

Lucent Technologies
Bell Labs Innovations



INTUITY™ Messaging Solutions
Release 4
Supplement for Planners
and Administrators

585-313-402
Comcode 108204280
Issue 1
March 1998

Notice

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

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EMC Directive 89/336/EEC
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Comments

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Acknowledgment

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

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About This Book

Purpose

The *Lucent INTUITY Messaging Solutions Release 4 Supplement for Planners and Administrators*, 585-313-402, describes new features and hardware available with INTUITY™ Release 4.4. In addition, it gives supplementary information required to plan for new migrations and upgrades.

It includes information about:

- The Release 4.4 Account Code Billing feature, complete with administration instructions
- The new MAP/100P platform
- Migration and upgrade planning

Intended Audiences

This book is intended primarily for the customer using a Lucent INTUITY system, specifically the telecommunications manager and system administrator. Secondary audiences include the following from Lucent Technologies:

- Field support — Technical Support Organization (TSO) and Global Support Organization (GSO)
- Helpline personnel
- Factory assemble, load, and test (ALT) personnel
- Provisioning project managers
- Sales and Design Support Center (SDSC)

Release History

This is the first release of this book. It will not be reissued. In the future, information from this supplement will be incorporated into the INTUITY Messaging Solutions Administration and System Description books.

How to Use This Book

The *INTUITY Messaging Solutions Release 4.4 Supplement for Planners and Administrators*, 585-313-402, is organized into the following sections:

- [About This Book](#)

This section describes the purpose of the book, intended audiences, organization, conventions, trademarks and service marks, and related resources. It also explains how to make comments about the book.
- [Chapter 1, “What’s New in Release 4.4”](#)

This chapter contains a high-level description of new features, and hardware for Release 4.4. In addition, it provides new information for migration and upgrade planning.
- [Chapter 2, “Account Code Billing”](#)

This chapter describes the Account Code Billing feature. It includes detailed instructions for administering and testing this feature.
- [Chapter 3, “MAP/100P Description”](#)

This chapter describes the hardware components of the new MAP/100P platform. It also describes component and capacity differences among the different platforms available for INTUITY AUDIX® R4.
- [Index](#)

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

Conventions Used in This Book

The following conventions are used in Lucent INTUITY documentation:

- The words “subscriber” and “user” are interchangeable terms that describe a person administered on the INTUITY system. The word “user” is the preferred term in the text; however, “subscriber” appears on most of the screens.
- The system displays *windows*, *screens*, and *menus*. “Windows” show system information ([Figure 1](#)). “Screens” request user input. This input is either a value or other specific information you must type into a field ([Figure 2](#)) or a command you must enter from the `enter` command prompt ([Figure 3](#)).

“Menus” (Figure 4) present options from which you can choose to view another menu, screen, or window.

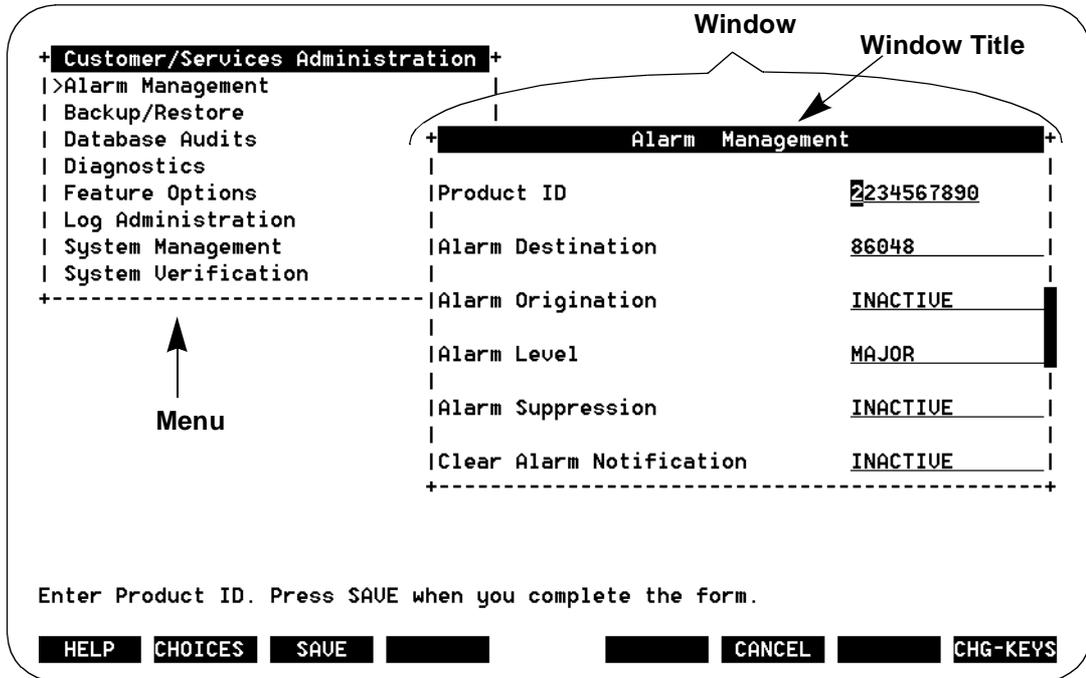


Figure 1. Example of an INTUITY Window

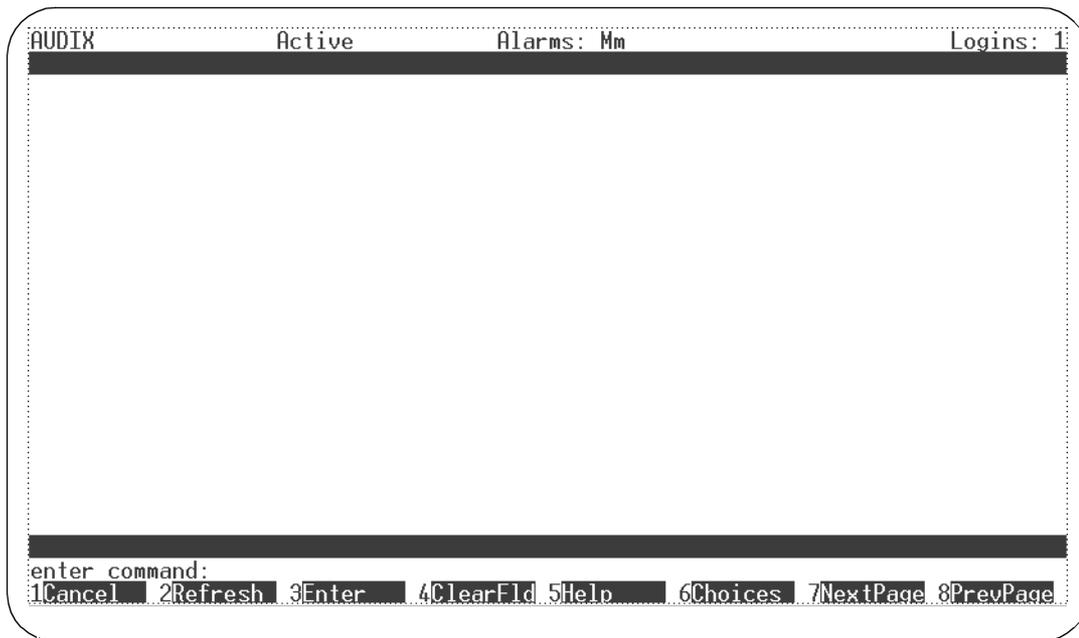


Figure 2. Example of an INTUITY Screen

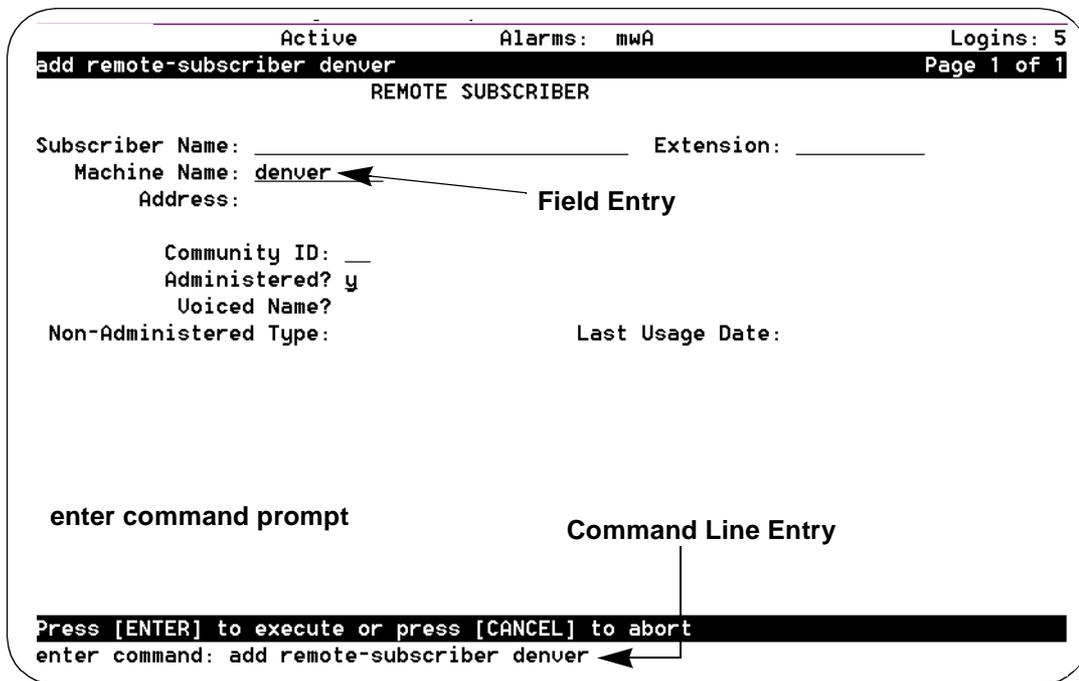


Figure 3. Example of an INTUITY Screen with an Entry in a Field and in the Command Line

```
+ Customer/Services Administration +
|>Alarm Management                |
| Backup/Restore                   |
| Database Audits                  + [REDACTED]
| Diagnostics                      |
| Feature Options                  |Product ID
| Log Administration               |
| System Management                |Alarm Destinati
| System Verification              |
```

Figure 4. 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).

- Function keys on your terminal, PC, or system screens, also known as *soft keys*, are represented as rounded 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 (F3) (Save).

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 Lucent INTUITY 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 system 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** 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 may use the following symbols to call your attention to potential problems that could cause personal injury, damage to equipment, loss of data, service interruptions, instances of toll fraud, or breaches of 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.

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- 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 the Lucent INTUITY product.

Documentation

Table 1 is an abbreviated list of the documentation related to an INTUITY R4 system. See the inside front cover for information on how to order Lucent INTUITY documentation.

Table 1. Lucent INTUITY R4 Documentation Set

Title and Document Number	Issue No.
General Information	
<i>INTUITY Messaging Solutions Release 4 Supplement for Planners and Administrators, 585-313-402</i>	1
<i>INTUITY Messaging Solutions Release 4 System Description, 585-310-235</i>	2
<i>BCS Product Security Handbook, 555-025-600</i>	6
CD-ROM Offers	
<i>INTUITY Messaging Solutions Release 4 Administration, 585-310-803</i>	4
<i>INTUITY Messaging Solutions Release 4 Reference, 585-310-804</i>	4
Planning	
<i>INTUITY Messaging Solutions Release 4 Planning for Migrations, 585-310-606</i>	2
<i>INTUITY Messaging Solutions Release 4 Change Description and Upgrade Planning, 585-310-607</i>	3
Installation	
<i>INTUITY Messaging Solutions Release 4 Supplement for Technicians, 585-313-401</i>	1
<i>INTUITY Messaging Solutions Release 4 Migration Procedures, 585-310-167</i>	4
<i>INTUITY Messaging Solutions Release 4 Upgrade Procedures, 585-310-168</i>	5
<i>INTUITY Messaging Solutions Release 4 MAP/5P System Installation, 585-310-185</i>	3
<i>INTUITY Messaging Solutions Release 4 MAP/40P System Installation, 585-310-196</i>	1

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Table 1. Lucent INTUITY R4 Documentation Set — Continued

Title and Document Number	Issue No.
<i>INTUITY Messaging Solutions Release 4 MAP/100 System Installation, 585-310-173</i>	3
<i>INTUITY Messaging Solutions Release 4 MAP/100P System Installation, 585-313-115</i>	1
<i>INTUITY Messaging Solutions Release 4 Update (addendum as necessary), comcode 108158080</i>	1
Maintenance	
<i>INTUITY Messaging Solutions Release 4 MAP/5P Maintenance, 585-310-186</i>	3
<i>INTUITY Messaging Solutions Release 4 MAP/40 Maintenance, 585-310-171</i>	3
<i>INTUITY Messaging Solutions Release 4 MAP/40P Maintenance, 585-310-197</i>	1
<i>INTUITY Messaging Solutions Release 4 MAP/100 Maintenance, 585-310-174</i>	3
<i>INTUITY Messaging Solutions Release 4 MAP/100P Maintenance, 585-313-114</i>	1
Switch Integration	
<i>INTUITY Messaging Solutions Integration with System 75, DEFINITY Generics 1 and 3 and R5/6, 585-310-257</i>	2
<i>INTUITY Messaging Solutions Integration with System 85 and DEFINITY Communications System Generic 2, 585-310-256</i>	1
<i>INTUITY Messaging Solutions Integration with MERLIN LEGEND Communications System, 585-310-255</i>	1
<i>INTUITY Messaging Solutions Release 4 Switch Integration with Digital Station Interface, 585-310-251</i>	2
<i>INTUITY Messaging Solutions Release 4 Centrex Switch Integration, 585-310-253</i>	1
<i>INTUITY Messaging Solutions Release 4 Inband and Serial Switch Integration, 585-310-252</i>	1
System Administration	
<i>INTUITY Messaging Solutions Release 4 Administration, 585-310-564</i>	3
<i>INTUITY Messaging Solutions Release 4 Alarm and Log Messages, 585-310-566</i>	2

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Table 1. Lucent INTUITY R4 Documentation Set — Continued

Title and Document Number	Issue No.
<i>AUDIX Administration and Data Acquisition Package, 585-302-502</i>	13
<i>INTUITY Digital Networking, 585-310-567</i>	3
<i>AMIS Analog Networking, 585-300-512</i>	6
<i>INTUITY Call Accounting System User Guide, 585-310-728</i>	1
<i>INTUITY Call Accounting System Quick Reference, 585-310-729</i>	1
<i>INTUITY Lodging Administration, 585-310-577</i>	1
<i>INTUITY Lodging Property Management Specifications, 585-310-234</i>	4
System Use/Subscriber	
<i>Guidebuilder for AUDIX Systems, 585-310-745</i>	2
<i>INTUITY Multimedia Solutions User's Guide, 585-310-748</i>	2
<i>INTUITY Messaging Solutions User's Quick Reference, 585-310-772 (150 per package)</i>	1
<i>INTUITY Voice/FAX Messaging User's Guide, 585-310-733</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference, 585-310-734 (150 per package)</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference-British English, 585-310-734ENB (50 per package)</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference-Canadian French, 585-310-734FRC (50 per package)</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference-Latin Spanish, 585-310-734SPL (50 per package)</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference-Greek, 585-310-734GK (50 per package)</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference-Mandarin, 585-310-734CHM (50 per package)</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference-Cantonese, 585-310-734CHC (50 per package)</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference-Brazilian Portuguese, 585-310-734PTB (50 per package)</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference-Spanish, 585-310-734SP (50 per package)</i>	1

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Table 1. Lucent INTUITY R4 Documentation Set — Continued

Title and Document Number	Issue No.
<i>INTUITY Voice/FAX Messaging Quick Reference-German, 585-310-734DE (50 per package)</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference-French, 585-310-734FR (50 per package)</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference-Dutch, 585-310-734NL (50 per package)</i>	1
<i>INTUITY Voice/FAX Messaging Quick Reference-Japanese, 585-310-734JA (50 per package)</i>	1
<i>Multiple Personal Greetings Quick Reference, 585-300-705 (150 per package)</i>	5
<i>Voice Messaging Outcalling Quick Reference, 585-300-706 (150 per package)</i>	1
<i>Voice Messaging Wallet Card, 585-300-704 (150 per package)</i>	2
<i>Voice Messaging business Card Stickers, 585-304-705 (140 per package)</i>	2
<i>A Portable Guide to Voice Messaging, 585-300-701</i>	3
<i>Voice Messaging Quick Reference, 585-300-702 (150 per package)</i>	3
<i>INTUITY Lodging Artwork Package, 585-310-739</i>	3
<i>INTUITY Lodging Artwork Package-British English, 585-310-739ENB</i>	2
<i>INTUITY Lodging Artwork Package-Canadian French, 585-310-739FRC</i>	2
<i>INTUITY Lodging Artwork Package-Latin Spanish, 585-310-739SPL</i>	2
<i>INTUITY Lodging Artwork Package-Greek, 585-310-739GK</i>	2
<i>INTUITY Lodging Artwork Package-Mandarin, 585-310-739CHM</i>	2
<i>INTUITY Lodging Artwork Package-Japanese, 585-310-739JA</i>	2
<i>INTUITY Lodging Artwork Package-Brazilian Portuguese, 585-310-739PTB</i>	2
<i>INTUITY Lodging Artwork Package-French, 585-310-739FR</i>	1
<i>INTUITY Lodging Artwork Package-German, 585-310-739DE</i>	1

Training

BCS Education and Training centers offer a wide variety of courses to enable customers to make full use of the INTUITY system and features. For more information on INTUITY training, call the BCS Education and Training Center at one of the following numbers:

- Organizations within Lucent Technologies: (904) 636-3261
- All other customers: (800) 255-8988
- Non-US Regional Training Centers
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 - Mexico City, Mexico
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You can also fax your comments to:

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Please be sure to mention the name and document number of this book.

Lucent INTUITY Messaging Solutions Release 4.4 Supplement for Planners and Administrators, 585-313-402.

What's New in Release 4.4

1

Overview

This chapter gives an overview of the feature and hardware changes available with the Lucent INTUITY™ Messaging Solutions Release 4.4. These changes may impact the way you plan for or administer your system. In addition, the chapter provides new information available for migration and upgrade planning.

New Features and Hardware

Release 4.4 introduces the following new feature and hardware platform:

- Account Code Billing
- the MAP/100P platform

Account Code Billing

Account Code Billing allows you to assign DEFINITY ECS or MERLIN LEGEND® account codes to calls originated by INTUITY AUDIX® voice ports. See [Chapter 2, "Account Code Billing"](#) for a detailed description and administration information for this feature.

MAP/100P

The MAP/100P is a new high-end hardware solution for the Lucent INTUITY R4 system. It supports up to 20,000 INTUITY AUDIX users and 4,000 INTUITY Message Manager clients. See [Chapter 3, "MAP/100P Description"](#), for a description of the MAP/100P platform and a comparison of the components and capacities of the different INTUITY R4 platforms.

Migration and Upgrade Planning

The following sections provide new information for migration and upgrade planning.

Migration Planning

When you are migrating from a DEFINITY® AUDIX® system to an INTUITY system, INTUITY 4.4 supports the transfer of user data for the DEFINITY AUDIX 3.2 release in addition to the DEFINITY AUDIX releases previously supported.

INTUITY AUDIX R1 migrations now have the option to automatically migrate remote machine profiles.

Selecting the Upgrade Method

An upgrade replaces an INTUITY Release 2 or Release 3 system with a Release 4 system. This involves replacing the R2 or R3 computer and transferring all customer data to a new computer.

During Release 4, two types of upgrades have been offered: in-service and out-of-service. However, only the out-of-service upgrade is now offered.

Account Code Billing

2

Description

Account Code Billing gives you the ability to assign DEFINITY® ECS or MERLIN LEGEND® account codes to calls originated by INTUITY™ AUDIX® voice ports. With this capability, you can track the expense of outbound fax calls, calls to print faxes from subscriber mailboxes, message notification calls, and others. Account codes are not recorded by the switch for internal calls.

To use the Account Code Billing feature, you must have:

- INTUITY AUDIX Release 4.4
- a DEFINITY ECS or MERLIN LEGEND system
- a Call Accounting System to interpret Call Detail Recording (CDR) or Station Message Detail Recording (SMDR) data

Account Code Billing is used primarily with the following features:

- Fax Messaging
- Outcalling
- Message Manager

Account codes are applied to all outbound calls placed by individual INTUITY AUDIX users, as well as AMIS analog networking calls. This includes:

- Faxes sent to a printer from a subscriber mailbox
- Fax messages sent to fax machines
- Message notification outcalls
- INTUITY Message Manager audio connections

- Call delivery messages
- AMIS analog networking calls
- Outgoing calls originated by Enhanced-List Application (ELA) lists

The account code is included in the DEFINITY ECS CDR or MERLIN LEGEND SMDR record.

DEFINITY ECS system administrators can specify filters to determine which calls (for example, local or long distance) produce a CDR record. MERLIN LEGEND administrators do not have this capability.

Administration

If you are a DEFINITY ECS user, you must first administer account codes on your DEFINITY system before you can use Account Code Billing for INTUITY AUDIX calls. See *DEFINITY ECS Administration and Feature Description, 555-230-522*, for detailed instruction for administering account codes. The MERLIN LEGEND system does not require preliminary account code administration.

To administer Account Code Billing for INTUITY AUDIX calls, you must:

1. Define the sequence that the system uses to dial digits to activate account codes.
2. Assign account codes to users.

In addition, an administration procedure is available for testing the dial sequence for outgoing calls.

Defining the Dialing Sequence

The switch begins to record account code information for a given call when it receives an account code Feature Access Code (FAC). The FAC must be received in the correct order in the sequence of digits dialed. This assures that the switch receives a signal to record the account code before the account code is sent to the switch. In other words, the INTUITY AUDIX must send the FAC, account code, call destination, and other digits to the switch in the correct sequence. This sequence varies depending upon the telephone system and the application. Therefore, you must administer a dialing sequence for the INTUITY Account Code Billing feature. This sequence is defined on the Outgoing Call Sequence screen.

To administer a dialing sequence:

1. Starting from the main menu, select

```
> AUDIX Administration
```

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

Full Command Version	Short Command Version
change system-parameters dial-sequence	ch sy d

The system displays the Outgoing Call Sequence screen ([Figure 2-1](#)).

⇒ NOTE:
[Figure 2-1](#) shows the default screen. Account codes are not activated on this screen.

```
drmid2           Active           Alarms: mWA           Logins: 2
change system-parameters dial-sequence           Page 1 of 1

                                OUTGOING CALL SEQUENCE

Dialing Sequence           █
Account Code Length
AMIS Account Code

Sequence Codes:

0-9,A-D,*,#   Direct Entry of Touch Tone Digits   N   Destination Number
P/L           Short/Long Pause(1,3 seconds)     S   Subscriber Account Code
Blank or Dash Delimiters or separators

enter command: change system-parameters dial-sequence
```

Figure 2-1. Outgoing Call Sequence Screen

3. Complete the fields in this screen using the information provided in [Table 2-1](#).

4. Press **F3** (Enter) to save this information to the system database.

The cursor returns to the command line, and the system displays the following message:

Command Successfully Completed.

Table 2-1. Field Definitions: Outgoing Call Sequence Screen

Field Name	Valid Input	Description
Dialing Sequence	0-9,*,#,A-D N S P, L Blank, -	<p>Any of the following codes can be placed at any position in the dialing sequence.</p> <p>Touchtone digits 0-9, *, # and, military touchtone digits A-D can be added directly into the dialing sequence.</p> <p>N instructs the system to insert the destination telephone number into the dial string.</p> <p>S instructs the system to insert the subscriber account code.</p> <p>P inserts a 1-second pause in the dialing sequence. L inserts a 3-second pause.</p> <p>Blanks or dashes (-) have no function in the dialing sequence, but can be inserted as visual aids.</p> <p>See "Dialing Sequence Examples" for assistance in applying these codes.</p>
Account Code Length	Any number from 0 to 16	<p>This field defines a uniform account code length for all account codes sent to the DEFINITY or MERLIN LEGEND switches.</p> <p>For the DEFINITY ECS, the account code length must match the account code length defined on the DEFINITY ECS CDR System Parameters form.</p> <p>DEFINITY ECS account codes are limited to 15 digits. MERLIN LEGEND account codes are limited to 16 digits.</p> <p>If this field is 0 or does not have a value, the Account Code Billing feature is turned off.</p>
AMIS Account Code	String of 0 to 16 digits	<p>This field defines an account code to apply to AMIS analog networking calls and to fax prints initiated by trusted server clients who have no INTUITY AUDIX mailbox. It must match the length defined in the Account Code Length field.</p>

⇒ NOTE:

If you are using the Outcalling feature to notify users of new messages, the user might include the account code FAC and account code in the dial string for message notification. In this case, the FAC, account code, and notification number are all part of the destination number. When the system constructs the dialing sequence, the account code appears twice, once as the account code and once as part of the destination number. To avoid this duplication of account codes, users should be instructed not to include the account code as part of the dial string for message notification.

However, if your users are including authorization codes in the dial string for message notification, there is no conflict with account codes. They can continue to include the authorization codes.

Dialing Sequence Examples

The following examples provide basic dialing sequences for sending account codes to the DEFINITY ECS and MERLIN LEGEND.

DEFINITY ECS

The DEFINITY ECS requires that the account code FAC be sent before the account code is sent. For the DEFINITY ECS, the account code FAC is set during the process of administering account codes on the switch. You must know this FAC before you can set the dialing sequence.

The following dialing sequence will send account codes from the INTUITY AUDIX voice ports to the DEFINITY ECS.

*75 S N

where *75 is the account code FAC, S is the subscriber account code, and N is the destination telephone number.

MERLIN LEGEND

The MERLIN LEGEND requires that the account code FAC be sent before the account code. Then the account code is terminated by a #. For the MERLIN LEGEND, the account code FAC is pre-set.

The following dialing sequence will send account codes from the INTUITY AUDIX voice ports to the MERLIN LEGEND.

#82 S # N

where #82 is the account code FAC, S is the subscriber account code, and N is the destination telephone number.

Assigning Account Codes

The INTUITY system assigns the user's extension as the default account code when no account code is assigned. This default account code does not display on the Subscriber screen. Instead, the `Account Code` field on this screen appears blank in this case.

Account codes, other than this default code, can be administered for each user.

In addition, an account code can be assigned to an Enhanced-List Application (ELA) mailbox. As with users, the default account code is the mailbox extension. When an outgoing call is placed using an ELA list the system records:

- the account code of the originating user when the user mailbox and ELA mailbox are on the same INTUITY AUDIX machine
- the account code of the ELA mailbox when the user mailbox and ELA mailbox are on different INTUITY AUDIX machines

To assign account codes to users or ELA lists:

1. Starting from the main menu, select

```
> AUDIX Administration
```

2. At the `enter command:` prompt, enter one of the following:

Full Command Version	Short Command Version
add subscriber <i>name/extension</i>	ch su <i>name/extension</i>
change subscriber <i>name/extension</i>	ch su <i>name/extension</i>

where *name/extension* is the name or telephone extension of the user who is being assigned an account code.

The system displays page 1 of the Subscriber screen ([Figure 2-2](#)).

```
drmid2           Active           Alarms: mWA           Logins: 2
add subscriber           Page 1 of 2
                                SUBSCRIBER
                                Name: █           Locked? n
                                Extension:           Password:
                                COS: class00           Miscellaneous:
Switch Number:           Covering Extension:
Community ID:           Broadcast Mailbox?
Secondary Ext:
Account Code:

Press [ENTER] to execute or press [CANCEL] to abort
enter command: add subscriber
```

Figure 2-2. Subscriber Screen; Adding an Account Code

3. Enter the account code using the information in [Table 2-2](#). (For new subscribers enter other information as needed. For instructions for adding a new subscriber, see *INTUITY Messaging Solutions Release 4 Administration*, 585-310-564.)
4. Press **F3** (Enter) to save this information to the system database.

The cursor returns to the command line, and the system displays the following message:

Command Successfully Completed.

Table 2-2. Account Code Field Definition

Field Name	Valid Input	Description
Account Code	String of 0 to 16 digits	The length of the account code you assign must match the Account Code Length defined on the Outgoing Call Sequence screen. When no account code is entered in this field, the system assigns the user's extension as the default account code, and the field appears blank. In this case, the system pads the extension with leading zeroes, or truncates the extension by removing leading digits as necessary to create the correct account code length.

Testing the Dialing Sequence

You can verify the dialing sequence using the Test Outgoing Call Sequence screen. The Test Outgoing Call Sequence screen:

- Displays the string of digits that will be dialed during an outgoing call.
- Executes the test call by attempting to dial the digits displayed in the `Dialed Digits:` field. The system displays information about the dialog that occurred during the test call on the Test Results screen.

Use this screen to test a mailbox to see if an outgoing call placed on behalf of the associated user is being made correctly.

You also can use this screen to test outgoing call functionality in general. For example, you can use the test screen to place an outgoing call to a nearby telephone to verify call completion. In addition, you can examine the contents of the `Dialed Digits:` field to account for each digit in the displayed dial string, for example, the account code feature access code, account code, pauses, and destination number. You can also test AMIS account code processing by leaving the `Mailbox to be Tested` field blank.

To test the dialing sequence:

1. Starting from the main menu, select

```
> AUDIX Administration
```

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

Full Command Version	Short Command Version
<code>test outgoing-call-sequence</code>	<code>test o</code>

The system displays the Test Outgoing Call Sequence screen ([Figure 2-3](#)).

```
drmid2           Active           Alarms: mWA           Logins: 2
test outcall     Page 1 of 1

                TEST OUTGOING CALL SEQUENCE

Port Number ( 1-18 ) █
Mailbox to be Tested
Destination Number

Dialed Digits :

Press Enter to Begin Test or Cancel to abort

enter command: test outcall
```

Figure 2-3. Test Outgoing Call Sequence Screen

3. Complete the following fields using the information provided in [Table 2-3](#).
 - Port Number
 - Mailbox to be Tested
 - Destination Number
4. Press **F3** (Enter). The system fills in the `Dialed Digits:` field with the digits defined in the `Dialing Sequence` field of the `Outgoing Call Sequence` screen. For example, the `Dialed Digits` field might contain the account code `FAC`, followed by an account code and a destination number.
5. To abort the test call, press **F6** (Cancel).

Table 2-3. Field Definitions: Test Outgoing Call Sequence

Field Name	Valid Input	Description
Port Number	Any port number less than or equal to the number of ports purchased	<p>The field allows you to direct a test call to a specific voice port. It can be used to detect problems that arise from different restriction levels among voice ports.</p> <p>This field is optional. If no value is entered, any available port will be used.</p>
Mailbox to be Tested	Any valid mailbox number	<p>This field allows you to specify a user's mailbox for the test. This user's account code is included in the Dialed Digits: field.</p> <p>If no mailbox is entered in this field, the system uses the AMIS Account Code specified on the Outgoing Call Sequence screen.</p>
Destination Number	<p>Any valid on-premises, local, long distance, or international telephone number</p> <p>In addition, to make the test compatible with AMIS and outcalling administration, the following can be included in the digit string:</p> <ul style="list-style-type: none"> ■ "P" (a short pause) ■ "Px" where x is a one digit number (the specified number of short pauses) ■ * at the beginning of a string ■ # at the beginning of a string ■ * elsewhere in the string (indicates a short pause) ■ *# (indicates a pound) ■ **# (indicates a short pause followed by #) 	A Destination Number must be specified for this test to run.

MAP/100P Description

3

Overview

Release 4.4 introduces a new high-end hardware solution for the Lucent INTUITY™ R4 system, the MAP/100P. This chapter gives a detailed description of the MAP/100P, and provides component and capacity comparisons of the INTUITY R4 platforms.

Platform Description

This section describes the MAP/100P ([Figure 3-1](#)).

General Description

The MAP/100P is a 20-slot, ten-bay system in a tower configuration. It is available as either a rack-mount unit or free-standing deskside unit. The rack-mount unit fits into an industry-standard 19-inch rack-mount cabinet.

The unit is equipped with a redundant power supply.

Five fans provide forced-air cooling for the unit. There is one power unit fan. In addition, two fan modules are located behind the front bezel. Each module is equipped with two fans that operate at half speed under normal operation. If one of the fans in the module fails, the remaining fan automatically speeds up to full speed. This provides the same air flow as when both fans are operating properly.

The unit is equipped with a 20-slot passive backplane for housing the CPU and all other adapter cards. The following base circuit cards of the MAP/100P occupy 4 of the 20 slots:

- P5 200-MHz CPU circuit card
- Video controller circuit card
- One Tip/Ring circuit card
- Remote maintenance circuit card¹

The following standard components occupy five of the ten bays:

- Diskette drive
- Cartridge tape drive
- Two hard disk drives
- SCSI terminator

The power switch, power cord receptacle, and fuse are located in the lower left rear corner of the unit. A reset switch and front keyboard connector are located in the lower front center section of the unit. LED indicators for power, disk activity, and fan and power status are located on a display panel on the front of the unit.

1. The Remote Maintenance circuit card may not be available. Check with your account representative for information about availability.

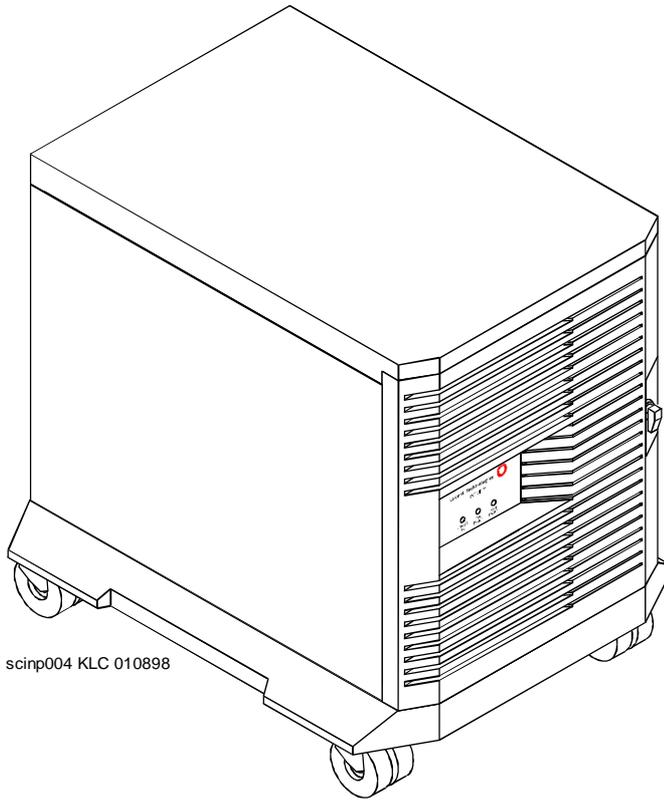


Figure 3-1. The MAP/100P

Platform Operating Requirements

[Table 3-1](#) lists operating requirements for the MAP/100P.

Table 3-1. MAP/100P Platform Operating Requirements

Component/Condition	
Operating temperature	
Continuous or short-term operation	+10 to +38° C
Nonoperating	-40 to +60° C
Humidity	
Continuous or short-term operation	5 to 80%, noncondensing
Nonoperating	5 to 90%, noncondensing
Weight	
Computer ¹	
Deskside unit	54 kg (120 lb)
Rack-Mount unit	36 kg (80 lb)
Monitor	6.7 kg (15 lb)
Height x width x depth	
Computer	
Deskside unit	48.3 x 30.5 x 55.9 cm (19 x 12 x 22 inches)
Rack-mount unit	30.5 x 48.3 x 55.9 cm (12 x 19 x 22 inches)
Monitor	34 x 33 x 37 cm (13.5 x 13 x 14.5 inches)
Volts AC (VAC) ²	
Computer	100–240
Monitor	110–240
Printer	115 ± 5%
Maximum power dissipation	325 W

1. The actual weight can be more, depending on the purchase of optional hardware components, such as additional hard disk drives or circuit cards.
2. Locate each unit within 6 feet of its power receptacle and keep the communication cables separate from the power cables.

Serial Ports and Parallel Port

On the MAP/100P, the CPU card has a single parallel port (most commonly used for the printer) and two RS-232 serial ports. Common configurations use the first serial port (COM1) for remote access. The second serial port (COM2) is usually reserved for remote maintenance.

SCSI Terminator

In the MAP/100P, the SCSI terminator provides for external SCSI device connection.

Hard Disk Drives and Speech Storage

The MAP/100P can accommodate from one to six Single Connector Attachment (SCA) plugable drives.

A portion of the first hard disk on the MAP/100P is reserved for non-speech data storage. This includes data for the UNIX operating system, the Lucent INTUITY system platform executables and data, and the Lucent INTUITY system software application executables. This disk area is very important for proper INTUITY system operations and cannot be changed or used for other purposes.

The rest of the first hard disk can be used for storing messaging components such as voice messages, users' personal greetings, and automated attendant voiced menus. The second standard disk drive is reserved exclusively for user data accessed by the messaging software applications.

Up to four additional hard disks can provide more storage space. To store the maximum hours of speech for a platform, the maximum number of hard disks and messaging storage must be purchased.

[Table 3-2](#) shows standard disk size and the maximum hours of speech storage for the MAP/100P platform.

Table 3-2. Hard Disk Capacity and Hours of Speech Storage for MAP/100P

Standard Number of 2 Gbyte Disks (Maximum)	Maximum Hours of Speech Storage (Mirrored Hours)
2 (6)	1240 (430)

Mirroring

Mirroring is an optional package on the Lucent INTUITY R4 system that enables you to store a copy of messaging information on another hard disk. In case some type of failure renders one copy of the information unavailable, the second copy is used as the source. Mirroring requires twice the disk capacity of a standard unmirrored configuration. In most cases, this means adding one or more hard disks to the Lucent INTUITY R4 system.

NOTE:

Mirrored disks provide no additional speech storage space because two copies of the exact same data are kept on the Lucent INTUITY R4 system.

Cartridge Tape Drive and Diskette Drive

The MAP/100P is equipped with a 2-Gbyte cartridge tape drive and a 3.5-inch, 1.44-Mbyte diskette drive. These peripherals are used for initial installation of software, ongoing backups of the system, and storage of data.

Keyboard

For local INTUITY AUDIX® R4 system computer access, a standard 101-key keyboard is included in the base configuration for the hardware platforms.

Modems

Lucent INTUITY R4 configurations with INTUITY AUDIX Digital Networking and remote access may require a modem. The Lucent INTUITY R4 system includes as its primary modem the Paradyne Comsphere 3820, a high-speed, 9600-baud, full-duplex modem.

In addition to the primary modem, other modems have been tested and certified for use with Lucent INTUITY R4. [Table 3-3](#) specifies all primary and certified modems for the MAP/100P platform.

Table 3-3. Modems Supported by the Lucent INTUITY R4 System

Modem	When Needed	Support Status
Paradyne Comsphere 3820	Required for <ul style="list-style-type: none"> ■ Low-speed RS-232C ■ Asynchronous digital networking ■ Remote terminal access 	Primary
MPDM	May be required for Data Communications Equipment (DCIU) switches	Primary
202T modem	Required for Centrex (SMSI) connectivity to DMS-100	Primary
7400A data module	Required for remote terminal access	Certified

Printer

An optional printer is available with the Lucent INTUITY R4 system for printing reports and screens. All platforms, including the MAP/100P, support the dot-matrix, 80-column, parallel printers shown in [Table 3-4](#).

Table 3-4. Printers Supported by the Lucent INTUITY R4 System

Printer	Support Status
NCR 6417	Primary
AT&T 570	Certified

Terminals

The Lucent 386 color SVGA monitor is recommended. The Lucent INTUITY R4 system can also be administered remotely through the use of a modem and one of the terminals shown in [Table 3-5](#). A convenience outlet is not provided on the rear of the MAP/100P for the monitor. Monitors used with the MAP/100P must have a cord capable of plugging directly into a wall outlet.

Table 3-5. Terminals Supported by the INTUITY AUDIX R4 System

Terminal	Support Status
Lucent 386	Primary
Lucent 4410 (for PROCOMM PLUS 4410 or Terranova emulation)	Certified
Lucent 513 (for Terranova emulation)	Certified
Lucent 715	Certified
Lucent 4425	Certified
vt100	Certified

Circuit Cards

This section describes circuit cards used in the MAP/100P and their functions. [Table 3-6](#) lists the circuit cards that are available with the MAP/100P. The circuit cards are then described in greater detail throughout this section.

⇒ NOTE:

The number of voice channels a Lucent INTUITY R4 system supports depends on the type of switch it is integrated with. See *INTUITY Messaging Solutions Release 4 System Description*, 585-310-235, for more information.

Table 3-6. MAP/100P Circuit Cards

Circuit Card	Required?
P5 200 CPU	Yes
Tip/Ring	Yes
Video Controller	Yes

Continued on next page

Table 3-6. MAP/100P Circuit Cards — Continued

Circuit Card	Required?
Remote Maintenance	Yes
AUDIX Communications Controller (ACCX)	No
Multi-Port Serial	No
DCIU	No
Digital Station Interface	No
Ethernet Local Area Network (LAN)	No
Speech and Signal Processor (SSP)	No

Within each system:

- A maximum of 15 ISA slots are available.
- A maximum of 11 tip/ring circuit cards are supported.
- A maximum of three ACCX circuit cards are supported.
- The Digital Station Interface circuit card is mutually exclusive with the EICON or the older GPSYNC circuit cards.
- All other circuit cards are supported one per system with no mutual exclusions. The only limitation is the total number of ISA slots available.

P5 200-MHz CPU Circuit Card

The MAP/100P supports 96 Mbytes of memory for the P5 200-MHz CPU circuit card. The memory is packaged on single in-line memory modules (SIMMs). The SIMMs are placed in sockets located in the top left corner of the CPU circuit card.

Tip/Ring Circuit Card

A Tip/Ring circuit card is required in all Lucent INTUITY R4 system configurations. The following cards are supported:

- IVC6 (AYC10)
- IVC6A (AYC29)—supported for Australia
- Next Generation Tip/Ring (AYC30)

The Tip/Ring circuit card uses two 6-pin-conductor modular cords. These cords provide three lines for telephone hook-up.

Tip/Ring Circuit Card Quantity

The number of Tip/Ring cards you need depends upon expected messaging traffic and the Lucent INTUITY R4 system configuration. As an example, the following applications use this card:

- INTUITY AUDIX Voice Messaging
- Lucent INTUITY FAX Messaging
- INTUITY Lodging

 **NOTE:**

Tip/Ring circuit cards have six channels, but you can purchase fewer voice channels on a right-to-use basis.

Standard Configurations

The standard configuration for the MAP/100P includes two Tip/Ring cards with eight ports enabled.

Maximum Configurations

[Table 3-7](#) summarizes the maximum voice channel and Tip/Ring card information for the MAP/100P. Note that it may not be possible to install the maximum number of Tip/Ring circuit cards, depending on the presence of certain other cards in the system. For a complete listing of circuit card dependencies and slot assignments, see *INTUITY Messaging Solutions Release 4 MAP/100P Maintenance*, 585-313-114.

Table 3-7. Maximum Voice Channels and Tip/Ring Cards for MAP/100P

Voice Channels	Tip/Ring Cards
64	11

Video Controller Circuit Card

The MAP/100P contains a video controller circuit card as part of the standard configuration. The video controller circuit card allows the system to interface with a monitor.

Remote Maintenance Circuit Card

The Remote Maintenance circuit card² (RMB) provides remote diagnostics of basic system components. The system supports the following Remote Maintenance circuit cards:

- AYC54 (with an internal modem)
- AYC55 (without an internal modem)

Digital Networking Circuit Card

The INTUITY AUDIX Digital Networking feature requires the AUDIX Communications Controller (ACCX) circuit card. The Lucent INTUITY R4 system supports four networking channels on the card and allows combinations of DCP and RS-232 in two-channel increments through the ACCX card.

Think of the ACCX card as having two halves; each half containing two ports. When configuring the board, you must make parallel channel assignments to each half. In other words, each half can have one DCP port (two I-channels each) or two RS-232 channels. You cannot assign three DCP ports and one RS-232 port or three RS-232 ports and one DCP port.

Channel Termination

Each ACCX card terminates four data channels in one of the following combinations:

- Two DCP ports, each providing two processor interface channels (I-channels) for data. Depending on the type of switch, only one of the two I-channels of each DCP circuit may be available for use.
 - System 75 R1V3, DEFINITY G1 R1V4, and DEFINITY G3i, G3s, or G3vs Version 1 support only one I-channel.
 - DEFINITY G3i, G3s, and G3vs Version 2 can use both of the I-channels. The option must be installed and administered on the switch before INTUITY system administration is performed. Contact a sales representative for more information on the I-channel option for the Digital Networking feature package.

 **NOTE:**

DEFINITY G3r does not have a processor interface. The G3r relies on a packet gateway to route information.

- Four RS-232 ports
- One DCP line (two I-channels) and two RS-232 ports

2. The Remote Maintenance circuit card may not be available in all locations. See your account representative for availability.

You create various arrangements of DCP and RS-232 ports on the ACCX cards. The Sales and Design Support Center (SDSC) or the International Technical Assistance Center (ITAC), as appropriate, can help determine the best configuration for you.

Circuit Card Capacities

[Table 3-8](#) summarizes the DCP and RS-232 capacities for the MAP/100P.

Table 3-8. MAP/100P Networking Capacities

	Network Maximums
ACCX networking cards	3
High-speed DCP ports	12
Low-speed RS-232 ports	12
Number of remote machines	485
Number of remote users	500,000 (regardless of the number of local users)

Multi-Port Serial Circuit Card

This multi-port serial circuit card provides eight RS-232 modular-pin serial ports. Common configurations will use the multi-port serial circuit card for connecting to:

- A property management system (PMS)
- A call accounting system (CAS)
- A remote administration terminal
- Lucent 5ESS®

Switch Interface Circuit Cards

In addition to connecting through the multi-port serial circuit card, the system can be connected to a switch using a:

- DCIU circuit card
- Digital station interface circuit card

DCIU Circuit Card

The DCIU circuit card allows connection to the following switches:

- System 75
- System 85

Digital Station Interface Circuit Card

The digital station interface circuit card allows connection to the NORTEL MERIDIAN 1 and MERIDIAN SL-1 switches.

Ethernet LAN Circuit Card

The Ethernet Local Area Network (LAN) is a 10-Mbyte/second circuit card that supports TCP/IP for use with a LAN. Applications that use the LAN include TCP/IP Digital Networking, Lucent INTUITY Message Manager, and INTUITY AUDIX Internet Messaging. For more information, see *INTUITY Messaging Solutions Release 4 System Description*, 585-310-235.

SSP Circuit Card

The speech and signal processor (SSP) circuit card provides for up to 30 text-to-speech channels. For more information, see *INTUITY Messaging Solutions Release 4 System Description*, 585-310-235.

Platform Component and Capacity Comparisons

The following tables compare the components and capacities of the different INTUITY R4 platforms.

Comparison of Platform Components

Table 3-9 shows the differences in hardware components of the Lucent INTUITY R4 platforms.

Table 3-9. Comparison of Release 4 Platform Components

Component	MAP/5P	MAP/40P	MAP/100P
CPU	200-MHz Pentium	200-MHz Pentium	200-MHz Pentium
RAM (new systems)	64 Mbyte 2 x 32 Mbyte	64 Mbyte 2 x 32 Mbyte	96 Mbyte 2 x 32 Mbyte 2 x 16 Mbyte
RAM expansion	To 128 Mbyte (two expansion slots available)	To 128 Mbyte (two expansion slots available)	To 128 Mbyte (replace the 2 x 16 with 2 x 32)
2-Gbyte hard disks (maximum)	1 (2)	1 (2)	2 (6)
Maximum number of bays available for optional hard disks	1	1	4
Mirroring	Yes	Yes	Yes
Hours of message storage	Disk 1 = 140	Disk 1 = 140 Disk 2 = 270	Disk 1 = 160 Disk 2 = 0 Disks 3-6 = 270
Maximum hours (mirrored hours)	140 (140)	410 (140)	1240 (430)
IMAPI sessions	32	64	96
Requires LAN card			
Used by Message Manager, ELA, and trusted servers			

Continued on next page

Table 3-9. Comparison of Release 4 Platform Components — Continued

Component	MAP/5P	MAP/40P	MAP/100P
Trusted Servers supported	32	64	96
Text-to-Speech sessions	4 SSP not available	4 30 with SSP board	4 30 with SSP board
Slots available for optional circuit cards	4	8	16
System serial ports	COM1– Available COM2– Dedicated always	COM1– Available COM2– Dedicated always	COM1– Available COM2– Dedicated always
Maximum number of optional multi-port cards	1	1	1
Available system serial port totals with optional multi-port card	9	9	9
Maximum number of networking cards (non-TCP/IP)	1	2	3
Maximum number of optional TCP/IP networking channels	4	4	4
Maximum number of networked systems	485	485	485
Maximum number of IVC6 voice cards (no optional circuit cards present)	2	7	11
Maximum number of DCIU cards	1	1	1

Comparison of Platform Capacities

[Table 3-10](#) shows system maximum comparisons among the hardware platforms. No platform can be equipped to the maximum with all features. Additional applications such as Fax Messaging, Internet Messaging, ELA, Electronic Mail Messaging and Digital Networking can have a significant impact on the number of voice ports, the number of hours of voice storage, and the number of users the INTUITY AUDIX system can accommodate.

Maximum channel capacities vary with non-Lucent switches.

Table 3-10. Comparison of Release 4 Platform Capacities

Maximum Number of Channels or Users	MAP/5P	MAP/40P	MAP/100P
Voice channels (ports)	18	42	64
Intuity AUDIX users	15,000	15,000	20,000
Automated attendants	No maximum; however, each Auto-attendant counts as one user	No maximum; however, each Auto-attendant counts as one user	No maximum; however, each Auto-attendant counts as one user
Bulletin boards	No maximum; however, each bulletin board counts as one user	No maximum; however, each bulletin board counts as one user	No maximum; however, each bulletin board counts as one user
Digital networking channels ¹	8	8	12
Maximum high-speed (DCP) networking channels	4	8	12
Maximum low-speed (RS232) networking channels	4	8	12
Local users (with digital network and/or AMIS analog network)	Up to 15,000 depending upon the number of remote users	Up to 15,000 depending upon the number of remote users	20,000
Remote users (with digital network and/or AMIS analog network)	Up to 213,000 remote users with 1,000 local users	Up to 213,000 remote users with 1,000 local users	500,000 regardless of the number of local users

Continued on next page

Table 3-10. Comparison of Release 4 Platform Capacities — Continued

Maximum Number of Channels or Users	MAP/5P	MAP/40P	MAP/100P
AMIS analog networking channels	All voice ports on the system can be used	All voice ports on the system can be used	All voice ports on the system can be used
Intuity Message Manager clients	1,000	2,000	4,000
IMAPI sessions	32	64	96
Switches using DCS networking	20	20	20

-
1. Depending upon your system's configuration, if Digital Networking is used, it may reduce the number of available voice ports by 6 for each networking card used (to a maximum of two cards, resulting in a maximum reduction of 12 voice ports.)
-

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