upgrade Instructions

> **⚠ CAUTION:**
> *Do not perform the procedure listed here unless specifically directed to do so by this document (because you saw the line* `Mach4 Intermediate Upgrade` *on your screen) or by the remote support center.*

If you are reading this, you have likely been directed here by this document. The *MACH4 Intermediate version of the upgrade software contains a known bug* that makes the upgrade behave as if it's completing when it is not. To perform a successful upgrade, you must re-invoke the upgrade software.

The result you are looking for is a screen with `**IMPORTANT**IMPORTANT**` across the top. You will then proceed with the upgrade. There are 2 ways of getting to this screen. Start as described below:

1. Press the button on the upper corner of the drive to open the drive door.

2. Insert the tape labelled *AUDIX R4.0 Voice Messaging* and close the drive door.

3. Press ENTER **twice**.

   The upgrade displays a message indicating that the software is installing and proceeds to download the software. This process takes a few minutes. The upgrade software can now respond in one of two ways. Proceed based on the response as follows:

   - *If the upgrade displays a screen with* `**IMPORTANT**IMPORTANT` across the top, proceed to "Using the Upgrade Flowchart" on page E-11.

   - *If the upgrade displays status messages, ending with the message*:

     ```
     Fri Oct 25 10:05:42 MDT 1996 (current date/time/etc.)
     Completed INTUITY Upgrade
     Press [enter] to return to the Main Upgrade Menu.
     ```

     THE UPGRADE DID *NOT* COMPLETE. *In that case, continue with the next step.*

4. Press ENTER to redisplay the main Upgrade menu (Figure E-3 on page E-9).

5. Enter **2** to re-invoke the upgrade software.

   The upgrade displays the message:

   ```
   Successfully installed upgrade software.
   Continuing with upgrade.
   ```

   and displays a screen with `*** IMPORTANT *** IMPORTANT ***` across the top.

6. Proceed to "Using the Upgrade Flowchart" on page E-11.

Performing a Platform Upgrade (MAP/40s to MAP/40)

F

⚠ CAUTION:

The procedures in this appendix refer only to running a MAP/40s to MAP/40 platform upgrade. ***Do not use these procedures for any other type of upgrade****.*

Overview

This appendix describes the procedures required to upgrade a MAP/40s platform to a MAP/40 platform. This appendix is organized as follows:

- Materials and information required before you begin
- Platform Upgrade procedures checklist
- Determining the amount of memory. If memory is required:

  — Stopping the voice system and shutting down the Lucent INTUITY system

  — Accessing the circuit card cage and removing the CPU circuit card

  — Upgrading the MAP/40s platform's memory

  — Adding Tip/Ring (IVC6) circuit cards, if required

  — Powering up the system

  — Verifying memory upgrade

- Installing the Platform Upgrade Software

Purpose

The purpose of this appendix is to provide the necessary information and instruction to enable the technician to complete a hardware upgrade. *Users should follow the upgrade procedures checklist included in this appendix*.

Before You Begin; Materials and Information Required

The following items should be available/complete before you begin the MAP/40s to MAP/40 platform upgrade.

- INTUITY MAP/40 Platform Upgrade Package diskette

- Two 16 Mbyte Single In-line Memory Modules (SIMMs) - if required

- Additional IVC6 circuit cards - if required

- ESD mat and strap

- Phillips screwdriver

- Platform Upgrade checklist (see page F-3. The checklist is designed to be taken out of the book and used as a reference guide during the platform upgrade)

- *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171*

- *The customer is aware that their system will be unavailable for at least 30 minutes,* and possibly much longer, depending on any required hardware upgrade

Table F-1 on page F-3 IS DESIGNED TO BE TAKEN OUT OF THE BOOK AND USED AS A REFERENCE GUIDE DURING THE OUT-OF-SERVICE UPGRADE.

Platform Upgrade Procedures Checklist

Use the procedures checklist below to upgrade the MAP/40s platform to a MAP/40 platform.

Table F-1. MAP/40s to MAP/40 Hardware Platform Upgrade Procedures Checklist

Step	Procedure	Reference Documentation/ Location of Procedure	✓
1.	Ensure all items required to perform the upgrade are available.	"Before You Begin; Materials and Information Required" on page F-2	
2.	Determine if the MAP/40s machine requires additional memory – MAP/40 requires 64Mbyte.	"Determining the Amount of Memory" on page F-5	

> ⚠ **CAUTION:**
>
> *Perform all the steps in this list if you are adding SIMMs or IVC6 cards. If the MAP/40s does not require additional memory or voice cards, proceed to step 21 of this checklist.*

Step	Procedure	Reference Documentation/ Location of Procedure	✓
3.	Stop the voice system.	"Stopping the Voice System" on page F-7	
4.	Power down the MAP/40s.	"Shutting Down the Lucent INTUITY System" on page F-8	
5.	Remove power from the MAP/40s	"Removing Power From the Computer" on page F-9	
6.	Remove the dress cover.	Procedures start with "Accessing the Circuit Card Cage" on page F-10	
7.	Remove the access panel.		
8.	Remove the retaining bracket.		
9.	Remove the P5 75 MHz CPU circuit card. ⚠ **CAUTION:** *Observe proper electrostatic discharge precautions.*	"Removing the P5 75 MHz CPU Circuit Card" on page F-16	
10.	Remove the 4-Mbyte SIMMs.	"Removing the 4-Mbyte SIMMs" on page F-17	
11.	Install the 16-Mybte SIMMs.	Procedures start with "Upgrading the MAP/40s Platform's Memory" on page F-17	

Continued on next page

Table F-1. MAP/40s to MAP/40 Hardware Platform Upgrade Procedures Checklist *Continued*

Step	Procedure	Reference Documentation/ Location of Procedure	✓
12.	Install the P5 75 MHz CPU circuit card and attach cables.	"Re-Installing the P5 75 MHz CPU Circuit Card" on page F-19	
13.	Determine the slot locations for new tip/ring circuit cards.	Procedures start with "Adding Tip/Ring (IVC6) Circuit Cards" on page F-22	
14.	Verify switch and jumper settings on the tip/ring circuit card.		
15.	Install the tip/ring circuit cards.		
16.	Replace all cables that were previously removed or connect new cables, as necessary.	See *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171*.	
17.	Replace the circuit card retaining bracket, circuit card access panel, and MAP/40s dress panel.	See *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171,* Chapter 4, "Getting Inside the Computer".	
18.	Apply power to the unit.	See *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171*, "Restoring Power to the MAP/40s" in Chapter 4, "Getting Inside the Computer" in	
19.	Power up the system.	"Powering Up the System" on page F-26	
20.	Check the amount of memory now available.	"Verifying Memory Upgrade" on page F-26	
21.	Stop the voice system.	"Stopping the Voice System" on page F-7	
22.	Install the platform upgrade software.	"Installing the Platform Upgrade Software" on page F-28	
23.	Reboot the system.	"Performing a Warm Reboot" on page F-30	

Determining the Amount of Memory

The MAP/40s can have either 40 Mbytes of memory or 64 Mbytes of memory. If the system has more than 12 ports, 64 Mbytes of memory is required. *A MAP/40 requires 64 Mbytes of memory.*

➡ NOTE:

If you already know the amount of memory on the MAP/40s system, skip this procedure. In that case, proceed to "Stopping the Voice System" on page F-7.

To determine the amount of memory in the MAP/40s machine, perform the following tasks:

1. Log into the system as *craft*.

   The system displays the Lucent INTUITY Main Menu (Figure F-1).

```
            INTUITY (TM) Main Menu

 AUDIX Administration
 Customer/Services Administration
 Networking Administration
 Switch Interface Administration
 Upgrade
 Voice System Administration
```
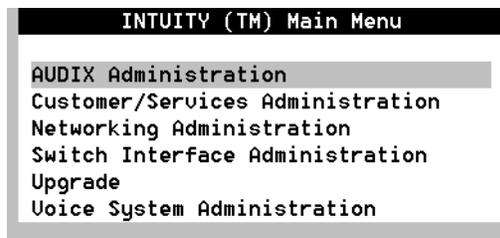
Figure F-1. Lucent INTUITY Main Menu

2. Select:
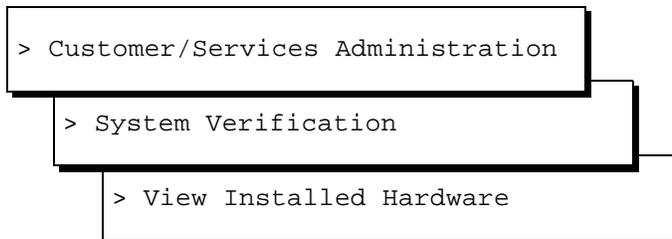
```
> Customer/Services Administration
```

```
> System Verification
```

```
> View Installed Hardware
```

   The system displays the View Installed Hardware window (Figure F-2).

```
                         View Installed Hardware
Installed Hardware of mtce

2047 megabyte Hard Drive Installed at SCSI id 0
47 megabytes of memory installed.

Installed Hardware of netw

Networking Board          Equipped          Version Number
        1                    no                   N/A
        2                    no                   N/A
        3                    no                   N/A
```

If this line reads → anything less than *63 megabytes,* you must install additional SIMMs.
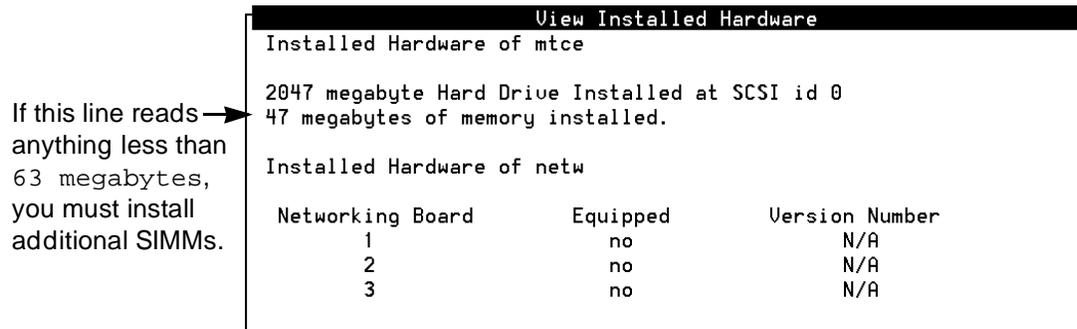
Figure F-2. View Installed Hardware Window

3. Check the amount of memory installed.

4. Press ⟨ENTER⟩ (F6) repeatedly to return to the Main Menu (Figure F-1 on page F-5).

5. *If the MAP/40s sytem does not have 64 Mbytes of memory OR the customer has ordered more voice cards*, continue with the next procedure, "Stopping the Voice System" on page F-7.

   If the MAP/40s system has 64 Mbytes of memory and no additional voice cards are required, proceed to "Completing the Platform Upgrade" on page F-27.

Stopping the Voice System

> ⚠ **CAUTION:**
> *All calls in progress will be disconnected. Users calling AUDIX will hear a fast busy signal. Callers sent to AUDIX coverage will hear ringing with no answer. Ensure with the customer that the loss of service is acceptable.*

To stop the voice system, perform the following tasks:

1. Starting at the Main Menu (Figure F-1 on page F-5), select:

```
> Customer/Services Administration
   > System Management
      > System Control
         >Stop Voice System
```

The system displays the Wait Time window (Figure F-3).

```
┌──────────────────────┐
│      Wait Time       │
│                      │
│   Seconds: ■         │
│                      │
└──────────────────────┘
```
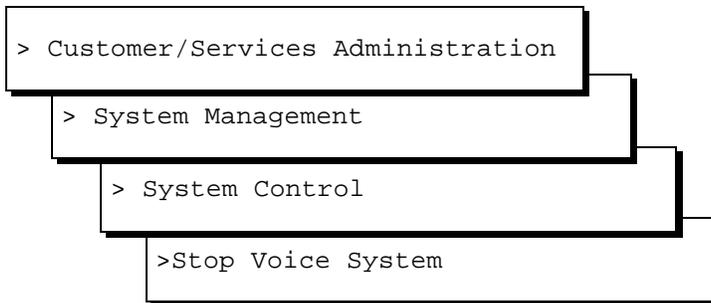
Figure F-3.   Wait Time Window

2. Enter *a number between 60 and 600* to designate how long the system will wait for calls in progress to finish before stopping the voice system. (The customer typically determines this number. If the customer has no preference, enter **60**.)

3. Press ⌷SAVE⌷ (F3).

   The system begins the process of stopping the voice system and displays several status messages as the process continues. When the process is complete, the system displays the message:

   ```
   The Voice System has stopped. Press Enter to Continue.
   ```

4. Press ⌷ENTER⌷.

5. *If you are installing additional SIMM or IVC6 voice cards*, continue with the next procedure, "Shutting Down the Lucent INTUITY System" on page F-8.

   If you were directed to this procedure from step 1 under "Powering Up the System", return to page F-27 and continue from step 2.

Shutting Down the Lucent INTUITY System

Now that the voice system has been stopped, you can proceed to shut down the entire system. To do so, perform the following tasks:

1. From the Lucent INTUITY Main Menu (Figure F-1) select:

```
> Customer/Services Administration
    > System Management
        > System Control
            >Shutdown System
```
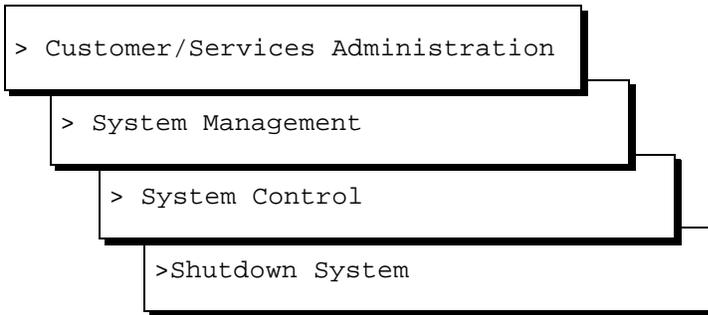
The system displays the Wait Time window (Figure F-3 on page F-7).

2. Enter **0** (zero) to indicate you would like an immediate shutdown.

3. Press SAVE (F3).

The system displays the message:

```
Shutdown started.
```

When the system is completely shut down, the system displays the message:

```
The system is down.
Press Ctrl-Alt-Del to reboot your computer.
```

> **⚠ CAUTION:**
> ***DO NOT*** *press* CTRL-ALT-DEL *at this time. If you do, the system reboots and automatically restarts the voice system. In that case, you must return to "Stopping the Voice System" on page F-7 and again perform that procedure and this one.*

4. Continue with the next procedure, "Removing Power From the Computer" on page F-9.

Removing Power From the Computer

The power cord connects to the rear of the MAP/40s at the point labeled AC input receptacle (Figure F-4).
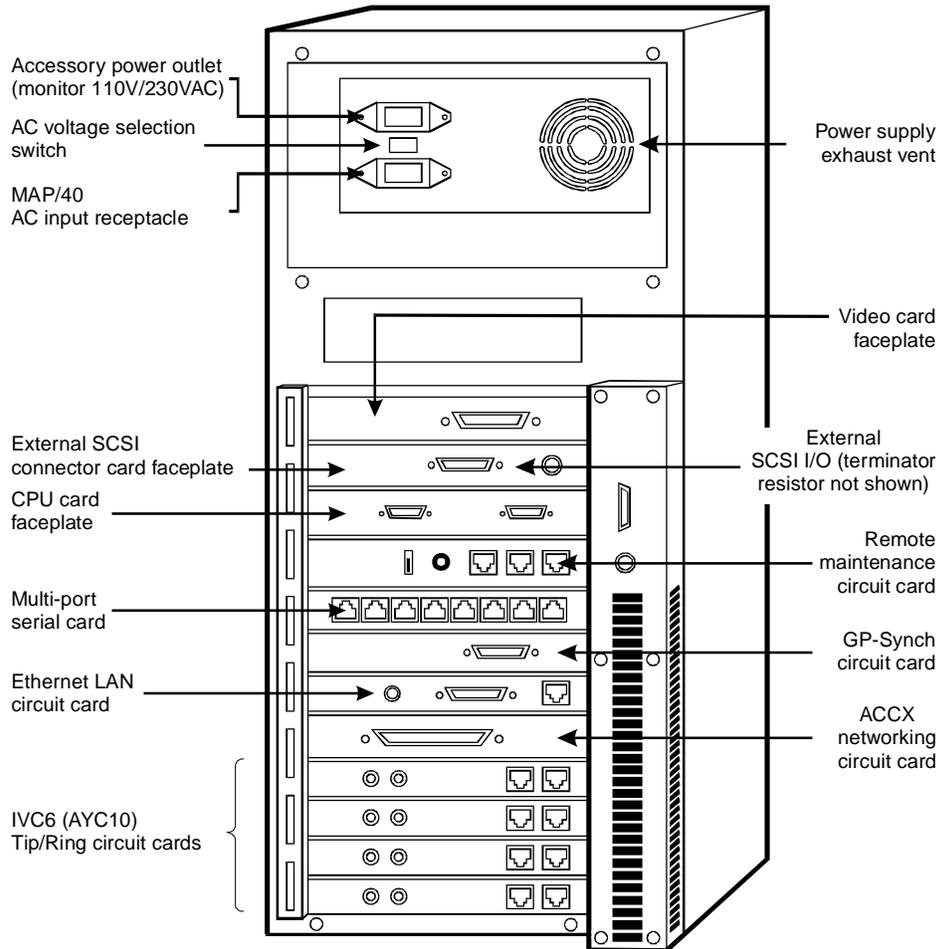
Figure F-4.   Back View of the MAP/40 or 40s

To remove power from the MAP/40s, perform the following tasks:

1. Turn off the monitor's power switch.

    The green or amber lamp on the front bottom of the monitor should be off.

2. Turn off the power switch on the front of the MAP/40s.

    The green lamp, labeled POWER ON, on the front of the unit should be off.

3. Unplug the MAP/40s from the power outlet.

4. Remove the MAP/40s power cord from the AC input receptacle on the rear of the MAP/40s (Figure F-4).

5. Observe the correct lock-out/tag-out precautions for isolating power as outlined in the Lucent lock-out/tag-out procedure.

6. Continue with the next procedure, "Accessing the Circuit Card Cage".

Accessing the Circuit Card Cage

In order to access the circuit card cage, you must remove the:

- Dress cover

- Circuit card cage access panel

- Circuit card cage retaining bracket

Removing the Dress Cover

To remove the dress cover, perform the following tasks:

1. Ensure that the power switch on the MAP/40s is off and the power cables are disconnected.

2. Ensure that the MAP/40s tower configuration is in an upright position on the support base.

3. Locate the two screws on both the bottom left and right corners of the dress cover (Figure F-5 on page F-11).

4. Remove the screws.

5. Remove the front bezel by pulling it forward.

6. Slide the dress cover forward and then up to remove it from the MAP/40s.

> ⚠ **CAUTION:**
> *As more of the dress cover is removed, it may begin to collapse inward from the pressure. Move your hands downward on the dress panel to reduce the pressure as you lift it.*

Chassis
dress cover

Peripheral bay
bezel cover

Bottom bezel
(chassis filter
located behind)
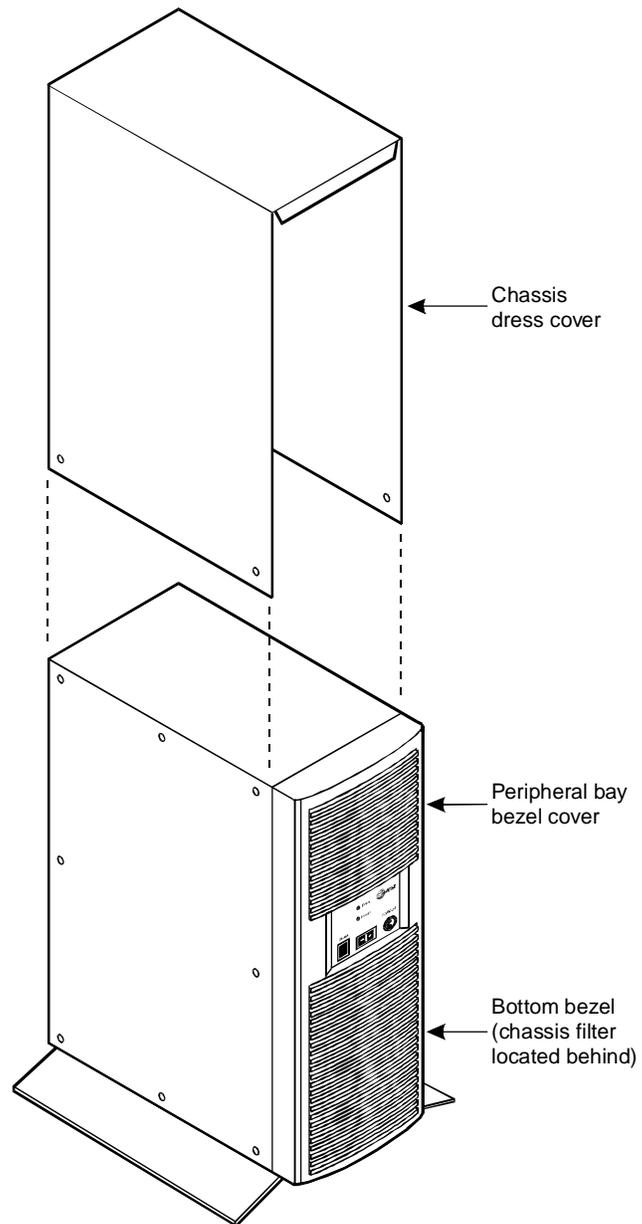
Figure F-5.   Removing the Dress Cover

7. Continue with the next procedure, "Removing the Circuit Card Cage
   Access Panel" on page F-12.

Removing the Circuit Card Cage Access Panel

To remove the circuit card cage access panel, perform the following tasks:

1. Place the MAP/40s on one side. The circuit card cage area is more accessible if the MAP/40s is on its side.

   Use one of the following methods to place the MAP/40s on its side:

   a. If you have cables attached to the MAP/40s and want to leave the computer on the floor,

      1. Place two books the size of large telephone books or a similar form of support on the floor.

      2. Turn the MAP/40s on its side, resting the side of the computer opposite from the support base on the two books (Figure F-6 on page F-13).

   b. If you do not have cables attached to the MAP/40s or currently have it sitting on a table, place the MAP/40s (tower configuration) on its side with the support base over the edge of the table (Figure F-7 on page F-14).

2. Use the Phillips screwdriver to loosen the 1/4-in. flathead screws by *two turns only.*

   > **NOTE:**
   > You only need provide adequate clearance. It is not necessary to remove the screws.

3. Apply gentle downward pressure to the access cover with the palms of your hands.

4. Push into the chassis with your palms and slide the access cover back toward the chassis area.

5. Lift and remove the access cover once you have cleared the screw heads.

Support base

Books used
to level box
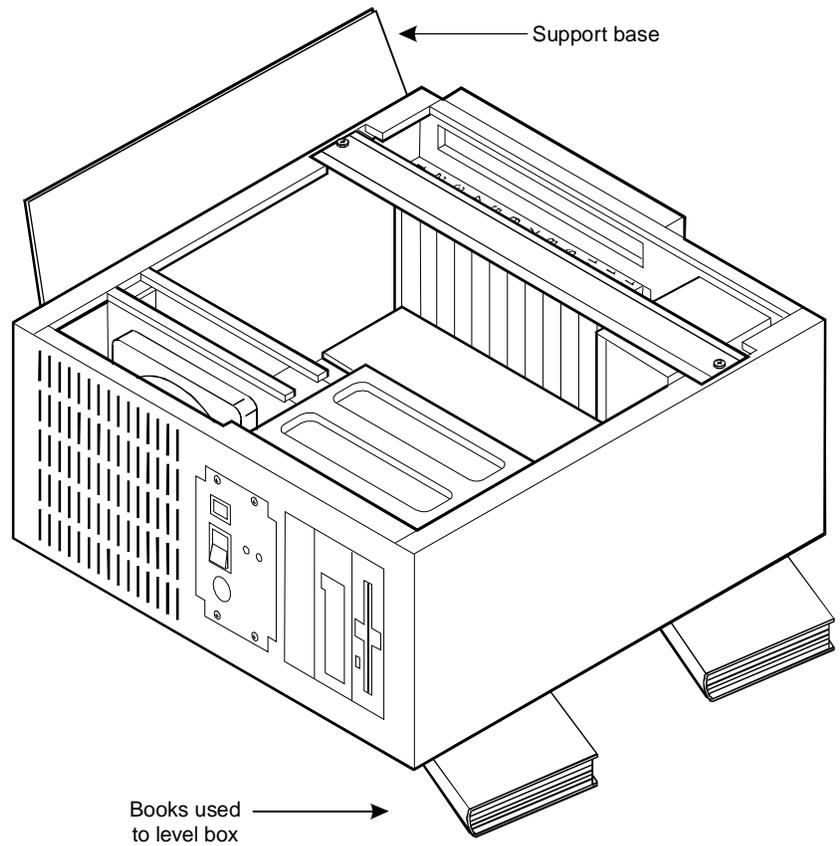
Figure F-6.   Working Within the Card Cage - Floor Position

Access cover

Retainer
circuit
card
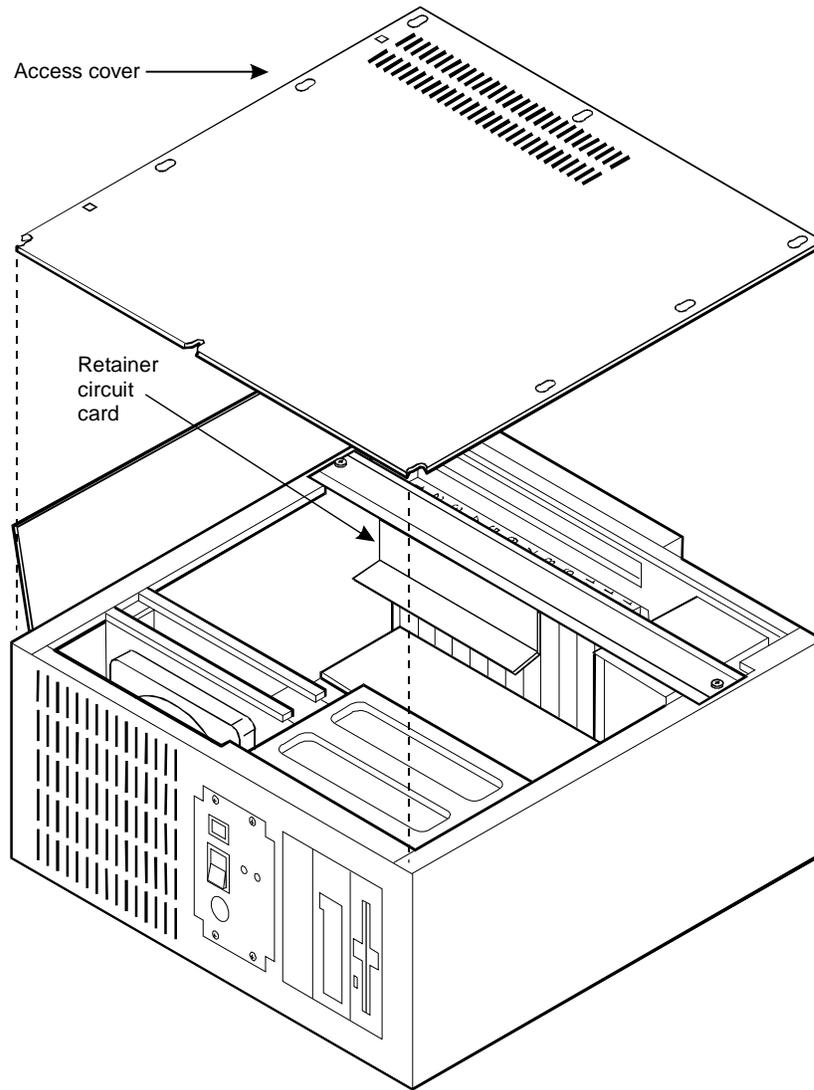
Figure F-7.   Removing the Access Panel

6. Continue with the next procedure, "Removing the Circuit Card Cage
   Retaining Bracket" on page F-15.

Removing the Circuit Card Cage Retaining Bracket

To remove the circuit card cage retaining bracket, perform the following tasks:

1. Use a Phillips #2 screwdriver to loosen and remove the two screws in the retaining bracket (Figure F-8).
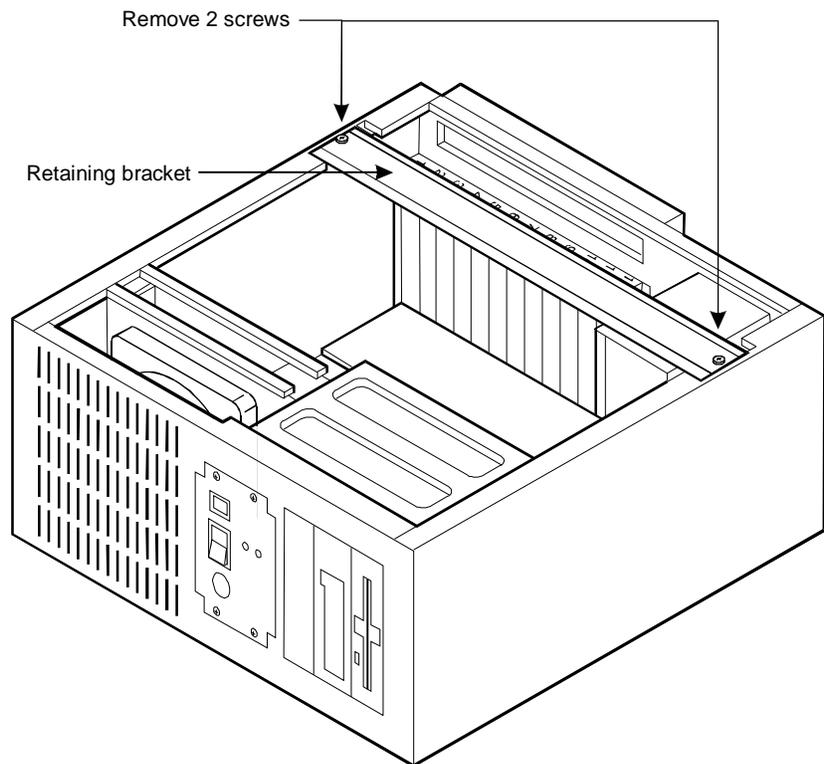
Figure F-8.   Removing Screws in the Retaining Bracket.

2. Lift the retaining bracket and remove it from the MAP/40s.

3. Continue with the next procedure, "Removing the P5 75 MHz CPU Circuit Card" on page F-16.

Removing the P5 75 MHz CPU Circuit Card

⚠ CAUTION:
Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See Chapter 4, "Getting Inside the Computer" in Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171 for detailed electrostatic discharge precautions.

Before You Begin.

This procedure assumes that the following has been completed:

- Stopping the voice system

- Shutting down the system

- Removing power

- Removing the dress cover, circuit card access panel, and circuit card retaining bracket

To install the additional SIMMs that a MAP/40 requires, the P5 75 MHz CPU circuit card must be removed. To remove the CPU circuit card, perform the following tasks.

1. Verify that the new SIMMs are on site and appear to be in usable condition, with no obvious shipping damage.

2. Disconnect any cables attached to the CPU circuit card from the following circuit cards:

   - Remote maintenance card in slot 9

   - External SCSI connector circuit card in Slot 11

   - Video controller card in Slot 12

   ⟹ NOTE:
   Remember the connectivity of each cable.

3. If there are ribbon cables attached to other cards which would impede the removal of the card, disconnect them and place them to the side.

   ⟹ NOTE:
   Remember the connectivity of each cable.

4. Remove the retaining screw from the circuit card faceplate and save it.

5. Remove the CPU circuit card from the backplane slot by gently pulling on each corner of the card.

> **NOTE:**
> Remember what backplane slot the CPU circuit card is in.

6. Remove the CPU circuit card from the chassis.

> **NOTE:**
> Hold the circuit card carefully by the edges and place it on a clean, ESD-protected surface (grounded mat). See Chapter 4, "Getting Inside the Computer" in *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171* for detailed electrostatic discharge precautions.

7. Continue with the next procedure, "Upgrading the MAP/40s Platform's Memory."

Upgrading the MAP/40s Platform's Memory

To upgrade the MAP/40s memory to the 64 Mbyte required by the MAP/40 platform, you must:

■ Remove the 4-Mbyte SIMMs.

■ Install the 16-Mbyte SIMMs.

Removing the 4-Mbyte SIMMs

To remove the 4-Mbyte SIMMs, perform the following tasks:

1. Lay the P5 75 MHz CPU circuit card on a flat, clean, ESD-protected surface.

2. Locate the 4-Mbyte SIMMs in sockets 3 and 4.

3. Release the metal snap locks gently at the edge of the SIMM connectors.

4. Rotate the SIMM back and downward to approximately a 60-degree angle.

5. Remove both 4-Mbyte SIMMs.

6. Continue with the next procedure, "Installing the 16-Mbyte SIMMs" on page F-18.

Installing the 16-Mbyte SIMMs

To install the 16-Mbyte SIMMs, perform the following tasks:

1. Install the SIMM by positioning the new SIMM at approximately a 60-degree angle with respect to the CPU circuit card.

   All SIMMs are keyed to prevent them from being inserted incorrectly.

   ⇒ **NOTE:**
   Install a new SIMM in the slot adjacent to the last SIMM installed. Do not leave any empty sockets between SIMMs.

2. Push down at that angle until the SIMM is reset into the SIMM carrier.

3. Snap the SIMM into place by rotating it to an upright position.

   The metal snap lock on the ends of the connector for the SIMM will be forced open and then lock when in the upright position.

4. Ensure the connector guide pins are seated into the clearance holes provided at each end of the SIMM.

   When properly seated, the guides should be fully extended into the circuit card clearance holes.

5. Continue with the next procedure, "Re-Installing the P5 75 MHz CPU Circuit Card" on page F-19.

Re-Installing the P5 75 MHz CPU Circuit Card

Now that the additional SIMMs have been installed, you can re-assemble the computer.

To re-install the P5 75 MHz CPU circuit card, perform the following tasks:

1. Attach the keyboard cable to the keyboard pins on the CPU circuit card (Figure F-9).

3.
COM2

2.
Bus
activity

1.
Keyboard
connector

pentsc01 LJK 052896
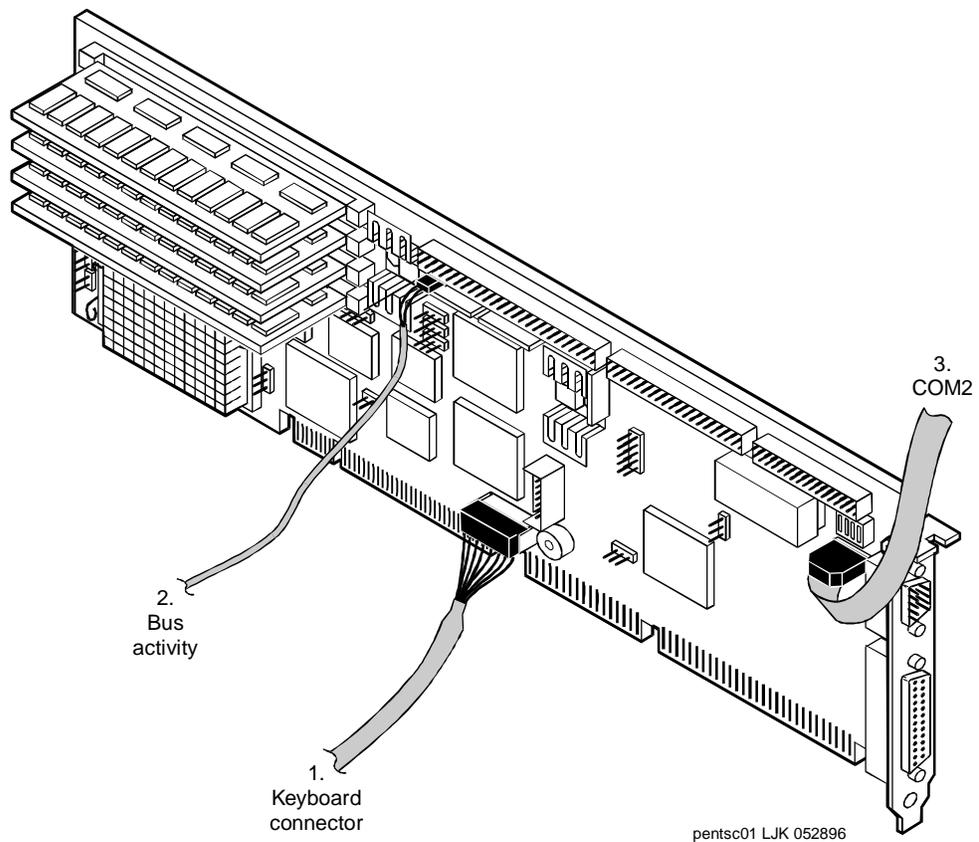
Figure F-9.   Attaching Cables to the P5 75 MHz CPU Circuit Card - Part 1

2. Holding the circuit card by its upper corners, slide the card into the backplane connector slot position from which you removed it.

3. Attach the disk activity cable to the CPU circuit card with the red lead (tracer wire) toward the back of the MAP/40s, that is, the red lead is to the right when correctly viewed. (Figure F-9).

4. Install the rear COM2 cable to the CPU circuit card with the red lead (tracer wire) toward the back of the MAP/40s, that is, the red lead is to the right when correctly viewed. Dress the cable to the side. (Figure F-9).

5. Attach the SCSI cable to the SCSI controller pins on the CPU circuit card, routing the cable over the top of the disk activity cable (Figure F-10).

$\Longrightarrow$ **NOTE:**

The SCSI cable (Figure F-10) has a label that contains the message:

H600-449 6() ISS. ()
MAP/40 SCSI CA
(SCSI/( ) -P5/40)

6. Attach the mouse cable to the CPU circuit card (Figure F-10).

Label

4.
SCSI

5.
Mouse

7.
Mouse

6.
SCSI

pentsc02 LJK 060796
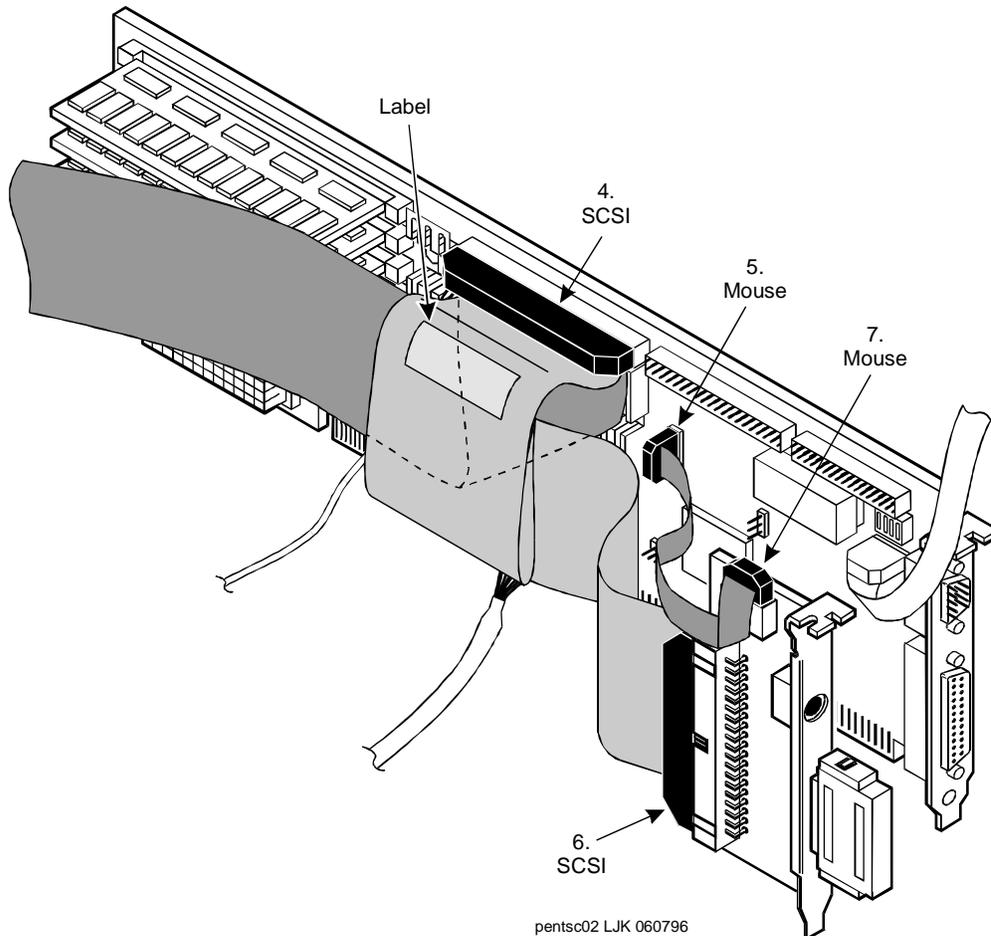
Figure F-10. Attaching Cables to the P5 75 MHz CPU Circuit Card - Part 2

7. Attach the floppy disk cable to the floppy cable pins on the CPU circuit card and dress this cable through the SCSI cable and beneath the external SCSI connector circuit card (Figure F-11).

> **NOTE:**
> The floppy cable has a label which contains the following message (Figure F-11):
>
>   H600-449 6() ISS. ()
>   MAP/40 Floppy CA
>   (Floppy/( ) -P5/40)

Label

8.
Floppy
disk *

* Run floppy disk cable
   in between the two
   SCSI cables.
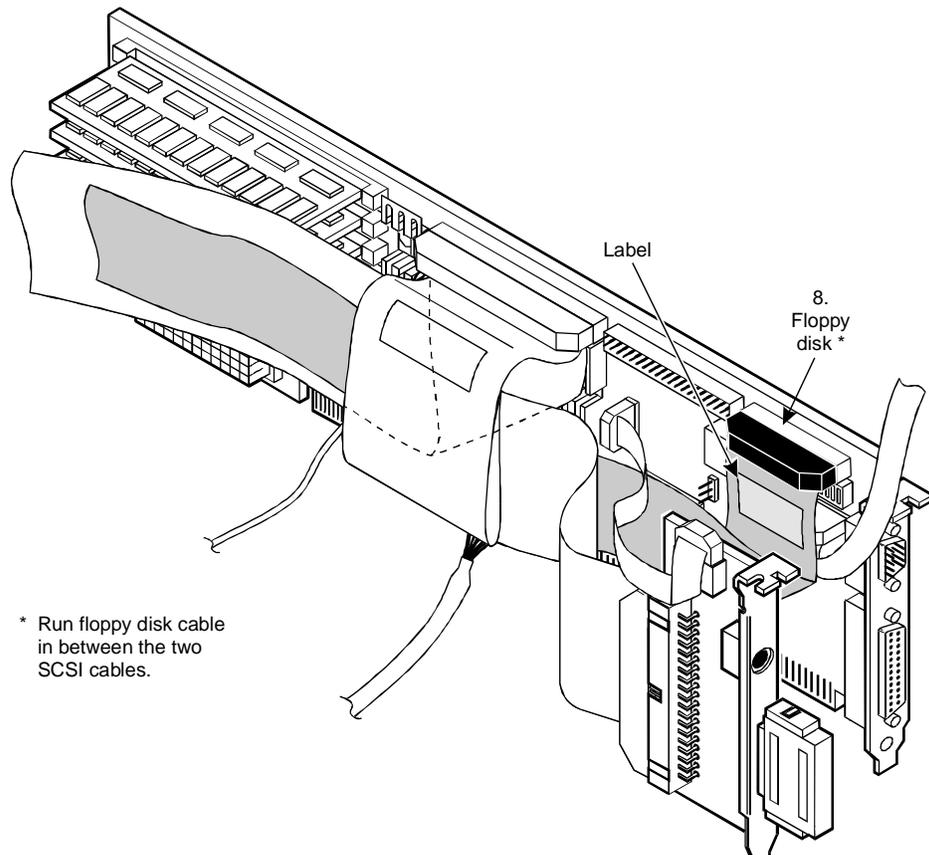
Figure F-11.   Attaching Cables to the P5 75 MHz CPU Circuit Card - Part 3

8. *If the customer ordered more IVC6 voice cards* as part of the platform upgrade, continue with the next procedure, "Adding Tip/Ring (IVC6) Circuit Cards" on page F-22.

   If the customer did not order additional IVC6 voice cards, proceed to "Powering Up the System" on page F-26.

Adding Tip/Ring (IVC6) Circuit Cards

To install additional voice cards you must:

1. Determine the other types of circuit cards in the system.

2. Determine what slots are to receive the voice cards.

3. Install the voice cards.

> ⚠ **CAUTION:**
> *If the customer did not order additional IVC6 voice cards, skip this procedure. In that case, proceed to "Powering Up the System" on page F-26.*

Determining Slot Location

The Tip/Ring circuit cards must be installed in particular slots in the MAP/40 backplane. These slots are determined in part based on the other types of circuit cards in the system. Use the tables below to determine in which slots to install the Tip/Ring circuit cards. If you need additional configuration information, see Appendix A, "System Configuration," in *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171*.

Table F-2 lists the variable slot locations for configurations where the number of Tip/Ring and ACCX circuit cards installed leaves the MAP/40s with only one slot available to accommodate either the LAN, Multi-port Serial, or GP-Synch card.

Table F-2.   Variable Slot Assignments When LAN, Multi-Port Serial, and GP-Synch Cards Are Mutually Exclusive

Circuit Card	Slots	Slots	Slots	Slots	Slots	Slots	Slots	Slots	Slots
IVC-6 (AYC10)	1-7	1-6	1-5	1-7	1-6	1-5	1-7	1-6	1-5
ACCX (AYC22)	-	7	6-7	-	7	6-7	-	7	6-7
LAN	8	8	8	-	-	-	-	-	-
Multi-port Serial	-	-	-	8	8	-	-	-	-
GP-Synch	-	-	-	-	-	-	8	8	8

Table F-3 on page F-23 lists the variable slot locations for configurations where the LAN card and Multi-port serial card, LAN card and GP-Synch card, and Multi-port serial card and GP-Synch card pairings are mutually exclusive. The pairings are mutually exclusive when the number of Tip/Ring and ACCX circuit cards installed leaves the MAP/40s with only two slots open.

Table F-3. Variable Slot Assignments When LAN + Multi-Port Serial, LAN + GP-Synch, and Multi-Port Serial + GP-Synch Pairings Are Mutually Exclusive

Circuit Card	Slots	Slots	Slots	Slots	Slots	Slots	Slots	Slots	Slots
IVC-6 (AYC10)	1-6	1-5	1-4	1-6	1-5	1-4	1-6	1-5	1-4
ACCX (AYC22)	-	6	5-6	-	6	5-6	-	6	5-6
LAN	7	7	7	7	7	7	-	-	-
Multi-Port Serial	8	8	8	-	-	-	8	8	8
GP-Synch	-	-	-	8	8	8	7	7	7

Table F-4 lists the variable slot locations for configurations where the LAN card, Multi-port serial card, and GP-Synch card are all included or all excluded.

Table F-4. Variable Slot Assignments When LAN , Multi-Port Serial, and GP-Synch Cards Are All Included or All Excluded

Circuit Card	Slots	Slots	Slots	Slots	Slots	Slots
IVC-6 (AYC10)	1-5	1-4	1-3	1-7	1-6	1-5
ACCX (AYC22)	-	5	4-5	-	7	6-7
LAN	6	6	6	-	-	-
Multi-Port Serial	8	8	8	-	-	-
GP-Synch	7	7	7	-	-	-

Installing the Tip/Ring Circuit Card

To install Tip/Ring circuit cards, perform the following tasks:

1. Remove the new circuit card from its ESD protective wrapping.

    ⇒ **NOTE:**
    Keep the package and all ESD protective wrapping. If you must return a card for repair, re-use of the replacement unit packaging is necessary to meet the manufacturer's warranty.

2. Verify the circuit card switch and jumper settings.

    See Table F-2 on page F-22 for switch settings location.
    See Figure F-12 on page F-24 for jumper settings.

Base I/O address = 100 Hex.

IVC6 T/R 0
First card installed

Base I/O address = 200 Hex.

IVC6 T/R 1
Second card installed

Base I/O address = 300 Hex.

IVC6 T/R 2
Third card installed

Base I/O address = 500 Hex.

IVC6 T/R 3
Fourth card installed

Base I/O address = 600 Hex.

IVC6 T/R 4
Fifth card installed

Base I/O address = 700 Hex.

IVC6 T/R 5
Sixth card installed

Base I/O address = 900 Hex.

IVC6 T/R 6
Seventh card installed

Note: Rocker switches 5 and 6 can be
      set either open or closed.

Figure F-12.   Tip/Ring Circuit Card Switch Settings
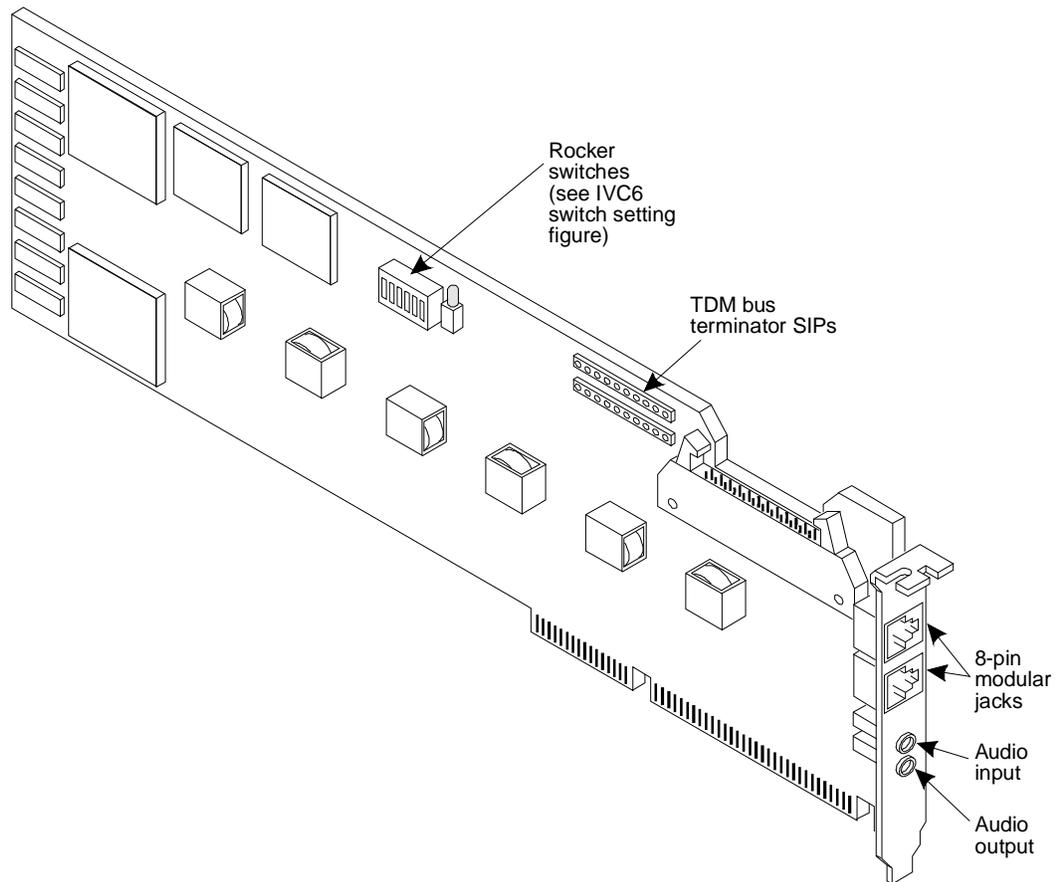
Figure F-13. Tip/Ring Circuit Card

3. Holding the circuit card by its upper corners, slide the card into the backplane connector slot position from which you removed the damaged card. If necessary, see Appendix A in *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171*, to determine the correct slot in which to place the card.

4. Apply even pressure to both corners of the circuit card until it is locked into the backplane.

5. Secure the circuit card faceplate into position by replacing the retaining screw.

6. Replace all cables on the new card. Make sure these cables are attached to their proper terminations.

7. Replace all cables removed from other cards. Make sure these cables are attached to their proper terminations.

8. Replace the circuit card retaining bracket, circuit card access panel, and MAP/40s dress panel. If you need additional information, see Chapter 4, "Getting Inside the Computer" in *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171*.

9. Apply power to the unit. See Chapter 4, "Getting Inside the Computer" in *Lucent INTUITY™ Messaging Solutions Release 4 MAP/40 and MAP/40s Maintenance, 585-310-171* for instructions on applying power.

10. Continue with the next procedure, ''Powering Up the System''.

Powering Up the System

To power up the MAP/40s, perform the following tasks:

1. Make sure there is no diskette in the floppy drive.

2. Press the power button on the front of the unit.

   As the system comes up, the voice system should activate.

   Continue with the next procedure, ''Verifying Memory Upgrade''.

Verifying Memory Upgrade

To ensure that the computer now has the memory required for a MAP/40, perform the following tasks:

1. Log into the system as *craft*.

   The system displays the Main Menu (Figure F-1 on page F-5).

2. Select:

   > Customer/Services Administration

   > System Verification

   > View Installed Hardware

   The system displays the View Installed Hardware window (Figure F-2 on page F-6).

```
                        View Installed Hardware
Installed Hardware of mtce

2047 megabyte Hard Drive Installed at SCSI id 0
64 megabytes of memory installed.

Installed Hardware of netw

Networking Board          Equipped          Version Number
        1                    no                  N/A
        2                    no                  N/A
        3                    no                  N/A
```

If this line shows → anything less than 63 megabytes, call the remote maintenance center.
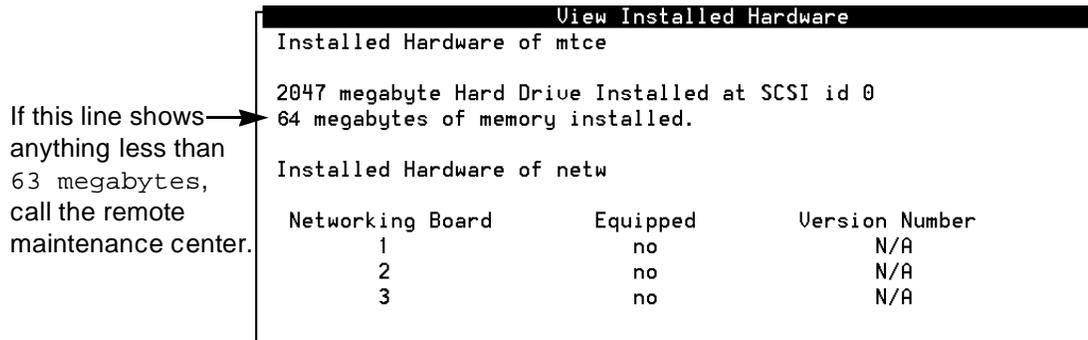
Figure F-14. **View Installed Hardware Window**

3. Check the amount of memory installed. If anything less than 64 Mbytes displays, call the remote maintenance center.

4. Press (ENTER) (F6) repeatedly to return to the Main Menu (Figure F-1 on page F-5).

5. Continue with the next procedure, "Completing the Platform Upgrade".

Completing the Platform Upgrade

In order to perform the platform upgrade, the voice system must be stopped.

1. Return to "Stopping the Voice System" on page F-7 and stop the voice system.

2. When that procedure is complete, continue with the next procedure, "Installing the Platform Upgrade Software" on page F-28.

Installing the Platform Upgrade Software

⚠ **CAUTION:**
> *The voice system must be stopped to complete this procedure.*

To complete the platform upgrade, perform the following tasks:

1. Insert the diskette labelled *INTUITY MAP/40 Platform Upgrade Package* into the floppy disk drive.

2. Starting at the Main Menu (Figure F-1 on page F-5), select:

```
> Customer/Services Administration
    > System Management
        > UNIX Management
            > Software Install
                > Floppy drive
```
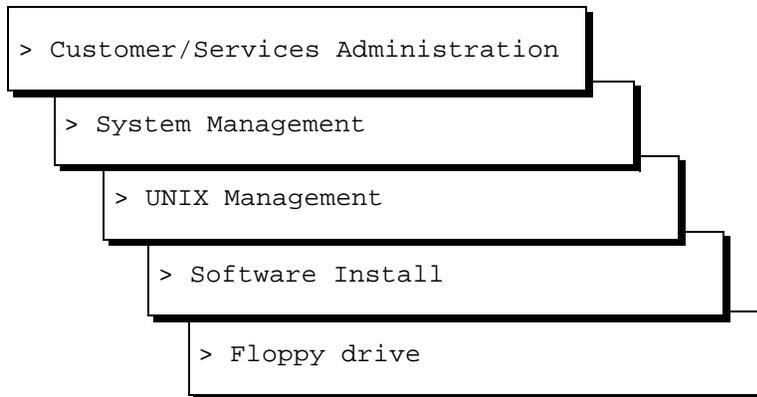
The system displays the following message:

```
Insert diskette into floppy drive.

Type [go] when ready
  or [q] to quit: (default: go)
```

3. Press ENTER.

The system displays the message:

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

The following packages are available:
1  MAP40Sset INTUITY MAP40s to MAP40 Upgrade Set
   (i486)  Release n.n

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

4. Press ENTER to select **all**.

The system displays the message:

```
PROCESSING:
Package:  INTUITY MAP40s to MAP40 Upgrade Set
          (MAP40Sset) from <diskette 1>.

Do you want to run the default set installation?
(default: y)
```

5. Press ⌊ENTER⌋ to select **y**.

   The upgrade software begins processing the platform set.

   ⮕ **NOTE:**
   The upgrade software installation requires about two minutes to run, during which time the system displays additional status messages. The next significant message is shown below. If the software does not read 64 Mbytes of memory, the system displays an error. The upgrade must then be stopped and the SIMMs must be checked for correct installation. Otherwise, the system displays the message.

   ```
   Checking system memory size. . . . . .

   The system has sufficient memory to continue with
   the platform upgrade.

   Installation of INTUITY MAP40s to MAP40 Upgrade
   Set (MAP40Sset) was successful.
   ```

6. Remove the diskette from the floppy disk drive.

7. Press ⌊ENTER⌋ (F6) repeatedly to return to the Main Menu (Figure F-1 on page F-5).

8. Continue with the next procedure, "Performing a Warm Reboot" on page F-30.

Performing a Warm Reboot

This procedure resets the software to a MAP/40 and starts the voice system. To reboot the MAP/40 system, perform the following tasks:

1. Make sure there is not a diskette in the floppy drive.

2. From the Main Menu (Figure F-1 on page F-5), select:

```
> Customer/Services Administration
   > System Management
      > System Control
         >Shutdown System
```
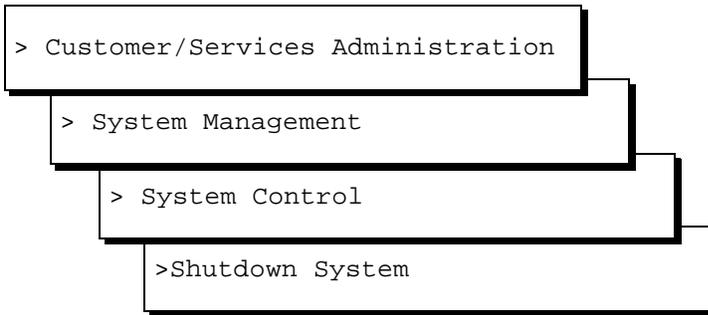
The system displays the Wait Time window (Figure F-3 on page F-7).

3. Enter **0** (zero) to indicate you would like an immediate shutdown.

4. Press (SAVE) (F3).

The system displays the message:

```
Shutdown started.
```

When the system is completely shut down, the system displays the message:

```
The system is down.
Press Ctrl-Alt-Del to reboot your computer.
```

5. Press (CTRL-ALT-DEL).

The system performs a power-on self test (POST). The system lists the various hardware components and the status of the tests performed on those components.

When the reboot is complete, the system displays the message:

```
Startup of the Voice System is complete.
Console Login:
```

6. If FAIL appears in the status column for any component, do the following:

    a. Record the component's name.

    b. Access the alarm log to begin troubleshooting. See Chapter 1, "Getting Started," in *Lucent INTUITY™ Messaging Solutions Release 4 Alarm and Log Messages, 585-310-566* for this procedure.

You have completed the MAP/40s to MAP/40 platform upgrade.

Accessing Windows and Screens

G

Overview

This chapter gives you an overview of how to access and use the Lucent INTUITY™ AUDIX® administration screens and the Lucent INTUITY platform windows. It describes

- How to activate a screen/window

- The layout of the screens and window

- How to use screen, window, and field help

- How to navigate through the data-entry fields of a screen/window

- How to enter data in a field

- How to invoke or cancel the screen/window operation

- The terminals supported

This chapter also details command line "shortcuts" and cross-references all the commands with the chapter in which they are fully described.

Purpose

This chapter provides instructions to use INTUITY AUDIX Release 4 system windows and screens. After reading this chapter, you should understand:

- Logging in and out of the AUDIX system

- Lucent INTUITY AUDIX screen layout, navigation, and data entry

- Command line syntax and shortcuts

- Function keys

Logging In to the INTUITY AUDIX System

You must log on to the Lucent INTUITY system to access the screens from which you perform the inital administration and test procedures in this book. In general, these procedures require the *craft* login, which is designed specifically for system installation and configuration. This login allows you to administer all Lucent INTUITY feature packages and access logs.

To log in to the Lucent INTUITY system as craft, perform the following tasks:

1. Turn on the terminal.

   The system displays the console login prompt.

2. Enter **craft** (The system is case sensitive, so use lowercase letters.)

   The system displays the password prompt.

   > **NOTE:**
   > The term "enter" means to type in the desired character(s) and then press (ENTER) or the return key. If you did not know that, please take a moment to read "Conventions Used in This Book" on page -xvi before continuing.

3. Enter the password.

   The system displays the terminal type prompt.

4. If you are at the Lucent INTUITY computer and monitor, press (ENTER) to accept AT386 as your terminal type.

   If you are logged in remotely, enter either *513*, *715*, *4410*, *4425*, or *pc*, depending upon your remote terminal type.

   > **NOTE:**
   > If you have trouble with the function keys, or if you are using a VT100 (that does not display the function keys with the Lucent INTUITY system) press (CONTROL+F) and then enter the number (1 – 8) of the function key.

   The system displays the main menu for the system you are logged on to, that is, either a Release 4 system or a Release 2 or Release 3 system (Figure G-1 on page G-3).

   > **NOTE:**
   > Figure G-1 is a sample screen only and does not reflect all the options loaded onto the actual system that you are installing.

Main Menu for Release 4

```
INTUITY (TM) Main Menu


AUDIX Administration
Customer/Services Administration
Networking Administration
Switch Interface Administration
Upgrade
Voice System Administration
```

main Administration menu for
Release 2 or Release 3

```
+    INTUITY (TM) Administration    +
|>AUDIX Administration             |
| Call Accounting System           |
| Customer/Services Administration|
| Networking Administration        |
| Switch Administration            |
| Switch Interface Administration  |
| Upgrade                          |
| Voice System Administration      |
+---------------------------------+
```

Figure G-1.   Lucent INTUITY Main Menu for Release 4 and Main Administration Menu for Release 2 or Release 3

Logging Out of the INTUITY AUDIX System

How you log out of the Lucent INTUITY system depends on whether you are logging out from an Lucent INTUITY window (Figure G-2 on page G-5) or an INTUITY AUDIX administration screen (Figure G-3 on page G-11).

Logging Out from a Lucent INTUITY Window.

To log out from a Lucent INTUITY widow:

1. Press CANCEL (F6) until you reach the following prompt:

   ```
   Welcome to USL UNIX System V Release 4.2 Version 1
   Console Login:
   ```

2. When the system displays this prompt, you are logged out of the system.

Logging Out from an INTUITY AUDIX Administration Screen.

To log out from an AUDIX administration screen:

1. Enter **exit**

   The system displays the Lucent INTUITY Main Menu (Figure G-1).

2. Press CANCEL (F6) until you reach the following prompt:

   ```
   Welcome to USL UNIX System V Release 4.2 Version 1
   Console Login:
   ```

3. When the system displays this prompt, you are logged out of the system.

Lucent INTUITY Administration Windows and Menus

You perform Lucent INTUITY platform administration tasks using windows accessed by selecting any option from the Lucent INTUITY Main Menu *except AUDIX Administration*. Through the Lucent INTUITY Administration windows you view information, enter information, access "pop-up" menus, or select available system options.

Window/Menu Layout and Components

The following section describes the look of the windows and menus and the component parts and functions of each.

Window and Menu Layout

Figure G-2 shows the typical layout of a Lucent INTUITY administration window and menu. Table G-1 on page G-5 describes the layout and components of each.
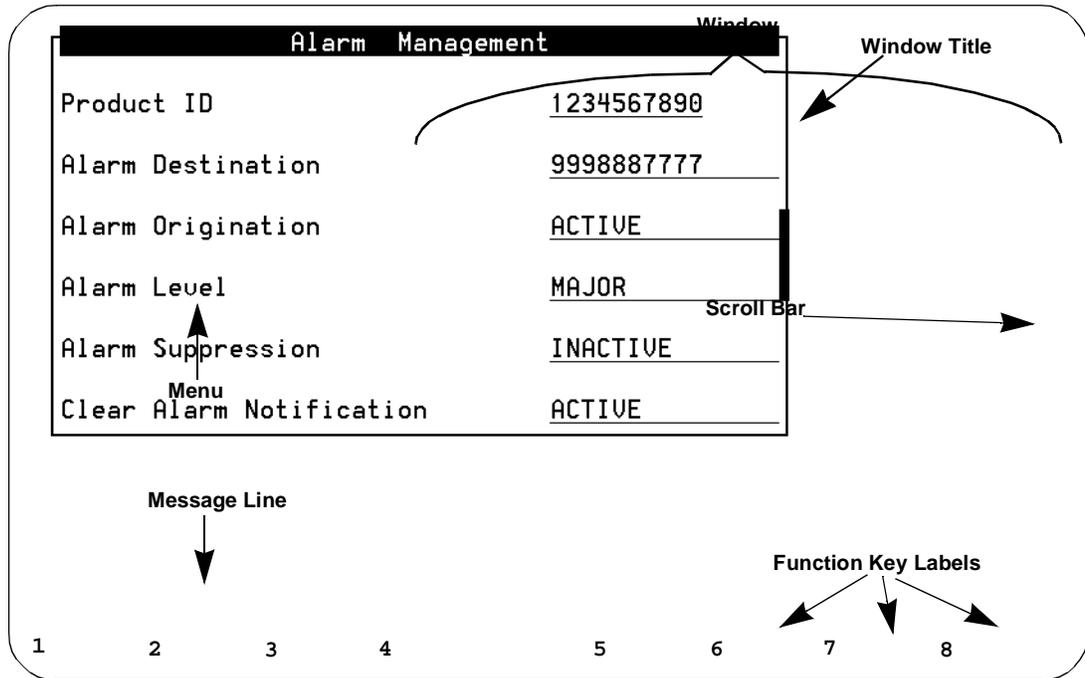
Figure G-2. **Sample Lucent INTUITY Administration Menu and Window**

Table G-1. **Lucent INTUITY Administration Window Layout and Components**

Window/Menu Component	Description
Menu	A special type of window that contains a list of options. A menu differs from other windows in that you can not enter data in it. You highlight an entry in the menu and press (RETURN) to select the entry. After selecting a menu option, the menu disappears, and you return to a data-entry field in a window.
Window	That bounded portion of the administrative interface through which you can view system information or status. Differs from a screen in that a screen fills the monitor viewing area while a window has an edge and displays only on a portion of the monitor viewing area.
Window Title	Shows the name of the window or menu.
Scroll Bar	Indicates when a window contains more than one screen of information. If the scroll bar contains a downward arrow, press (▼), (PgDn), or (NEXTPAGE) (F3) to scroll to the additional information. When there are no more screens, the arrow on the scroll bar changes to an upward arrow, and pressing (▲), (PgUp), or (PREVPAGE) (F2) will scroll back through the information.
Message Line	Contains a brief message about how to use the window.

Continued on next page

**Table G-1.   Lucent INTUITY Administration Window Layout
                and Components** — *Continued*

Window/Menu Component	Description
Function Key Labels	Boxed labels that correspond to the first eight function keys (F1 through F8) on your keyboard. Each label represents a command that is executed when the corresponding function key is pressed. If more than one window is open, the commands displayed apply only to the active screen. If no command label appears for a given function key, that key is not available for the active window.
	To display an additional set of function key labels press (CHG-KEYS) (F8).

Standard Window Function Keys

Several function key commands perform standard actions regardless of what window is active. Other commands are unique to a particular window. Table G-2 describes the standard function key commands.

Table G-2.   Lucent INTUITY Administration Window Function Keys

Command	Description
(HELP)	Displays information about the active window, including available function key commands. To close the help window, press (CANCEL).
(CHOICES)	From a data-entry field, displays a menu of possible options, if available. For more information, see ""Pop-Up" Menus" on page G-8
(SAVE)	Saves any changes to the system database.
(PREVPAGE)	Scrolls to the previous page, when a window contains more than one screen (page) of information.
(NEXTPAGE)	Scrolls to the next page, when a window contains more than one screen (page) of information.
(PREV-FRM)	If more that one window is open, makes the previous window active while still displaying the current window. Continue pressing the key to scroll in a loop through all open windows. (This choice is not present in all windows.)
(NEXT-FRM)	If more that one window is open, makes the next window active while still displaying the current window. Continue pressing the key to scroll in a loop through all open windows. (This choice is not present in all windows.)

Table G-2. Lucent INTUITY Administration Window Function Keys — *Continued*

Command	Description
(CANCEL)	Closes the active window and returns to the previous window. Any unsaved changes are lost.
(CHG-KEYS)	Toggles between two available sets of function key commands.
(PRINT)	If you have a printer connected to your Lucent INTUITY system, prints each page of the window that can be displayed.
(FRM-MGMT)	Displays a menu that allows you to control several physical characteristics of the window.

Lucent INTUITY Window Navigation and Data Entry

Some Lucent INTUITY windows have data-entry fields into which you enter values, such as user IP addresses, machine names, dial strings, etc. Other fields are display-only fields. You cannot enter data into display-only fields.

Window Navigation

Table G-3 shows the keys that are used to move between data-entry fields within a window.

Table G-3. Window Navigation

Command	Description
(TAB) (Tab) and (RETURN)	Moves the cursor to the next field in the window in a left-to-right, top-to-bottom order.
▶ (right arrow)	Moves to the next character or field to the right on the current line in the window. From the last field on a line, this moves to the first field on the next line that contains a field. From the last field in a window, this moves to the first field on the first line in the window.
◀ (left arrow)	Moves to the next character or field to the left on the current line in the window. From the first field on a line, this moves to the last field on the previous line that contains a field.
▲ (up arrow)	Moves to the nearest field on the first preceding line that contains a field. If no preceding lines contain fields, it moves to the nearest field on the last line in the window that contains a field.

Continued on next page

Table G-3. **Window Navigation** — *Continued*

Command	Description
▼ (down arrow)	Moves to the nearest field on the next line that contains a field. If no lines below the current one contain fields, it moves to the nearest field on the first line in the window that contains a field.
backspace	Deletes the last character entered into the field and moves the cursor backward one position.
HOME	Moves the cursor to the first field in the window.
END	Moves the cursor to the last field in the window.

"Pop-Up" Menus

A "pop-up" menu is a special type of window that contains a list of valid entries for a data-entry field. Not all data-entry fields have a pop-up menu available. If a menu is available, you access it by pressing CHOICES (F2). You can populate the data-entry field with a selection from the menu.

Selecting a Menu Option.

To select a menu option, highlight the option, and press ENTER. To highlight a menu option, use any of the following methods:

■ Press ▲ and ▼ to move the cursor to the desired menu option. You can scroll in a loop through the top or bottom of the menu.

■ Press HOME to highlight the first menu option. Press END to highlight the last menu option.

■ Type the first character of the desired menu option. The first option beginning with that letter is highlighted. When you use this method, the following rules apply:

— If more than one option begins with the same letter, type enough letters to uniquely identify the option you would like. If the cursor is already on the first letter of an option beginning with the same letter, type the second letter in the desired option.

— To move the cursor back to the beginning of a menu option's name, press BACKSPACE.

— This feature is not case sensitive, that is, you can type either **a** or **A**.

Data Entry

Some windows contain fields that require you to enter information. To enter data in a field, type in the lines displayed in the window.

The following guidelines apply to data entry:

- In most cases, the length of the line represents the maximum number of characters allowed for that field.
- Valid input varies depending on the window. The message line at the bottom of the display provides information about what constitutes valid input.
- Once you type information in a field, you can either save the changes to the system database or cancel without saving any new information.

Using Help

To view the help information for a window, press ⌷ HELP ⌷ (F1).

INTUITY AUDIX Administration Screens

You perform most INTUITY AUDIX system administration tasks using screens accessed by selecting `AUDIX Administration` from the Lucent INTUITY Main Menu. Through the AUDIX Administration screens you view information, enter information, or select available system options.

You access the various AUDIX administration screens primarily via commands that you type at the *command line*. This differs from the windows and menus that are employed for other parts of the system. For a discussion on using the Lucent INTUITY Administration windows, see "Lucent INTUITY Administration Windows and Menus" on page G-4.

> **NOTE:**
> You can only access INTUITY AUDIX administration screens if the voice system is up. If you attempt to access these screens without the voice system operating, the system displays an error message and returns you to the Lucent INTUITY Main Menu (Figure G-1 on page G-3).

When you first access the INTUITY AUDIX administration screens, a blank screen is displayed (Figure G-3 on page G-11). From this screen, you enter commands. These commands display screens that allow you to enter or view information. Each screen has a name that you use to display the screen. From these screens, you can use a set of function keys and also receive help information.

Screen Layout and Components

Figure G-2 on page G-5 represents the basic screen layout that you will see in all of the AUDIX Administration screens. This section discusses the layout, navigation, command protocol, and technique for entering data in AUDIX Administration screens.

> **NOTE:**
> The terms "user" and "subscriber" are used interchangeably throughout this book. They are equivalent terms; however, "subscriber" is used on the screens and is the command word you must type at the command line, for example, **change subscriber "Jane Doe"**.
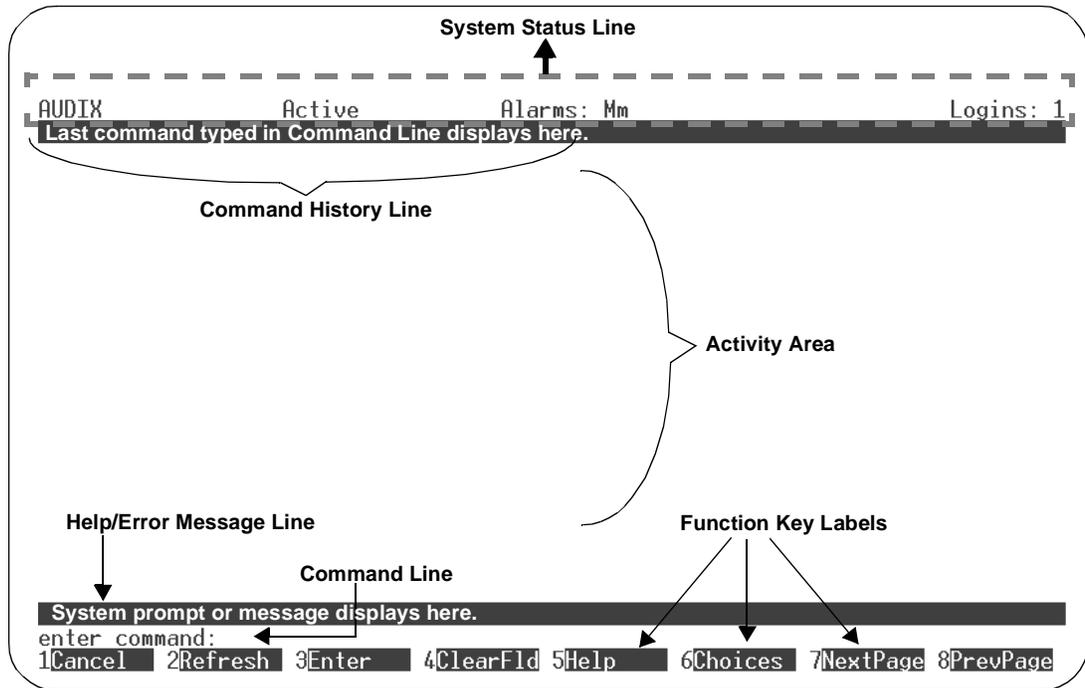
Figure G-3.   AUDIX Administration Screen Layout

Screen Components

Table G-4 describes the components of the AUDIX Administration screen.

Table G-4.   INTUITY AUDIX Administration Screen Layout

System Status Line	This line displays Lucent INTUITY system information. Starting from the left, the Status Line indicates:
	■ The Lucent INTUITY machine name
	■ A voice mail status indicator (Active or Inactive)
	■ Any active alarms

	M = Major
	  m = Minor
	  A = Administrative
	  w = Warning

	■ The number of people currently logged in

Continued on next page

Table G-4. INTUITY AUDIX Administration Screen Layout — *Continued*

Command History Line	This line displays the fully-expanded command currently entered in the command line and the current page number and page count (for example, `change subscriber "Jane Doe" Page 1 of 2`). If the active screen is a help screen, this line contains the title of the screen or field help (for example, `change subscriber "Jane Doe": field help  Page 1 of 1`).
Activity Area	The activity area displays: ■ Data-entry fields used to specify new or changed parameter values ■ Display-only fields, which contain current parameter values that cannot be changed from this screen ■ Report results, which display requested system information ■ Screen and field help activated with the *Help* or *Choices* keys
Help/Error Message Line	This line is used to display system feedback (`Command Successfully Completed`, for example), error messages, and prompts.
Command Line	This line is where you type commands to access a new screen or exit AUDIX Administration.
Function Key Labels	This portion of the screen shows labels for function keys F1 through F8. The labels indicate the actions invoked by pressing the function keys while a screen is active.

Standard Screen Function Keys

Several function keys perform standard actions regardless of the screen you are viewing. Other commands are unique to a particular screen. Table G-5 describes the purpose of each standard function key.

Table G-5. AUDIX Administration Standard Function Keys

CANCEL (F1)	Aborts the current activity and returns the cursor to the command line. When the cursor is in the command line, F1 erases the entire contents of the command line. In a help screen, F1 returns to the screen on which the help was requested.
REFRESH (F2)	Repaints the screen.

Continued on next page

Table G-5. AUDIX Administration Standard Function Keys — *Continued*

(ENTER) (F3)	Submits the information entered on a screen for the action specified on the command line. When the cursor is in the command line, F3 requests execution of the command.
	NOTE: (RETURN) has the same effect as (ENTER) (F3) when the cursor is *on the command line*. In a screen, (RETURN) moves the cursor forward from one field to the next.
(CLEAR FLD) (F4)	Clears an entire field in a screen or a single keyword from the command line. For example, if the command line contains the command **list cos** and you press F4, the command line changes to **list**.
(HELP) (F5)	When the cursor is in the command line, pressing this key is identical to typing the **help** command, that is, it displays a screen explaining all the types of help available in the INTUITY AUDIX system. When the cursor is in a screen, this key requests help for the entire screen.
(CHOICES) (F6)	When the cursor is in the command line, this key requests a menu of valid entries for command line keywords. Once a CHOICES menu is displayed, pressing F6 selects the highlighted item from the menu.
	When the cursor is in a screen, F6 requests help for the particular field where the cursor appears. The field help menu provides an explanation of the field and a list of valid values or actions for the field. When a field menu is displayed, pressing F6 again selects the highlighted item from the menu.
(NEXTPAGE) (F7)	Moves forward through multiple-page administration screens, reports, or help screens.
(PREVPAGE) (F8)	Moves backward through multiple-page administration screens, reports, or help screens.

Changing the Sequence of the AUDIX Function Keys

The function keys shown on the last line of the screen appear in the default INTUITY AUDIX order. However, you may change the order in which these keys are displayed to match the order in which keys appear on the System Access Terminal (SAT) or Manager 1 administration tools.

You can change the sequence of the AUDIX function keys to match the order used by the System Access Terminal (SAT) or Manager 1 administration tools for System 75 and DEFINITY Communications System Generic 1 and 3.

To change the sequence of keys, enter `toggle function-keys` at the command line. The key sequence changes from the default order to that of the SAT/Manager 1, or vice-versa.

The Command Line

This section describes the syntax for the screen-activation commands.

Verb-Object Orientation

The commands to activate the INTUITY AUDIX administration screens follow a *verb-object syntax*. A qualifier (such as a user or machine name) is added to some verb-object commands, depending on the desired command outcome.

The structure of the INTUITY AUDIX screen-activation commands is:

Verb   Object/Object-Phrase   Qualifier(s)

One or more of these verbs + the object/object-phrase (usually a screen name) + a qualifier (if applicable), compose a command to which the INTUITY AUDIX system responds.

Each of these three command-line elements is described below.

Command-Line Verbs

The first command-line element is the verb, which specifies the type of action. The following is a list of INTUITY AUDIX command-line verbs. Note that those commands marked with an asterisk (∗) are complete commands, that is, they are not combined with objects or qualifiers.

add	**audit**	**change**	**copy**	**display**
exit*	**help***	**list**	**logoff***	**print**
remove	**reset**	**toggle**		

Command-Line Objects/Object-Phrases

The second command-line element is the object or object-phrase. This is usually a screen name. The screen name consists of one or more words (nouns and adjectives) that identifies the screen. If more than one word is used, a hyphen must be typed between the two words to ensure that the object-phrase has no embedded spaces. The screen names are generally (but not always) the same as the title of the screen as it appears on your screen when activated. Examples of object phrases are **alarms**, **measurements**, **remote-messages**, **subscribers,** and **system-parameters**.

Command-Line Qualifiers

The third command-line element is the qualifier. A command-line qualifier can be a user extension number (**12345**), a date (**7/21/96**), a user name (**"Jane Doe"**), and other specific parameters. Notice that a qualifier with an embedded space, such as the user name Jane Doe, must be put in quotation marks, that is **"Jane Doe"**.

Variations of Commands

You can activate most screens by more than one version of a command. The different versions of the screen-activation command are distinguished by the verb that begins, and the qualifiers that end, the command line. For example, there are 4 versions of the versions of the command to activate the Subscriber screen:

add subscriber *name/number*

change subscriber *name/number*

display subscriber *name/number*

remove subscriber *name/number*

All of these commands activate the Subscriber screen with information about the user, as specified by typing either the user's name or telephone number. The **display** and **remove** versions of the command activate a display-only version of the screen.

The **add** and **change** version of the command activate a data-entry version of the screen that allows you to make changes to the features assigned to the AUDIX user specified by *name/number*.

Command-Line Abbreviation

For most screen-activation commands, you can enter a minimum unique subset of the full command string and the system will expand the entry. For example, the command **change system-parameters sending-restrictions** could be abbreviated to **ch sy s** since this is a unique subset of the full command.

The abbreviation of each word in the command must be represented by the first *n* letters of the word, in the correct spelling order[1], where *n* is the minimum number of letters that uniquely specifies the command word. As a general rule, *n* is equal to 2. In other words, it usually takes 2 characters to uniquely identify each command line element.

In the above example the string **ch sys s** would work as a unique subset of the full command. However:

■ The string **chg sys s** would *not* work because **chg** is not the first three letters of **change**

■ The string **ch s s** would not work because **ch s** is not unique (it could also mean **change subscriber** or **change system-parameters**).

⇒ **NOTE:**
Notice that hyphenated words such as **system-parameters** and **sending-restrictions** are treated as single words.

---

1.   Exceptions to the correct-spelling rule are the abbreviations for "*announcement-set*", which is abbreviated **annc**, and for "Class of Service," which is abbreviated **cos**.

Command Structure

You can build a command one word at a time. For example, at the beginning of the command line you can press (CHOICES) (F6) to see a list of all valid command verbs. If you then type **ch** and press (RETURN), the system expands **ch** to change and lists all valid words that can follow **change**. If you then type **sy** and press (CHOICES) (F6) the system expands the command line to change system-parameters and lists all valid words that can follow.

If you enter a string that is not a valid command word or is not a valid or unique abbreviation, the system notifies you of the mistake. If you omit a required command qualifier (such as a user name or extension, or a port address) the system prompts you for the missing information.

Command-Line Help

During command entry, the (CHOICES) (F6) function key displays a menu of allowable command-component words in the activity window. The choices displayed depend on the position of the cursor in the command line. That is, the allowable command-component words displayed when you press (CHOICES) (F6) are only those command words that can follow what is currently to the left of the cursor, if any. Select from the displayed choices on the menu by using Tab or arrow keys, or by typing the initial character of the desired menu choice.

Command History and Command-Line Editing

The system memory retains a list of the 10 most recently-entered commands. After you enter a command, you can "scroll" back through previous commands using the up arrow key. Each time you press (▲) (up arrow) key, the *previous* command in the command stack is retrieved. Each time you press (▼) (down arrow) key, the *next* command in the command stack is retrieved. The retrieved command is placed on the command line with the cursor at the end of the line. This is a convenient way to re-enter commands containing user names or telephone numbers, for example, without retyping the entire command.

Table G-6 shows the editing/cursor movement actions are possible once you display a previously executed command on the command line.

Table G-6. AUDIX Administration Command Line History and Editing

(CANCEL) (F1)	Erases the entire contents of the command line
(◄) (left arrow)	Moves the cursor to the beginning of the previous word on the command line
(TAB) (Tab) or (►) (right arrow)	Moves the cursor to the beginning of the next word on the command line, or to the end of the line if the cursor is on the last word
(▲) (up arrow)	Moves through previously completed commands

Continued on next page

Table G-6. AUDIX Administration Command Line History and Editing — *Continued*

▼ (down arrow)	If you have gone too far through previously completed commands, use down-arrow to move back through the commands
backspace	Deletes the character preceding the cursor
CLEAR_FLD (F4)	Clears a single keyword from the command line; for example, if the command line contains the command **list cos** and you press F4, the command line reads **list**.
HELP (F5)	Displays a screen explaining all the types of help available in the INTUITY AUDIX system
CHOICES (F6)	Displays a menu of valid entries for command line keywords. Once a CHOICES menu is displayed, press F6 to select the highlighted item from the menu.
ENTER (F3)	Expands a shortened version of a command and activates the screen
PREVPAGE (F8)	Moves backward through multiple-page administration screens, reports, or help screens.

Abbreviations

A

AAR
automatic alternate routing

AC
alternating current

ACA
automatic circuit assurance

ACD
automatic call distribution

ADAP
administration and data acquisition package

ADU
asynchronous data unit

ALT
assemble load and test

AMIS
Audio Messaging Interchange Specification

API
application programming interface

ARS
automatic route selection

ASCII
American Standard Code for Information Exchange

AUCC
AUDIX Upgrade Control Center (see *MMISC*)

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

CDR
call detail recording

CED
called tone

CELP
code excited linear prediction

CICS
customer information control system

CMS
call management system

CNG
calling tone

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

CPE
customer premise equipment

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

ELA
Enhanced List Application

E-MAIL
electronic mail

ESD
electrostatic discharge

ESS
electronic switching system

F

FAX
facsimile

F key
function key

FIFO
first-in first-out

FNPA
foreign numbering plan area

FOOS
facility out of service

FRL
facilities restriction level

FX
foreign exchange

ABB-2   Issue 2   January 1997

G

Gbyte
gigabyte (1 billion bytes)

GOS
grade of service

H

HW
hardware

Hz
hertz

I

I/O
input/output

IDI
isolating data interface

IMAPI
Lucent 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)

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

MAP
multi-application platform

MANOOS
manually out of service

Mbyte
megabyte (one million bytes)

MHz
megahertz

MMISC
Multimedia Messaging Implementation and Support
Center (formerly the AUCC)

modem
modulator/demodulator

MPDM
modular processor data module

ms
milliseconds

MT
maintenance (Lucent INTUITY software component)

MTBF
mean time between failures

MWI
message-waiting indicator

MWL
message-waiting lamp

N

NLM
network loadable module

NPA
numbering plan area

NW
INTUITY AUDIX Digital Networking

O

OA&M
operations, administration, and maintenance

OR&M
offer realization and management

OS
operating system

OSI
open systems interconnection

P

PBX
private branch exchange

PC
personal computer
power converter

PDM
processor data module

PEC
price element code

PI
processor interface

PIB
processor interface board

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

RUK
reusable upgrade kit

S

SAT
system access terminal

SCA
switch communications adapter

SCSI
small computer systems interface

SID
switch integration device

SIMM
single in-line memory module

ABB-4 Issue 2 January 1997

SMDR
station message detail recording

SMSI
simplified message service interface

SPM
system programming maintenance

SW
software
switch integration (Lucent INTUITY software component)

T

TAC
trunk access code

TCP/IP
Transmission Control Protocol/Internet Program

TDD
telecommunications device for the deaf

TDM
time division multiplex

TOS
Telephony OneStop™ (developed by Lotus Development Corporation)

T/R
tip/ring

TRIP
tip/ring input process

TSC
Technical Services Center

U

UCD
uniform call distribution

UCL
unrestricted call list

UPS
uninterruptable power supply

V

VEX
Voice Exchange

VM
INTUITY AUDIX Voice Messaging

VNI
virtual nodepoint identifier

VP
voice platform (Lucent INTUITY software component)

VROP
voice response output process

W

WAN
wide area network

WATS
wide area telephone service

WCR
world class routing

ABB-6   Issue 2   January 1997

Glossary

5ESS Switch
A central office switch manufactured by Lucent 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 (ACD)*.

activity menu
The list of options spoken to users 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 (ADAP)*.

address
INTUITY AUDIX user identification, containing the user's extension and machine, that indicates where the system needs to deliver a message. An address may include several users or mailing lists. Name or number addressing can be selected with the ✱ Ⓐ (Address) 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 user, maintenance, or traffic data from an INTUITY AUDIX system to a personal computer (PC).

ADU
See *asynchronous data unit (ADU)*.

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
Consisting of alphabetic and numeric symbols or punctuation marks.

ALT

See *assemble, load, and test (ALT)*.

American wire gauge (AWG)

A standard measuring gauge for nonferrous conductors.

AMIS

See *Audio Messaging Interchange Specification (AMIS)*.

AMIS prefix

A number added to the destination number to indicate that it 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 transfer.

analog signal

In teleprocessing usage, a communications path that usually refers to a voice-grade telephone line.

announcement

A placeholder within the Lucent INTUITY system for playing fragments. Each event that may occur within AUDIX has one or more announcement numbers permanently assigned to it. Fragment numbers are then assigned to the announcement numbers.

announcement fragment

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

antistatic

A treatment for material to prevent the build-up of static electricity.

API

See *application programming interface (API)*.

application

A computer software program.

application programming interface (API)

A set of formalized software calls and routines that an application program can reference to access underlying network services.

assemble, load, and test (ALT)

The Lucent 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 spaced by start and stop bits rather than 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 for use with the Lucent INTUITY system 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 EIA-232 capabilities for INTUITY AUDIX Digital Networking, if required.

attendant console

A special-purpose telephone with numerous lines and features usually located at the front desk of a business or other organization. The front desk attendant uses this telephone to answer and transfer calls.

Audio Messaging Interchange Specification (AMIS)

An analog networking protocol that allows users to exchange messages with any messaging system that also has AMIS Analog Networking capabilities. Messages can be exchanged with users on Lucent INTUITY systems as well as with users on remote messaging systems made by vendors other than Lucent.

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 (AUDIX)*.

autodelete

An INTUITY AUDIX feature that allows users to designate that faxes be automatically deleted from their mailboxes after they are printed.

automated attendant

A Lucent INTUITY system feature that allows users 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 Lucent INTUITY users and users to the system. See also *call-distribution group*.

automatic message scan

An INTUITY AUDIX feature that allows users to scan all message headers and messages at the touch of two buttons. With Lucent 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 users to designate that faxes be automatically sent to a specified print destination.

autoscan

See *automatic message scan*.

AWG

See *American wire gauge (AWG)*.

B

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

backplane
A centrally located device within a computer to which individual circuit cards are plugged for communication across an internal bus.

backup
A duplicate copy of files and directories saved on a removable medium such as floppy diskette or tape. The back-up filesystem can 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 for which the information is intended.

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

baud rate
Transmission signaling speed.

basic call transfer
The 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 (BIOS)*.

bit
See *binary digit (bit)*.

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.

body
The part of a Lucent INTUITY 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

See *bits per second*.

BRI

See *basic rate interface (BRI)*.

broadcast messaging

An INTUITY AUDIX feature that enables the system administrator and other designated users to send a message to all users automatically.

BSC

See *binary synchronous communications (BSC)*.

buffer

A temporary storage area used to equalize or balance different operating speeds. A buffer can be used between a slow input device, such as a terminal keyboard, and the main computer, which operates at a very high speed.

bulletin board

An INTUITY AUDIX feature that allows a message to be played to callers who dial the bulletin board 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 a Lucent INTUITY device from service (make it appear busy or in use), and later restore it to service (release it). The Lucent INTUITY switch data link, voice ports, or networking ports may be busied out if they appear faulty or when maintenance tests are run.

byte

A unit of storage in the computer. On many systems, a byte is 8 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 feature that allows the system to answer a call and record a message when the user is unavailable. Callers can be redirected to the system through the call coverage or call forwarding switch features. INTUITY AUDIX users can record a personal greeting for these callers.

call-answer language choice
The capability of user 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 Lucent 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 switch users to the Lucent 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 (ACD)* and *uniform call distribution (UCD)*.

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 (a 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 (a constant 1100-Hz tone that is on for 1/2 second, off for 3 seconds).

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

card cage
An area within the Lucent 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 accounting system (CAS)*.

CED tone
See *called tone (CED tone)*.

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

central office (CO)
An office or location in which large telecommunication equipment 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.

class of service (COS)
The standard set of INTUITY AUDIX features given to users 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 example a user's PC running Message Manager is the client. See also *server*.

CMS
See *call management system (CMS)*.

CNG tone
See *calling tone (CNG tone)*.

CO
See *central office (CO)*.

code excited linear prediction (CELP)
An analog-to-digital voice coding scheme.

collocated
A Lucent INTUITY system installed in the same physical location as the host switch. See also *local installation*.

collocated adjunct

Two or more adjuncts that are serving the same switch (that is, 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

A numbering system for telecommunications equipment used by Lucent. 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.

community

A group of telephone users administered with special send and receive messaging capabilities. A community is typically comprised of people who need full access to each other by telephone on a frequent basis. See also *default community*.

compound message

A message that combines a voice message and a fax message into one unit, which INTUITY AUDIX then handles 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 (COS)*.

coverage path

The sequence of alternate destinations to which a call to a user on a Lucent INTUITY system is automatically sent when it is not answered by the user. 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 (CPU)*.

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 (CSI)*.

CTS

See *clear to send (CTS)*.

D

DAC

See *dial access code (DAC)*.

data base

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 base processor (DBP)

A element of a computer or other information handling system that creates, changes, retrieves, or otherwise manipulates information in a data base.

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 telephone 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 Intuity system connections. The 2600 or 2700 series may also be used; these support diagnostic testing and the DATAPHONE II Service network system.

data set

Another term for a modem, although 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 (DBP)*.

DCE

See *data communications equipment (DCE)*.

DCIU

See *data communications interface unit (DCIU)*.

DCP

See *digital communications protocol (DCP)*.

DCS

See *distributed communications system (DCS)*.

debug

See *troubleshooting*.

dedicated line

A communications path that does not go through a switch. A dedicated (hard-wired) path can be formed with directly connected cables. MPDMs, DSUs, or other devices can 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 community

A group of telephone users administered with restrictions to prevent them from sending messages to or receiving messages from other communities. If a system is administered to use communities, the default community is comprised of all the AUDIX users defined on that system.

default print number

The user-administered extension to which autoprinted faxes are redirected upon their receipt into the user's mailbox. This default print destination is also provided as a print option when the user 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 access code (DAC)

A feature available with some switching systems that permits dialoing a special number to access a long distance number.

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.

dial string

A series of numbers used to initiate a call to a remote AMIS machine. A dial string tells the switch what type of call is coming (local or long distance) and gives the switch time to obtain an outgoing port, if applicable

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 (DID)*.

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 (DSP)

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

DIP switch

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

direct inward dialing (DID)

The ability for an outside caller 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

1. A Lucent INTUITY AUDIX feature that allows you to hear a user's name and extension after pressing ✳ ✳ N at the activity menu. 2. 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 (DMA)*.

DNIS

See *dialed number identification service (*DNIS_SVC)*.

domain

An area where data processing resources are under common control. The AUDIX system is one domain and an e-mail system is another domain.

DSP

See *digital signal processor (DSP)*.

DSU

See *data service unit (DSU)*.

DTE

See *data terminal equipment (DTE)*.

DTMF

See *dual tone multifrequency (DTMF)*.

dual in-line package (DIP) switch

A 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 users 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 user mailboxes can be in either of the two languages.

dual tone multifrequency (DTMF)
A way of signaling consisting of a pushbutton or touch-tone dial that sends out a sound consisting of two discrete tones that can be picked up and interpreted by telephone switches.

E

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

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

electronic mail
See *e-mail*.

e-**mail**
The transfer of a wide variety of message types across a computer network (LAN or WAN). E-mail messages may be text messages containing only ASCII or may be complex multimedia messages containing embedded voice messages, software files, and images.

enabled/disabled
The state of a hardware device that indicates whether it is available for use by the Lucent INTUITY system. 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 user who encounters a problem trying to respond to a message. To escape, the user presses ⌗.

escape to attendant

An INTUITY AUDIX feature that allows users with the call answer feature to have a personal attendant or operator administered to pick up their unanswered calls. A system-wide extension could also be used to send callers to a live agent.

ESD

See *electrostatic discharge (ESD)*.

event

An 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 (FOOS)

State of operation during which the current channel is not receiving a dial tone and is not functioning.

facsimile

1. A digitized version of written, typed, or drawn material transmitted over telephone lines and printed out elsewhere. 2. Computer-generated text or graphics transmitted over computer networks. A computer-generated fax is typically printed to a fax machine but can remain stored electronically.

fax

See *facsimile*.

fax addressing prefix

Uniquely identifies a particular fax endpoint to the Lucent INTUITY system. Used by the system as a "template" to differentiate all call-delivery machines on the network from each other.

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.

fax print destination prefix

A dial string that the Lucent INTUITY system adds to the fax telephone number the user enters to print a fax. The system takes the full number (fax print destination prefix + fax telephone extension) and hunts through the machine translation numbers until it finds the specific fax endpoint.

field

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

FIFO

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

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 (FIFO)

A method of processing telephone calls or data in which the first call (or data) to be received is the first call (or data) to be processed.

F key

See *function key (F key)*.

FOOS

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

format

To set up a disk, floppy diskette, or tape with a predetermined arrangement of characters so that the system can read the information on it.

function

Individual steps or procedures within a mailbox activity.

function key (F key)

A key on a computer keyboard programmed to perform 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, designed for serving large communities of System 75 and System 85 users.

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 (GOS)*.

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 hear the system answer and 5% hear ringing until a port becomes 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 callers who are not INTUITY AUDIX users to leave messages on the system by dialing a user'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. A hard disk drive stores data on nonremovable 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 $\boxed{\text{HELP}}$ or $\boxed{\text{CTRL}}$ $\boxed{?}$ on a Lucent INTUITY display terminal to show the options available at your current screen position. In the INTUITY AUDIX system, press $\boxed{*}$ $\boxed{H}$ 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 1 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 (Hz)*.

I

I/O
Input/output.

IDI
See *isolating data interface (IDI)*.

IMAPI
See *Lucent INTUITY messaging application programming interface (IMAPI)*.

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

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 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 the IVC6 card.

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

internal mail messaging
　　Software (Lucent INTUITY Message Manager) on a PC that provides messaging capability between
　　users on the same AUDIX system, or to administered remote AUDIX systems and users. Users
　　can create, send, and receive a message that contains multiple media types; specifically, voice,
　　fax, text, or file attachments (software files, such as a word processing or spreadsheet file).

interrupt request (IRQ)
　　Within a PC, a signal sent from a device to the CPU to temporarily suspend normal processing
　　and transfer control to an interrupt handling routine.

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 users. See also *digital networking*.

INTUITY Message Manager
　　A Windows-based software product that allows INTUITY AUDIX users to receive, store, and send
　　their voice/FAX messages from a PC. The software also enables users to create and send
　　multimedia messages that include voice, fax, file attachments, and text.

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

I/O address
　　input/output address.

IRQ
　　See *interrupt request (IRQ)*.

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

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*.

J

jumper
Pairs or sets of small prongs or pins on circuit cards and mother boards the placement of which determines the particular operation the computer selects. When two pins are covered, an electrical circuit is completed. When the jumper is uncovered, the connection is not made. The computer interprets these electrical connections as configuration information.

K

Kbps
Kilobits per second; one thousand bits per second.

Kbyte
Kilobytes 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 back-up copies (such as back01). Disk drive labels usually indicate the disk position (such as disk00 or disk02).

LAN
See *local area network (LAN)*.

last-in/first-out (LIFO)
A method of processing telephone calls or data in which the last call (or data) received is the first call (or data) to be processed.

LCD
See *liquid crystal display (LCD)*.

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 (LED).*

LIFO

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

light emitting diode (LED)

A light on the hardware platform that shows the status of operations.

liquid crystal display (LCD)

The 10-character alphanumeric display that shows the status of the system, including alarms.

load

The process of reading software from external storage (such as disk) and placing 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 INTUITY Message Manager requires that the INTUITY AUDIX system and the users' PCs be on a LAN.

local AUDIX machine

The Lucent INTUITY system where a user's INTUITY AUDIX mailbox is located. All users on this home machine are called *local users.*

local installation

A switch, adjunct, or peripheral installed physically near the host switch or system. See also *collocated.*

local network

An INTUITY AUDIX Digital Network in which all Lucent INTUITY systems are connected to the same switch.

login

A unique code a user must enter 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 users every time they log in to the system.

Lotus Notes

Information management software for work groups that allows individuals to share and manipulate information over a local or wide area network

LWC

See *leave word calling (LWC).*

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 allotted to each Lucent INTUITY system user for creating and storing outgoing and incoming messages.

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

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 (MANOOS)*.

manually out-of-service (MANOOS)
State of operation during which a unit has been intentionally taken out of service.

MAP
See *multi-application platform (MAP)*.

mean time between failures (MTBF)
The average time a manufacturer estimates will elapse before a failure occurs in a component or system.

media type
The form a message takes. The media types supported by the Lucent INTUITY system are voice, text, file attachments, and fax.

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

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

menu
A list of options displayed on a computer terminal screen or spoken by a voice processing system. Users choose the option that reflects what action they want the system to take.

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

message categories
Groups of messages in INTUITY AUDIX users' 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 component
A media type included in a multimedia message. These types include voice, text, file attachments, and fax messages.

message delivery
An optional Lucent INTUITY feature that permits users 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 Lucent INTUITY users that they have received new mail messages. An MWI can be an LED or neon lamp, or an audio tone (stutter dial tone).

message waiting lamp (MWL)

See *message-waiting indicator (MWI)*.

migration

An installation that moves data to the Lucent INTUITY system from another type of Lucent messaging system, for example, from AUDIX R1, DEFINITY AUDIX, or AUDIX Voice Power.

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 back-up (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 INTUITY AUDIX system information such as call type, calling party, called party, and on/off signals for message waiting indicators.

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 the Lucent INTUITY system to a switch DCIU or SCI link or connect terminals to a switch port card.

MPDM

See *modular processor data module (MPDM)*.

MTBF

See *mean time between failures (MTBF)*.

multi-application platform (MAP)

The computer hardware platform used by the Lucent INTUITY system.

multilingual feature

A feature that allows announcement sets to be active simultaneously in more than one language on the system. Mailboxes can be administered so that users can hear prompts in the language of their choice.

MWI

See *message-waiting indicator (MWI).*

MWL

See *message waiting lamp (MWL).*

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

A message that could not be delivered after a specified number of attempts. This usually means that the user's mailbox is full.

O

off-hook

See *switch hook.*

on-hook

See *switch hook.*

on-line help

A Lucent INTUITY system feature that provides information about user interface windows, screens, and menus by pressing a predetermined key. See also *help.*

open systems interconnection (OSI)

An internationally accepted framework of standards for communication between systems made by different vendors.

operating system (OS)

The set of software 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 specify program output by modifying the execution of a command. When you do not specify any options, the command executes according to its default options.

OS

See *operating system (OS).*

OSI

See *open systems interconnection (OSI).*

outcalling
A Lucent INTUITY system feature that allows the system to dial users' numbers to inform them they have new messages.

outgoing mailbox
A storage area on the Lucent INTUITY system where users can 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
1. A word or character string recognized automatically by the Lucent INTUITY system that allows a user access to his/her mailbox or a system administrator access to the system data base. 2. An alphanumeric string 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 user's AUDIX password or the administrator's system password expires. The user or administrator must then change the password.

PBX
See *private branch exchange (PBX)*.

PC
See *power converter*.

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

PEC
See *price element code (PEC)*.

peripheral device
Equipment such as a printer or terminal that is external to the Lucent INTUITY cabinet but necessary for full operation and maintenance of the system. Also called a *peripheral*.

personal directory
An INTUITY AUDIX feature that allows each user 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.

port
A connection or link between two devices that allows information to travel to a desired location. For example, a switch port connects to a Lucent INTUITY voice port to allow a caller to leave a message.

POST
    See *power on self test (POST)*.

power converter
    A device for changing AC to DC and vice versa.

power on self test (POST)
    A set of diagnostics stored in ROM that tests components such as disk drives, keyboard, and memory each time the system is booted. If problems are identified, a message is sent to the screen.

price element code (PEC)

priority call answer
    An INTUITY AUDIX feature that allows users to designate a call answer message as a priority message. To make a message a priority message, the caller presses $\boxed{2}$ after recording.

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

priority outcalling
    An INTUITY AUDIX feature that 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 telephone switching 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 Lucent INTUITY system user who owns it can access.

private messaging
    A feature of INTUITY AUDIX that allows a user 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 (F key)*.

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 user can use if that user knows the owner's list ID number and extension number. Only the owner can modify a public mailing list.

pulse-to-tone converter
A device connected to the switch that converts signals from a rotary pulses to touch tones. This device allows callers to use rotary telephones to access options in a Lucent INTUITY user's mailbox or in an automated attendant.

R

RAM
See *random access memory (RAM)*.

random access memory (RAM)
The memory used in most computers to store the results of ongoing work and to provide space to store the operating system and applications that are actually running at any given moment.

read-only memory (ROM)
A form of computer memory that allows values to be stored only once; after the data is initially recorded, the computer can only read the contents. ROM is used to supply constant code elements such as bootstrap loaders, network addresses, and other more or less unvarying programs or instructions.

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 (that is, telephone) 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 maintenance
The ability of Lucent personnel to interact with a remote computer through a telephone line or LAN connection to perform diagnostics and some system repairs. See also *remote service center*.

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 in to your system and remedy problems. See also *remote maintenance*.

remote terminal
A terminal connected to a computer over a telephone line.

remote users
INTUITY AUDIX users whose mailboxes reside on a remote INTUITY AUDIX Digital Networking machine.

REN
See *ringer equivalence number (REN)*.

reply loop escape

An INTUITY AUDIX feature that allows a user the option of continuing to respond to a message after trying to reply to a nonuser message.

reply to sender

An INTUITY AUDIX feature that allows users 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 an EIA-232 connector that places the modem in the originate mode so that it can begin to send.

restart

1. A Lucent INTUITY feature that allows INTUITY AUDIX users who have reached the system through the call answer feature to access their own mailboxes by entering the ✳ Ⓡ (Restart) command. This feature is especially useful for long-distance calls or for users who want to access the Lucent INTUITY system when all the ports are busy. 2. 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 back-up tapes, floppy diskette, or another disk device.

retention time

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

reusable upgrade kit (RUK)

A package shipped to the customer's site prior to an upgrade that contains materials the technician needs to complete the installation. This package includes an A/B switch box, a keyboard, a 25-foot coaxial cable, two T adapters, and terminations to a LAN circuit card. It remains the property of Lucent once the installation is finished.

right-to-use (RTU) fee

A charge to the customer to access certain functions or capacities that are otherwise restricted, for example, additional voice or networking ports or hours of speech storage. Lucent personnel can update RTU parameters either at the customer's site or remotely via a modem.

ringer equivalence number (REN)

A number required in the United States for registering your telephone equipment with a service provider.

ROM

See *read-only memory (ROM)*.

RS-232

See *EIA interface.*

RTS

See *request to send (RTS)*.

S

scan

To automatically play mail messages, headers, or both.

scheduled delivery time

A time and/or date that an INTUITY AUDIX user can assign to a message that tells the system when to deliver it. If a delivery time is omitted, the system sends the message immediately.

screen

That portion of the Lucent INTUITY user interface through which most administrative tasks are performed. Lucent INTUITY screens request user input in the form of a command from the `enter command:` prompt.

SCSI

See *small computer systems interface (SCSI)*.

secondary extension

A second, fax-dedicated extension that directs incoming faxes directly into a user'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 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 (SID)*.

SIMM

See *single in-line memory module (SIMM)*.

simplified message service interface (SMSI)

Type of data link connection to an integrated 1A ESS or 5ESS switch in the Lucent INTUITY system.

single in-line memory module (SIMM)

A method of containing random access memory (RAM) chips on narrow 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 (SMSI)*.

subscriber

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

surge

A sudden rise and fall of voltage in an electrical circuit.

surge protector

A device that plugs into the telephone system and the commercial AC power outlet to protect the telephone system from damaging high-voltage surges.

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 (that is, when the telephone is *on hook*). This device is raised when the handset is picked up (that is, when the telephone 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 to provide a seamless interface to callers and system users. A fully integrated INTUITY AUDIX system, for example, answers each incoming telephone call with information taken directly from the switch. Such information includes the number being called and the circumstances under which the call was sent to it, for example, covered from a busy or unanswered extension.

switch integration device (SID)

A combination of hardware and software that passes information from the switch to the Lucent INTUITY system thus allowing it to share information with non-Lucent switches. The operation of a SID is unique to the particular switch with which it interfaces.

switch network

Two or more interconnected switching systems.

synchronized mailbox

A mailbox that is paired with a corresponding mailbox in another domain and linked via software that keeps track of changes to either mailbox. When the contents of one mailbox change, the software replicates that change in the other mailbox.

synchronizer

The name given to the trusted server by the e-mail vendor, Lotus Notes.

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 to magnetic tape.

TCP/IP
　　See *transmission control protocol/internet protocol (TCP/IP)*.

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

TDM
　　See *time division multiplexing (TDM)*.

telecommunications device for the deaf (TDD)
　　A device with a keyboard and display unit that connects to or substitutes for a telephone. The TDD allows a deaf or hearing-impaired person to communicate over the telephone 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 from which a user is logging in 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 a bus, line, or cable to prevent signals from being reflected or echoed.

time division multiplexing (TDM)
　　A method of serving multiple channels simultaneously over a common transmission path by assigning the transmission path sequentially to the channels, with each assignment being for a discrete time interval.

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

tone generator
　　A device acoustically coupled to a rotary telephone used to produce touch-tone sounds.

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. Translations customize the Lucent INTUITY system and switch features for users.

transmission control protocol/internet protocol (TCP/IP)

A suite of protocols that allow disparate hosts to connect over a network. Transmission control protocol (TCP) organizes data on both ends of a connection and ensures that the data that arrives matches that which was sent. Internet protocol (IP) ensures that a message passes through all the necessary routers to the proper destination.

T/R

See *tip/ring*.

troubleshooting

The process of locating and correcting errors in computer programs (also called *debugging)* or systems.

trusted server

A server that uses IMAPI to access an INTUITY AUDIX mailbox on behalf of a user and is empowered to do everything to a user message that INTUITY AUDIX can do.

U

UCD

See *uniform call distribution (UCD)*.

Undelete

An INTUITY AUDIX feature that allows users to restore the last message deleted by pressing ✱ Ⓤ.

undelivered message

A message that has not yet been sent to an INTUITY AUDIX user's incoming mailbox. The message resides in the sender's outgoing mailbox 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 as 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 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 (UPS)

An auxiliary power unit 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 user 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 remains lit).

UPS

See *uninterruptable power supply (UPS)*.

U. S. 123

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

user interface

The devices by which users access their mailboxes, manage mailing lists, administer personal greetings, and use other messaging capabilities. Types of user interfaces include a touch-tone telephone keypad and a PC equipped with INTUITY Message Manager.

user population

A combination of different types of 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 IVC6 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 INTUITY AUDIX users.

voicing

1. Speaking a message into the Lucent INTUITY system during recording. 2. Having the system play back a message or prompt to a user.

volt

The unit of electromotive force required to produce a current of 1 ampere through a resistance of 1 ohm.

W

WAN

See *wide area network (WAN)*.

watt

The unit of electrical power required to maintain a current of 1 amp under the pressure of 1 volt.

wide area network (WAN)

A data network typically extending a local area network (LAN) over telephone lines to link with LANS in other buildings and/or geographic locations.

window

That portion of the Lucent INTUITY user interface through which you can view system information or status.

Index

D

E

F

G

T

U

V

W