Meridian Mail

Message Services Module

Customer Administration Guide for Multi-Customer Systems

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About this document

This document describes the administration procedures to be completed by the Message Services Module (MSM) customer administrator. It is intended to be used in conjunction with the *System Administration Guide* (NTP 557-7001-300).

How the MSM library is organized

This document is part of the MSM documentation that supports the Nortel line of MSM products. MSM documentation is a subset of the Meridian Mail library.

The Meridian Mail Message Services Module (MSM) library is structured in numbered layers, and each layer is associated with a Nortel product. To understand MSM products, you need documents from the following layers:

- Meridian Mail MSM basic documents in the 557-1001 layer
- MSM documents in the 557-7001 layer

MSM documents and other documents that contain related information are listed in “Finding MSM information” in the MSM *Product Guide* (NTP 557-7001-010).

Documents referenced

The following documents are referred to in this document:

Number	Title
557-7001-010	*Meridian Mail MSM Product Guide*
557-7001-100	*Meridian Mail MSM Planning and Engineering Guide*
557-7001-300	*Meridian Mail MSM System Administration Guide*
557-7001-305	*Meridian Mail MSM System Administration Tools*
557-7001-310	*Meridian Mail MSM Translation Guide*
555-7001-325	*Meridian Mail Voice Menus Application Guide*
555-7001-326	*Meridian Mail Voice Forms Application Guide*
555-7001-327	*Meridian Mail Fax on Demand Application Guide*
555-7001-335	*Meridian Mail Networking Services Administration Guide*
557-7001-340	*Meridian Mail AdminPlus on the MSM System Administration Guide*
557-7001-501	*Meridian Mail MSM Routine Maintenance Procedures*
557-7001-503	*Meridian Mail MSM Trouble-locating and Alarm-clearing Procedures*
557-7001-504	*Meridian Mail MSM System Installation and Modification Guide*
297-7001-001	*Family Guide to Northern Telecom Publications*
——	*Meridian Mail Voice Messaging Quick Reference Card*
——	*Meridian Voice Forms Implementation Guide*
——	*Meridian Mail Voice Forms Transcriber User Guide*
——	*Meridian Mail Call Answering User Guide*
——	*Meridian Mail Voice Messaging (VMUIF) User Guide*

Using this document

This manual describes the basic administration tasks that you will carry out on your MSM system. It assumes that all the hardware, including the administrator's terminal and printer, is in place. Administration facilities are used in the initial setup of your system as well as for routine maintenance.

Additional administrative tools and utilities are available. These are described in the *System Administration Tools Guide* (NTP 557-7001-305).

This guide covers the following groups of administration tasks:

- administrative role and responsibilities

  Your role and responsibilities as administrator are covered in Chapter 1, "An overview of administration".
- procedures for setting up and administering the system

  If you are setting up Meridian Mail on the MSM, read Chapter 2 "Setting up customer groups" before commencing with any of the procedures described in this guide. When setting up for the first time, certain procedures need to be performed before others. The "Setting up the system" chapter explains this order and points out those parameters that *must* be configured.

  Other maintenance procedures that should be performed on an ongoing basis are described throughout the rest of this guide. These include voice services, procedures carried out using the telephone (recording personal verification greetings, announcements and a custom call-answering greeting) and procedures for administering users and classes of service.

  Note: Your system may not include all of the features described in this guide. To obtain features that you do not have, contact your sales representative.

Organization of content in chapters

The organization of this manual reflects the hierarchical set of procedures accessible from the Main Menu. Each item that appears in the Main Menu has a corresponding chapter describing the administrative tasks, and the screens and fields that you interact with to complete the tasks. Each screen and subscreen in the administrative facility is described using the following structure:

- Introduction

  This section includes a brief description of the menu, and any concepts or rules necessary to use the menu.
- Menu

  The menu section provides an illustration of the menu and its softkeys.
- Screen

The screen section provides an illustration of the screen and its softkeys.

- Field descriptions

  The field descriptions section includes a description of each field as it appears on the screen, stating requirements your entries must meet and any default information supplied by the system.

- Choice of actions

  The choice of actions section includes a description of available softkeys and their actions.

- Task-oriented procedures

  The task-oriented procedures section includes a step-by-step description of the administrative task associated with the administrative function being described.

  — Starting point

  The starting point in the procedure tells you where in the menu hierarchy the procedure begins.

  — Body of procedure

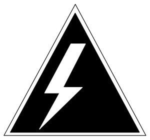
  The body of the procedure is a numbered list of the required steps and any additional information you require to complete a task.

The meaning of the precautionary messages in this document

Danger and caution messages in this document indicate potential risks. These messages and their meanings are listed in the following chart.

Message	Significance
DANGER	Possibility of personal injury, or death
CAUTION	Possibility of equipment damage, loss of data, or service interruption

Examples of the precautionary messages follow.



DANGER
Risk of electrocution
The inverter contains high voltage lines. Do not open the front panel of the inverter unless fuses F1, F2, and F3 have been removed first. Until these fuses are removed, the high voltage lines inside the inverter are active, and you risk being electrocuted.

CAUTION
Risk of damage to backplane connector pins
Use light thumb pressure to align the card with the connectors. Next, use the levers to seat the card into the connectors. Failure to align the card first may result in bending of the backplane connector pins.

Typographic conventions

The following conventions are used throughout this guide:

Text item	**Typographic convention**	**Examples**
Softkeys	Softkeys are displayed on the various administration menus and screens and indicate which keyboard function keys carry out specific MSM tasks. These are referred to in the document by using the label of the softkey (as displayed in the given menu), delimited by square brackets.	[Exit] [OK to Delete] [Save]
Keyboard keys	Keyboard keys (or hardkeys) are referred to by indicating the label of the key, delimited by angle brackets.	<1> <2> <Return>
Text input	Where you are required to type in specific text, the characters are presented in bold instead of using angle brackets.	**servord**, **custpwd** (not <s><e><r><v><o><r><d>)
Fields in administration screens	When the name of a field is referred to, it appears in italics and in a different typeface than the body of the document.	Enter a unique identifier in the *Announcement ID* field.
Values in fields	When the choices presented in a selectable data field are discussed, they are in quotes.	1 The default is “Yes”. 2 Select “Custom” to create a set of restriction/permission codes unique to this thru-dialer.

Text item	**Typographic convention**	**Examples**
Spoken words	Suggested wordings for prompts (such as for voice menus or voice forms), or words which you may be required to speak into the telephone receiver, are in italics and between double quotation marks.	An appropriate prompt would be *“Please wait on the line, an attendant will be with you shortly”.*
References	References to section headings and chapter titles are placed in double quotation marks. References to book titles are shown in italics.	See “Time-of-Day Controls” in the “Voice Administration” chapter. See the *Translations Guide* (NTP 557-7001-310) for details.

Chapter 1: An overview of administration

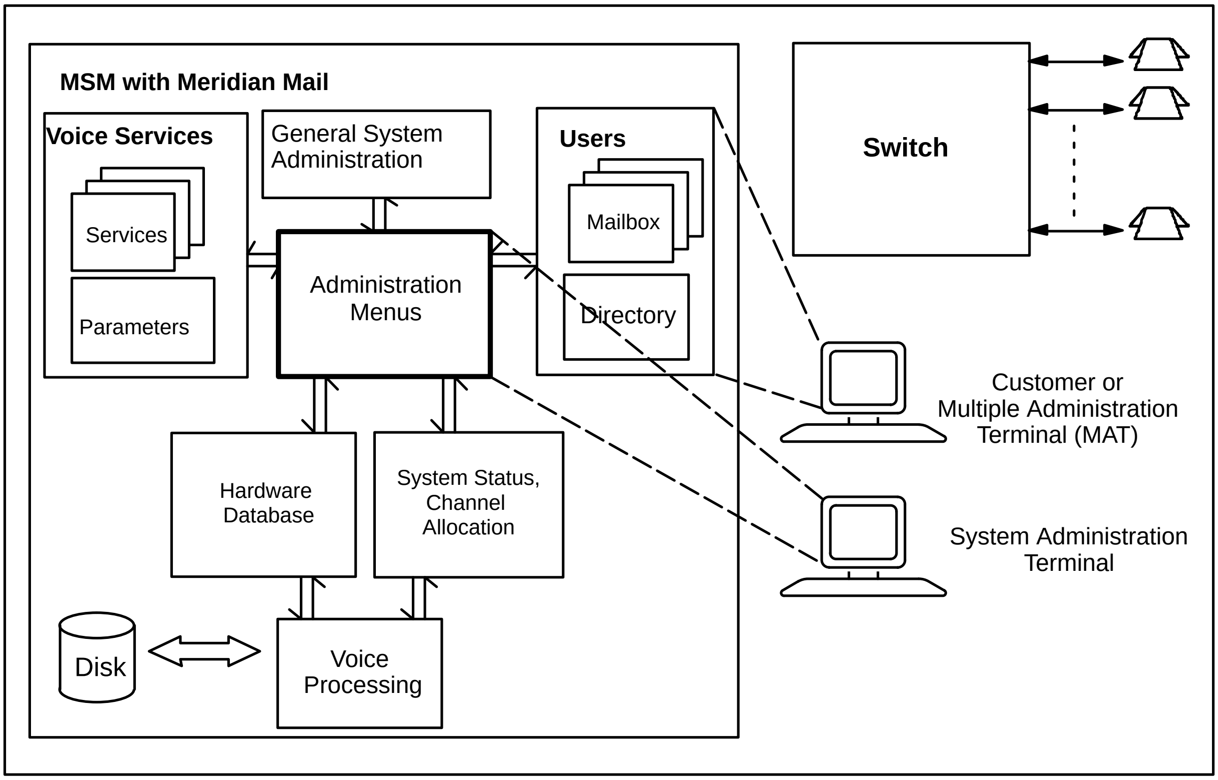
As administrator, your duties include setting up the initial system configuration (normally a one-time operation) and performing routine procedures needed for effective operation of the system. The setup procedures are described in Chapter 2, “Setting up customer groups”.

When you are setting up your system, you may also have to retrieve data related to the performance and use of the Meridian Mail Message Services Module (MSM) system. In your role as administrator, you may also be required to review and analyze system data to identify early indications of resource shortages. This data is used in system provisioning calculations. In addition, you may be required to collect and analyze data for detecting and correcting equipment faults.

Administrative procedures are performed either through menu-driven screens at the administration terminal or through a telephone set. You may need to carry out some procedures frequently, perhaps daily, and others only occasionally.

Figure 1-1 illustrates a conceptual view of the customer administration tasks, and Figure 1-2 illustrates the hierarchy of customer administration menus available at the administration terminal.

Figure 1-1
Administration overview



Users and subscribers

Users that belong to Voice Messaging User Interface Forum (VMUIF) customer groups are referred to as *subscribers* since they subscribe to services. Users that belong to Meridian Mail User Interface (MMUI) customer groups are referred to as *users*. However, all of the administration screens refer simply to users. For example, User Administration applies to both MMUI users and VMUIF subscribers. This administration guide will refer to both users and subscribers.

Levels of administration

There are two levels of administration for multi-customer systems:

- system administration
- customer administration

This publication describes the customer administration tasks. The system administration tasks are described in the *System Administration Guide* (NTP 557-7001-300).

Customer administration

Your system is partitioned into customer groups. Apart from enabling certain features on your system, additional steps may be required in order to make them available to the users in your customer group(s).

If any of the following features are installed on your system, they must be enabled in at least some of the system classes of service that have been defined by the system administrator. At least one class of service with the feature enabled must then be assigned to the customer groups that require the feature. Only those users who are assigned to these classes of service will have access to the feature.

- Dual Language Prompting (MMUI customer groups only)
- Delivery to Non-Users
- Remote Notification
- AMIS Networking

If any of the following features are enabled on your system, you must enable them in the General Options screen at the customer administration level for each customer group that requires the feature:

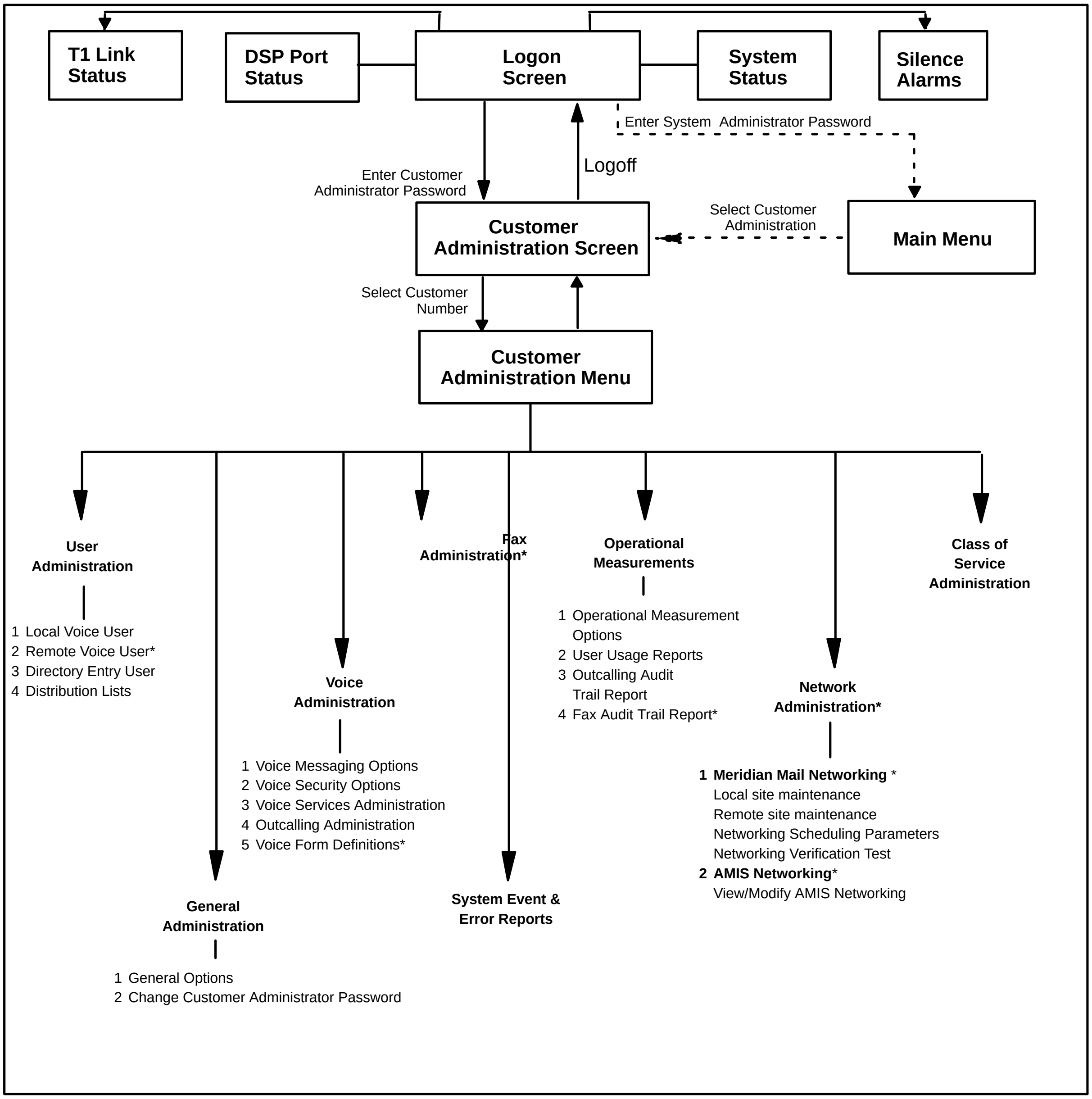
- Voice Menus (includes voice menus, announcements, thru-dialers, and Time-of-Day Controllers)
- Voice Forms
- Meridian Networking

Any parameters that you configure in the customer administration screens (such as the broadcast mailbox number) affect only the current customer group. Certain parameters (such as defining restriction and permission dialing codes and defining the SEER printer port name) are configured at the system administration level and affect all customer groups. System administration is described in the *System Administration Guide* (NTP 557-7001-300).

Customer administration menu hierarchies

Figure 1-2 shows the hierarchy of menus and screens that are available for the customer administrator.

Figure 1-2
Customer Administration menu hierarchy



* Available only if the necessary feature is enabled

Tasks of the customer administrator

Customer administration can be broken down into the following tasks:

- ***User Administration***

  User administration involves the maintenance of a current information base of users and customer distribution lists, as well as carrying out other user-related functions such as recording personal verifications for users.

- ***General Administration***

  General administration involves configuring General Options (selecting classes of service, enabling features, and configuring an attendant DN for each customer group); and changing the customer administrator password.

- ***Voice Administration***

  Voice administration involves the administration of all voice services used by your organization, assigning phone numbers (DNs) to voice services, setting operational parameters and security for voice services, and administering voice services (such as Voice Menus, Announcements, Thru-Dialers, Time-of-Day Controllers, and Voice Forms), and Outcalling (Remote Notification and Message Delivery to Non-users).

- ***Fax Administration***

  Fax administration involves configuring parameters that affect all fax services configured on the system. These parameters include the maximum number of fax delivery channels, the maximum number of call attempts to handle per channel acquisition, the maximum resolution of fax reception (normal or fine), the maximum number of pages allowed per fax item, fax delivery retries, allowed times for delivery of fax items on weekdays and weekends, and the delivery time limit.

  Note: The Fax on Demand feature is described in detail in the *Fax on Demand Application Guide* (NTP 555-7001-327).

- ***System Event and Error Reports (SEERs)***

  System event and error reports display continual information about errors and events occurring in the system. This information is used for troubleshooting purposes.

- ***Operational Measurements***

  Operational measurements involve collecting statistical data on users' use of the system. This includes local usage, and AMIS Networking and Meridian Networking usage.

- ***Network Administration***

  Network administration involves setting the AMIS compose prefix and local number (part of the system access number). Both of these numbers are customer-specific. You can also disable/enable outgoing and incoming messages for a particular customer group, if necessary. All other AMIS administration is done at the system administration level.

  Note: Only one customer group can have Meridian Networking enabled. All customer groups can have access to AMIS Networking.

- ***Class of Service Administration***

  Class of service administration involves viewing class of service definitions, if necessary, before assigning them to a customer group. Classes of service are created, modified, and deleted by the system administrator only. However, as customer administrator, you may need to check these definitions from time to time.

  Meridian Mail classes of service are essentially mailbox classes of service since each mailbox on the system is assigned to a particular class of service. The class of service determines which features are available to the user as well as certain minimum and maximum operating parameters. Certain parameters are common to both the VMUIF and MMUI interfaces, whereas others are specific to a particular interface.

At the administration terminal

The setup and operation of your system involves work at the administration terminal. Through the administration terminal, you can access the screens and menus used to define the characteristics and parameters of your system.

Each chapter in this manual describes procedures carried out at a particular menu or set of screens. Some of the administration tasks that you can access are described in more detail in separate user guides. A general description of these tasks is provided in this document for consistency along with a reference to the appropriate user guide.

Multiple administration terminals

> ***Note:*** In previous releases of Meridian Mail MSM, MATs were referred to as UATs.

Secondary terminals can also be connected to the MSM and used to access a subset of the customer administration functionality. All administration terminals connected to the MSM are referred to as multiple administration terminals (MATs). Up to four multiple administration terminals are supported: one main administration terminal and up to three secondary terminals.

From the MATs, you can

- perform user administration
- perform customer-specific voice services administration (such as creating or modifying voice services)
- view class of service definitions

If more than one administrator accesses a user, customer distribution list, or voice service at the same time, the administrator who first gained access to the entry is the only one who can modify the information. The information displayed on the other terminals will be read-only, and the [Exit] softkey will be available instead of the [Save] and [Cancel] softkeys.

For information about configuring multiple administration terminals, see the “Configure MATs” chapter in *System Administration Tools* (NTP 557-7001-305).

At the telephone

To create the various voice recordings required for your system, you must use a telephone as well as an administration terminal. The basic procedures for creating voice recordings are described in detail in Chapter 4, “Making recordings.” You may create the following types of voice recordings:

- personal verification recordings
- customized customer greeting (MMUI only)
- introductory tutorial greeting (VMUIF only)
- broadcast mailbox personal verification

You can also perform Voice Prompt Maintenance from the telephone.

Personal verification recordings

A recording of a person’s name (and extension) may be recorded for each user. When recorded, it is played to callers instead of the user’s phone number, making identification easier. Personal verifications can either be recorded by the administrator at the administration terminal or by users using their telephone sets.

Verifications can also be recorded for Meridian Mail network sites. If no verification is recorded, a recording of the site number is played when callers are connected to a remote user’s mailbox to leave a message. This is used to identify the site. If a personal verification has been recorded, the site name is played instead, making identification easier.

Customized call answering customer greeting

This greeting is played to external callers who reach an MMUI call answering service and is simply a recording of the customer group name (for example, the company’s name). It is played before any personal greetings.

Introductory tutorial greeting

This greeting is played to users belonging to VMUIF customer groups only, the very first time they log on to their mailbox. It describes how to use the voice messaging system and the features that are available.

Broadcast mailbox personal verification

A broadcast message is deposited in the mailboxes of all Meridian Mail users in a customer group.

Voice Prompt Maintenance

This is the routine recording of prompts, announcements, and greetings used in various voice services.

Nightly system audits

During the night, several background utilities run to reclaim system resources and improve the performance of the system. These utilities are

- DR (organizational directory) audit
- Volume server audit
- Garbage daemon
- Operational Measurements collector

> **CAUTION**
> **Risk of administration tasks being unsuccessful during an audit**
> You should not try to perform any administration tasks during an audit. These tasks may be unsuccessful and could cause problems.

DR audits

The *organization directory*, or DR, contains information about users, voice services, and customer groups. A DR audit is performed if the DR has changed during the day due to administrative modifications (such as adding or deleting users and/or services), or if the previous evening's audit did not finish. The purpose of the audit is to rebalance (clean up) the system by removing obsolete data, reorganizing internal directories and so on.

The DR changes whenever you do any of the following:

- ***User Administration***

This includes adding, modifying, or deleting users

- ***Voice Services Administration***

  This includes adding, modifying, deleting Directory Numbers (DN) in the Voice Services Directory Number (VSDN) table, as well as adding, modifying or deleting voice and fax service definitions (announcements, thru-dial services, Time-of-Day Controllers, voice menus, and fax items).

- ***Adding customer groups***

If performed, the nightly audit begins at 3:30 a.m. (by default) and can take anywhere from a few minutes to *three hours*. Three hours is the maximum duration of the audit. If the audit is not completed during this time, it will be completed during the next audit. The length of the audit depends on how many changes have been made. You will know when the audit starts and ends because a SEER is generated at the start and the end.

CAUTION
Risk of operations failure
If an audit is in progress, do not perform any User Administration, or Voice Services Administration, or add any customer groups. These operations will fail if attempted during the audit, and a number of SEERs, including 3135, will also be generated.

Volume server audits

The volume server audits are always done on every volume in the system each night. This audit reclaims disk space by reorganizing the file system. It also rebuilds system information. The audit begins at 1:30 a.m. and will continue until it is finished. The length of the audit depends on how many files have to be reorganized. You will know when the audit starts and ends because a SEER is generated.

Garbage daemon

The garbage daemon is started by the volume server audit to delete messages that users have read and that have passed their maximum read message retention limit. The garbage daemon runs until it is finished and all of the old messages have been deleted. The *Maximum Read Message Retention* field is configured in the Voice Messaging Options screen. For more information about the Voice Messaging Options screen, refer to Chapter 7, “Voice Administration.”

The length of time that the garbage daemon runs depends on how many messages have to be deleted. You will know when the garbage daemon starts and ends because a SEER is generated.

Operational Measurements collector

The Operational Measurements collector starts at 4:30 a.m. and does three things:

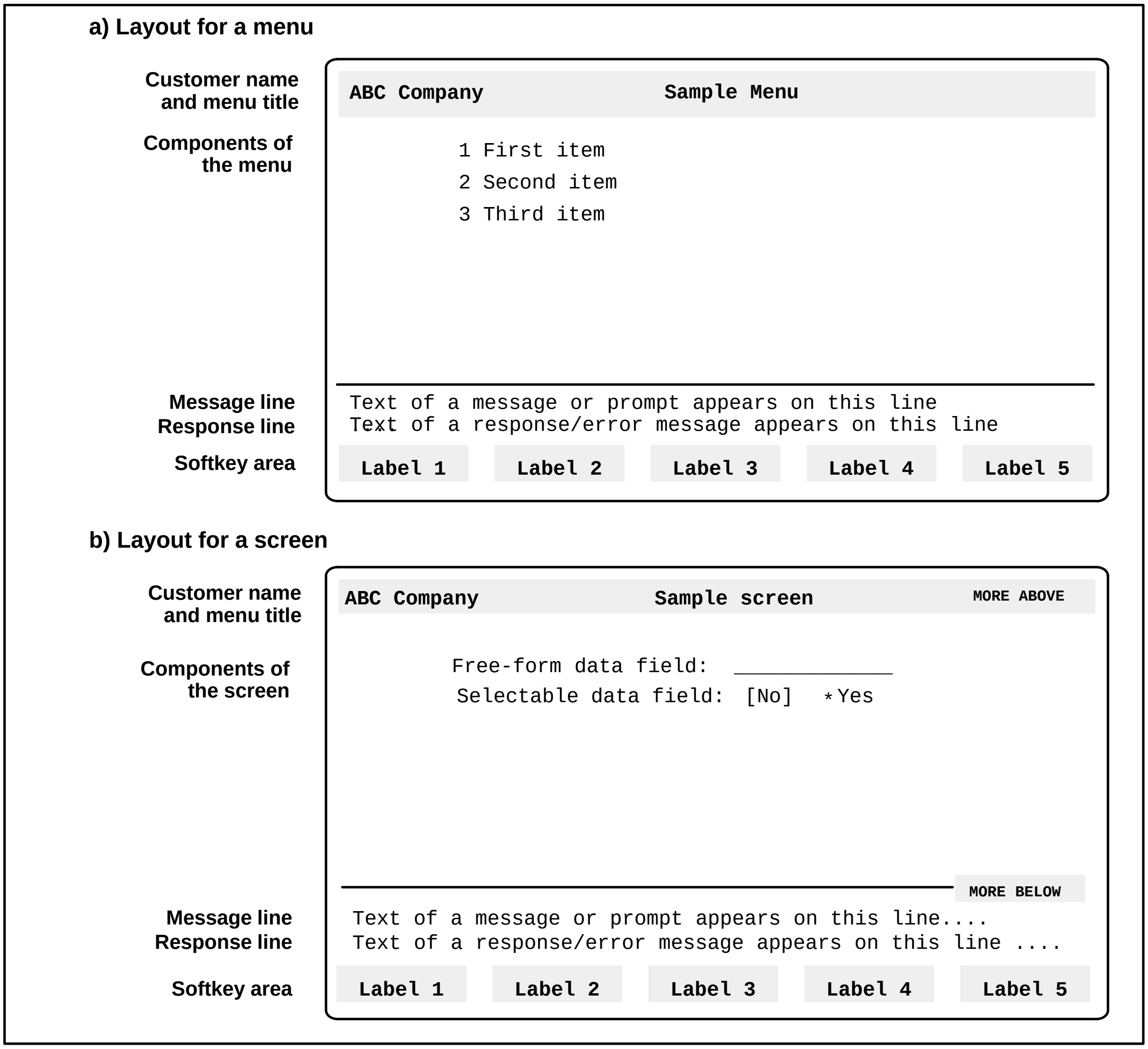
- summarizes the billing data that has been collected for each day
- creates a user usage report that totals the billing data for each user on the system
- deletes the old billing information (that is, information that is older than the date entered in the *Number of Days of User Usage Data Stored* field in the Operational Measurements Options screen)

Customer Administration screens: menus and screens

Customer Administration screens and menus conform to the general layout shown in Figure 1-3. The title of each screen or menu appears on the first line of the screen. For menus, this is followed by a list of numbered items. For screens, the title is followed by fields for viewing or entering information. The bottom four lines of the screen are reserved for system prompts, responses, error messages, and softkey identification.

Two types of fields appear in administration screens: free-form data fields, where you can overwrite existing entries and enter new data; and selection fields, where the system presents a set of options from which you can select. Some fields may already be filled in with default values. Usually, this default value can be changed as needed.

Figure 1-3
General screen layout



* In this guide, items surrounded by square brackets indicate a selected option. On MSM screens, selections are actually shaded.

Softkeys

Softkeys appear on the bottom two lines of menus and screens and are displayed in reverse video (dark characters on a light background). The softkeys that appear change depending on the menu or screen and may change with the function you are performing. They correspond to function keys F6 through F10 on the top row of the keyboard. They also correspond to the keys on the keypad shown in Figure 1-4.

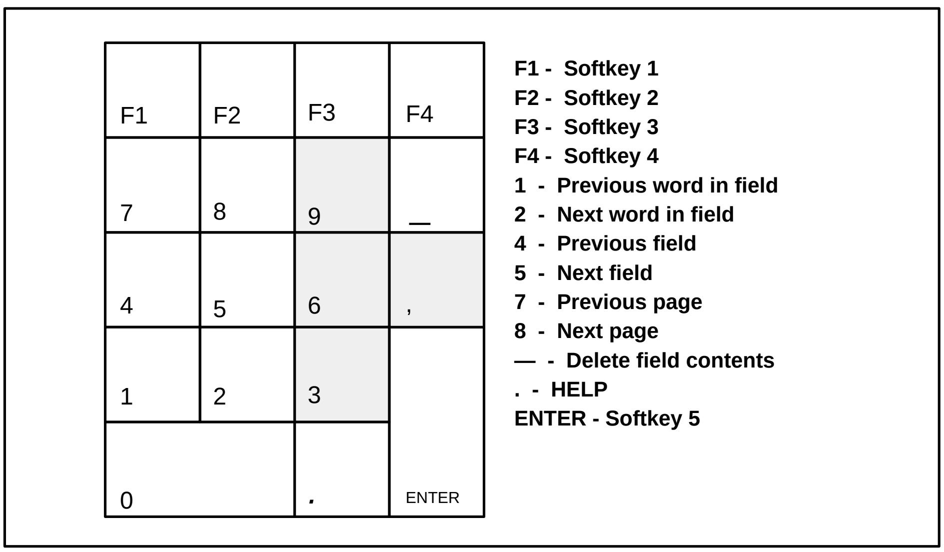
Keypad functions

Figure 1-4 also shows the other functions that are available on the keypad by pressing the keys shown.

VT220 terminals and the following VT220-compatible terminals are supported: VT320, VT420, HP700/22, and HP700/32.

Note: The functions shown in Figure 1-4 are only available if the application keypad is in application mode. (Application mode is the default whenever the system is rebooted.) If you choose to work with a numeric keypad (where the numeric keys generate numbers when you press them), then only the F1, F2, F3, and F4 keys retain the functions indicated. The keypad is set to numeric mode through the terminal's setup function; for details, consult the documentation for your terminal.

Figure 1-4
Numeric keypad function keys



Note: Shading indicates that the key has no function.

The Help key

On-line help is available for most of the menus and screens including the Main Menu. The <Help> key on the keyboard can be used to display information on whatever screen you are working in. If you require help with a screen, press the <Help> key. Alternatively, you can press the period (.) on your application keypad (Figure 1-4). The system will display a screen showing explanations of all the fields on the menu or screen you are working in. When you are done, press [Exit] on the Help screen to return to the menu or screen you were working in. Figure 1-5 shows an example of the Help screen for the Customer Administration Menu.

Figure 1-5
MSM Help example

```
                              MSM Help

Customer Administration Menu
The Customer Administration Menu provides access to all administrative
functions
Softkey Available:
Exit           Exits to Customer Administration.
Description of Menu Items:

General        To maintain general system options and perform
               administration tasks.

________________________________________________________________________

  Exit        Using                                        Keypad
              Help                                          Help
```

Multipage screens

Certain screens may contain more fields than can be displayed at once on the screen. Additional pages are viewed by

- ***Scrolling***

  If you see “MORE BELOW” at the bottom of a screen or “MORE ABOVE” at the top of a screen, use the down-arrow key or the <Next Scrn> hardkey to view the next page. Use the up-arrow key or <Prev Scrn> hardkey to return to the previous screen. When the “MORE BELOW” prompt disappears, you are at the end of the screen; when the “MORE ABOVE” prompt disappears, you are at the top of the screen.

  Note: The down-arrow key will only display the last input field even if there is text beyond it. To view any text that may appear at the very end of a screen, use the <Next Scrn> hardkey.

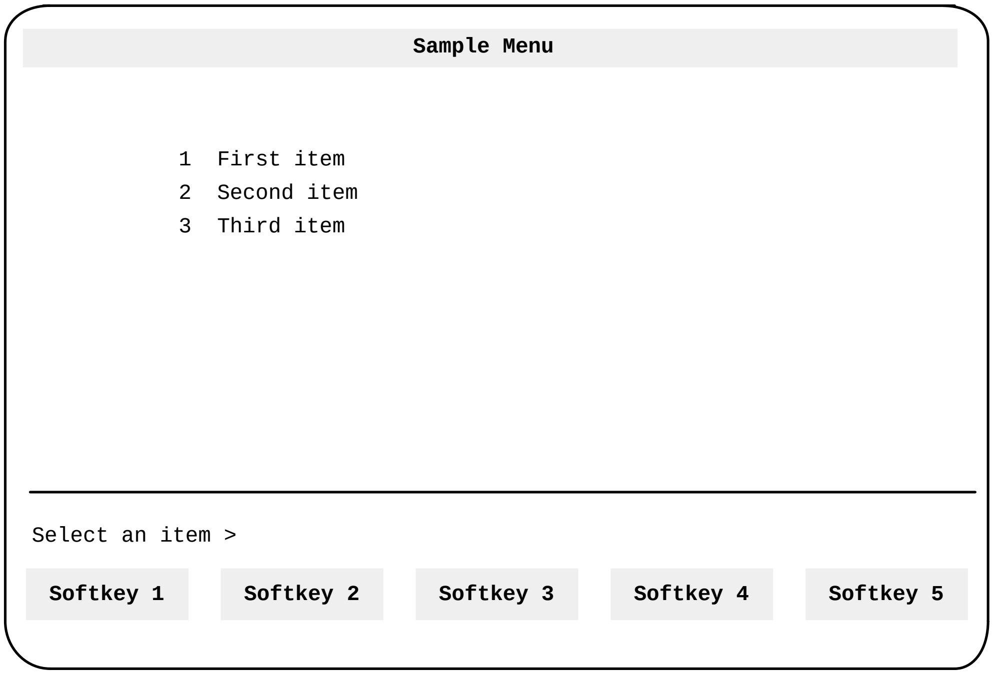
- ***Paging***

  Press the [Next Page] softkey if it is displayed.

Selecting a numbered item in a menu

In a menu (Figure 1-6), each item has a number. The system displays a prompt requesting you to select an item. To select a menu item, type the corresponding number and press <Return>. The number you enter appears next to the “Select an item >” prompt. When you press <Return>, the system displays a submenu or screen corresponding to the selected item.

Figure 1-6
Selecting a numbered item in a menu

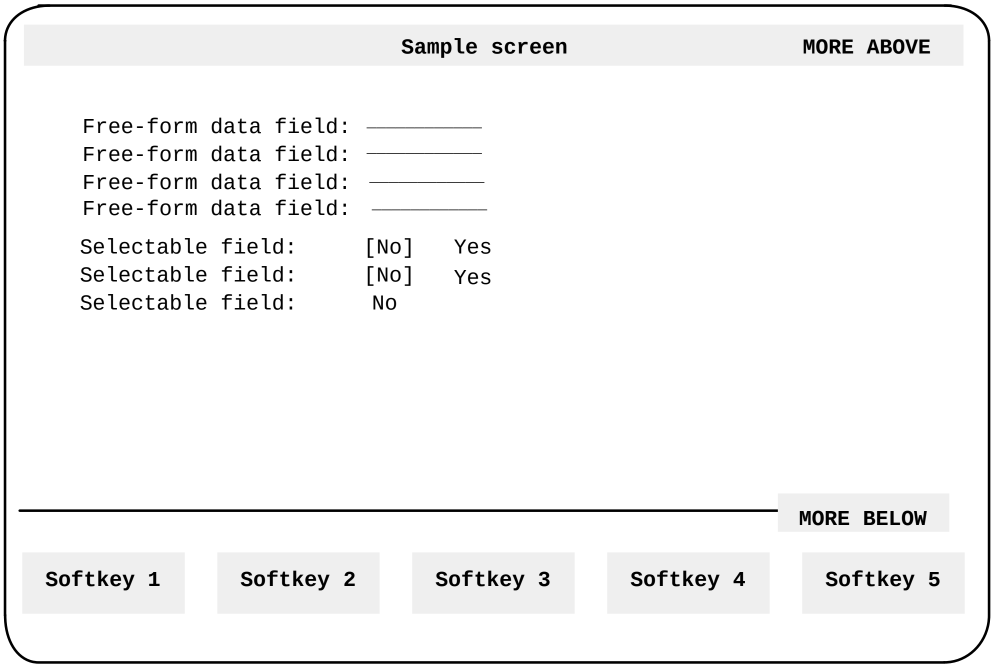


Entering information in a screen

There are two types of modifiable fields in the administration screens. (See Figure 1-7.) *Free-form data fields* are fields in which you enter information, such as a user’s name or mailbox number. *Selectable fields*, on the other hand, present a series of specific options from which to choose.

In order to modify a field, you must first move your cursor to it. Once the cursor is in the appropriate field, you can change its contents.

Figure 1-7
Entering information in a screen



Some fields display unmodifiable information. You cannot change the content of these fields. The cursor may or may not position on these fields, depending on the type of screen displayed. When a selectable field is not modifiable, only the selected option will be displayed. For example, if a field is disabled, only “No” will be displayed. It will not be shaded.

Certain data fields must be filled in with a value whereas others are optional. Mandatory fields are pointed out in the field descriptions. If you neglect to fill in a mandatory field and then try to save your settings, the system will not save the screen and will prompt you to fill in the necessary field.

The following keys on the keyboard and on the application keypad (shown in Figure 1-4), move the cursor within or across fields:

- <**Tab**> moves the cursor to the next field.
- <**4**> on the application keypad moves the cursor to the previous field.
- <**Return**> moves the cursor to the next field.
- < ↑ > , the up-arrow key, moves the cursor to the previous field or the field above.
- < ↓ > , the down-arrow key, moves the cursor to the next field or the field below.

- < ← > < → > , the left and right arrow keys, move the cursor in the corresponding direction within an input field, but not between fields. They also move the cursor from one selection to the next in a selectable field.

The following keys change the content of fields:

- <**Remove**> clears the current field.
- <$\boxed{\text{x}}$> deletes one character to the left of the cursor each time the key is pressed.
- <**Back Space**> deletes the character on which the cursor is positioned.

Procedure 1-1
Changing the contents of a free-form data field

1 If the field you want to change is below the current cursor position, use one of the following keys to move the cursor to the appropriate field: <Tab>, <Return>, or down-arrow key.

If the field you want to change is above the current cursor position, use one of the following keys to move the cursor to the appropriate field: up-arrow key or <4>.

2 If the field is not blank, delete the current entry by pressing either <Remove> to clear the field, <Back Space> to delete the character on which the cursor is positioned, or <$\boxed{\text{x}}$> to delete the character to the left of the cursor (until the entry is deleted).

3 Enter the new information.

Procedure 1-2
Changing the contents of a selectable field

1 If the field you want to change is below the current cursor position, press one of the following keys to move the cursor to the appropriate field: <Tab>, <Return>, or down-arrow key.

If the field you want to change is above the current cursor position, use one of the following keys to move the cursor to the appropriate field: up-arrow key or <4>.

2 Use the right and left arrow keys to position the cursor on the appropriate selection.

3 When the cursor is positioned correctly, press <Return> to select.

Selecting an entire line

In some screens, you are required to select an entire line. For example, in the Voice Services DN-Table screen (Figure 7-10 on page 7-43), you must select a number from a list of DNs to indicate which DN you want to modify. To select a line in a screen, place the cursor at the beginning of the line and press the <Space Bar>. Screens requiring this mode of selection will indicate this in a prompt such as “Move the cursor to the item and press the spacebar to select it..”

Error messages

The system displays error messages, both general and screen-specific, on the line above the softkey display. These messages are simply feedback to the administrator’s actions. (Do not confuse them with System Event and Error Reports, SEERS.) The messages remain on the screen until the user types in more input or until another error message appears. Typical error messages are

- **The key entered is not valid at this time.**
- **Enter a number in the range of 1 to 6.**

On-line help

As described earlier in the “The Help key” section, on-line help is available for most of the menus and administration screens. The <Help> key on the keyboard can be used to display information on whatever screen you are working in. If you require help with a screen, press the <Help> key. The system will display explanations of all the fields on the menu or screen you are working in. When you are done, press [Exit] on the Help screen to return to the screen you are working in.

Screen redraw

If a printer is not activated on the MSM, reports and SEER messages will print to the administrative screen, overwriting the contents of the screen. To redraw the screen and clean up any interfering information, press <Control><r>. You can use this key combination at any time to redraw the screen.

Chapter 2: Setting up customer groups

Once you have configured the basic system parameters, you are ready to add customer groups, configure them to meet the requirements of your customers, and add users. Furthermore, most of the optional features that can be enabled on MSM also require configuration at the customer administration level.

Overview

This chapter describes those tasks that are carried out at the customer administration level. However, the initial configuration of your system will involve both system administration tasks and customer administration tasks. You should have already completed the configuration tasks described in Chapter 2, “Setting up the system,” in the *System Administration Guide* (NTP 557-7001-300).

When doing customer administration, perform all of the tasks necessary for one customer group, then move to the next customer group and perform the necessary administrative tasks for that group. Continue in this manner until you have completed administration of all customer groups.

Step 1

Begin with Procedure 2-1, “Configuring customer groups,” to

- change the customer administrator password
- add customer groups to the system
- enable features for each customer group
- customize operating parameters for each customer group
- add users to customer groups

Step 2

After you have completed the basic setup, refer to the other procedures in this chapter when you are ready to configure specific features, some of which are optional and may not be enabled on your system. The other procedures in this chapter include

- configuring Outcalling features

- creating a voice service (such as an Announcement, Voice Menu, Time-of-Day Controller, Thru-Dialer, or Voice Form)
- creating Fax Information Services
- configuring the AMIS Networking service
- configuring Meridian Networking

Setup and configuration of system-wide parameters is discussed in the *System Administration Guide*, in the “Setting up the system” chapter.

Basic setup procedures

Before carrying out any of the following steps, ensure that the MSM has been properly provisioned on the switch. See the *Planning and Engineering Guide* (NTP 557-7001-100) and the *Translations Guide* (NTP 557-7001-310).

The following steps are common to all MSM installations, and are necessary for your system’s operation.

Procedure 2-1
Configuring customer groups

Step 1. Change the customer administrator password.	
Log on to the administration terminal with the default customer administrator password (custpwd). You are prompted to change the password the first time you log on.	See page 3-17.
Step 2. Add customer groups to the system.	
This step must be done before users are added because users are added to specific customer groups.	See page NO TAG.
For the procedure, see the sections “Logging on” and “Adding customer groups.”	See page NO TAG and page NO TAG.
—continued—	

Step 3. Enable features for each customer group.	
To enable features for customer groups 3 From the Customer Administration Menu, select General Administration, General Options. a. Enter the customer name. b. Specify the Customer Type (Private or Residential). The following features are disabled by default for all customer groups and must therefore be explicitly enabled for each customer group: - Voice Menus and Announcements, if enabled - Voice Forms, if enabled - Meridian Mail Networking, if enabled (MMUI customer groups only) - Fax on Demand, if enabled	See page 6-7.
Step 4. Assign classes of service to each customer group.	
To assign classes of service to customer groups 1 From the Customer Administration Menu, select General Administration, General Options. Assign up to 15 COSs to each customer group. When adding users to the customer group, you will have to select one among the 15 COSs available.	See page 6-7.
Step 5. Set the Attendant DN for each customer group.	
To set the attendant DN for each customer group 2 From the Customer Administration Menu select General Administration, General Options. Do the following: 3 Assign an Attendant DN. If MSM is unable to handle a call, it is reverted to this number. Each user can have a custom revert DN. The system number you enter here is used as the default when adding users. (An attendant DN cannot be configured if VMUIF is enabled for the customer group.)	See page 6-7.
—continued—	

<table>
<tr><th colspan="2">Step 6. Customize voice messaging options for each customer group.</th></tr>
<tr><td>To customize voice messaging options for each customer group
4 From the Customer Administration Menu, select Voice Administration, Voice Messaging Options.

For MMUI customer groups
a. If more than one language is installed on the system, select the default language and the secondary default language.
b. If desired, record a custom call answering greeting (for each language that is enabled on the system).
c. Set the maximum delay for timed delivery.
d. Define the name dialing and name addressing prefix (or disable name dialing and addressing if necessary).
e. Configure the broadcast mailbox number.
f. Record a personal verification for the broadcast mailbox.
g. Define the billing DN.
h. Specify the local addressing lengths.
i. Set the mailbox full warning threshold.
j. Set the maximum amount of time that user’s read messages are kept before being deleted by the system. (Note that this impacts disk space.)

For VMUIF customer groups
k. If more than one language is installed on the system, select the default language and the secondary default language.
l. Record a customized VMUIF introductory tutorial (this is played when users log on for the first time) for each language that is installed on the system for DTMF and dial pulse support.
m. Record the login greeting.
n. Configure the lockout revert DN.
o. Define the personal distribution list prefix.
p. Define the broadcast mailbox number and record a personal verification for the broadcast mailbox.
q. Define the billing DN.
r. Specify the local addressing lengths.
s. Configure the maximum amount of time that user’s read messages are kept before being deleted by the system. (Note that this impacts disk space, since the longer you keep user’s read messages, the more disk space that is used.)</td><td>See page 7-10.</td></tr>
<tr><td colspan="2">—continued—</td></tr>
</table>

Step 7. Customize voice security options for each customer group.	
To customize the voice security options for each customer group 1 From the Customer Administration Menu, select Voice Administration, Voice Security Options. 2 Set the maximum number of invalid logon attempts that a user is allowed to make before being locked out of his or her mailbox. For MMUI customer groups, you may want to change the default parameters that affect user passwords (such as the number of days allowed between password changes, the minimum password length, etc.)	See page 7-23.
Step 8. Add voice service DNs.	
To add voice service DNs 1 From the Customer Administration Menu, select Voice Administration, Voice Services Administration, Voice Services-DN Table. 2 Add a DN for each voice service that will be directly dialable to users and external callers (such as the Voice Messaging DN, the Express Messaging DN, and any voice services.)	See page 7-42.
Step 9. Add users to customer groups.	
Before adding users, you should decide which users need to be assigned to which class of service since this will determine the capabilities that are available to them. For example, if a user needs Remote Notification capability, you must assign them to a class of service in which Remote Notification is enabled. Also, read the section “Planning how to add users to the system” before beginning. 1 Add local voice users. These are users that are on your system and that have a mailbox. From the Customer Administration Menu, select User Administration, Local Voice Users, [Add]. 2 Add Directory Entry Users for people who want to be accessible by name dialing, but who do not need a mailbox. (This is only applicable to MMUI customer groups.) If Networking is enabled, users at remote sites can be added as remote voice users (the reasons for doing this are explained in the “User Administration” chapter).	See page 5-3. See page 5-10. See page 5-60.
Step 10. Create distribution lists.	
This step does not have to be part of the initial configuration. If you know which lists you will need to create at this time, you may do so, so that they will be ready for you to use. If you are unsure at this point, these can be created at any time. 1 From the Customer Administration Menu, select User Administration, then Distribution Lists.	See page 5-73.
—continued—	

Step 11. Configure optional features and other services.	
You can either continue with the configuration of those optional features that are enabled on your system (Voice Menus, Voice Forms, Fax on Demand, AMIS, Meridian Networking) or you can back up the system now (as described in the following step) and continue at a later time. Additional features include	
- Outcalling	See the *Outcalling Application Guide for Multi-Customer Systems* (NTP 555-7001-323).
- AMIS Networking - Meridian Networking	See the *Networking Services Administration Guide* (AMIS and Meridian Networking) (NTP 555-7001-335)
The services that you create will depend on the features that are enabled and your organization's needs. Other services include	
- Voice Menus, Announcements, Thru-Dial services, Time-of-Day Controllers	See the *Voice Menus Application Guide* (NTP 555-7001-325).
- Voice Forms and Transcription Services	See the *Voice Forms Application Guide* (NTP 555-7001-326).
- Fax Information Services	See the *Fax on Demand Application Guide* (NTP 555-7001-327).
Note: For each service that you create that is directly dialable by users or external callers, add a DN to the VSDN table.	
Step 12. Make sure the system administrator backs up the system.	
Once the system configuration has been customized, back up the new data onto tape to ensure its safety.	See the "General Administration" chapter in the *System Administration Guide*.
—end—	

Setting up for Voice Menu applications

Voice Menus includes the following voice services:

- Announcements
- Thru-Dial services
- Time-of-Day Controllers
- Voice Menus

Voice Menu applications can only be created at the customer administration level. Once created, they can be maintained (or deleted) by both the customer administrator and the system administrator.

See the *Voice Menus Application Guide* (NTP 555-7001-325) for more information.

More about setting up optional features

Meridian Mail offers a number of optional features including Outcalling, Voice Forms, Fax on Demand, AMIS (audio messaging interchange specification) Networking, and Meridian Networking.

Setting up the Outcalling feature

The Outcalling feature refers to two functions. The first allows Meridian Mail users to be notified of new messages at remote phone or pager numbers and is known as Remote Notification (RN). The other feature, Delivery to Non-User (DNU), allows users to compose and deliver messages to non-users of Meridian Mail.

To configure Outcalling, you must first enable Remote Notification and/or Delivery to Non-User in classes of service. There are also a number of outcalling parameters to configure in classes of service. In the Outcalling Administration screen, there are additional outcalling parameters, such as DNU retry limits and intervals, dual tone multi-frequency (DTMF) confirmation, and some pager information. Once these parameters have been set up, you can add users (or assign existing users) to the appropriate class of service in which RN and/or DNU is enabled. At this stage, either the administrator or the user can create a remote notification schedule if Remote Notification is enabled. Once outcalling services are in use, you can monitor them using the Outcalling Audit Trail Report.

You may not have to change any of the parameters if you find that the default values are adequate. However, you should look over the default configuration to ensure that your customers' specific requirements are met.

Refer to the *Outcalling Application Guide* (NTP 555-7001-323) for detailed planning and configuration instructions.

Voice Form applications

A *voice form* is the electronic equivalent of a paper form. It is "filled out" by callers who dial a special number that connects them to the voice form. (Alternatively, callers can be connected to a voice form through a voice menu or time-of-day controller.) The form is made up of a series of questions that are played over the telephone to the caller. The caller listens to each question and responds by giving a verbal answer. If callers require assistance while responding to a form, they can press 0 to transfer to an operator. (This functionality can be enabled or disabled for each voice form.) The caller's *answers* are recorded and stored in the system as a *response*.

The Voice Forms feature is intended to help fulfill an organization's information-gathering needs. Voice forms can replace paper forms as well as certain information gathering tasks that are currently carried out over the phone (such as order taking).

Voice Forms is an optional feature and may not be enabled on your system. Voice Forms must be enabled for each customer group on the system for which you need to create voice form applications.

See the *Voice Forms Application Guide* (NTP 555-7001-326) for more details. For additional information about transcribing voice forms, refer to the *Meridian Voice Forms Transcriber User Guide*.

Fax on Demand

Fax on Demand is an optional feature that is new to Meridian Mail MSM, Release 9.0. It allows you to store fax items in the system and then make them accessible to external callers and internal users.

Fax items can be accessed directly. In this case, the fax service has a unique DN entered in the VSDN table which is published. Depending on how the service is set up, the fax will either be delivered on the same call (only if the caller is calling from a fax phone), or the caller will be prompted for a call-back number. This is the number of a fax phone to which the fax will be delivered at a later time. You can also give callers the choice of choosing same-call delivery or callback delivery.

You can also include fax items in voice menus. This allows you to create fax menus that are collections of fax items only, or combine fax items with other services in your voice menus.

For information about configuring this service, refer to the *Fax on Demand Application Guide* (NTP 555-7001-327).

AMIS Networking

> ***Note:*** AMIS Networking requires that your system has (or has been upgraded) to use RS-232 instead of current loop service modules. If you need to convert your current loop service modules to RS-232, contact your Nortel support organization.

AMIS Networking is an optional feature and may not have been enabled on your system.

AMIS is a standardized networking protocol that allows users in your Meridian Mail system to compose messages to and receive voice messages from users at other voice messaging sites. This means that the remote users can be part of a voice messaging system other than Meridian Mail, and still be able to send voice messages back and forth.

You do not have to configure a DN specifically for AMIS Networking because both voice menus and thru-dialers can accept incoming calls and pass them on to the appropriate AMIS agent. (This is explained in the "AMIS Networking" chapter in the *Networking Services Administration*

Guide [NTP 555-7001-325].) The only requirement is that the voice menu or thru-dialer have direct inward dialing (DID) access. If the Voice Menus feature is not enabled, or if none of your voice menus or thru-dialers have DID access, you will have to configure a DN specifically for the AMIS service in the VSDN table.

AMIS Networking must be enabled in the class of service to which a user belongs for a user to have access to this feature. Unlike Meridian Networking, AMIS Networking can be made available to all users on the system (if necessary), not just one customer group. For more information about Class of Service administration, see Chapter 10, “Class of Service Administration.”

For more information about configuring and administering AMIS Networking, in general, see the “AMIS Networking” chapter in the *Networking Services Administration Guide* (NTP 555-7001-335) for details.

Meridian Networking

Note: Meridian Networking requires that your system uses RS-232 instead of current loop service modules. If you need to convert your current loop service modules to RS-232, contact your Nortel support organization.

Meridian Networking is an optional feature and may not be enabled on your system.

Meridian Networking allows users at one Meridian Mail site to compose messages to and receive voice messages from another Meridian Mail site. This type of networking, also known as proprietary networking, requires that each site in the network have Meridian Mail. This is unlike AMIS Networking.

Note: Meridian Networking can only be enabled for one customer group.

For more information about configuring and administering Meridian Networking, refer to the *Networking Services Administration Guide* (NTP 555-7001-335).

Chapter 3: Administrator logon

Once the MSM has been installed and the software is loaded, you are ready to use the main administrative console attached to your MSM system to log on to the system, and gain access to the customer administration menus. These menus are the starting point for initial setup of customers and general administrative functions.

A remote administration configuration is shown in Figure 3-8. If your installation uses this feature for the purpose of support from service personnel, you must coordinate remote administration sessions. See “Using a remote terminal” later in this chapter.

This chapter describes

- the functions available from the Logon/Status screen
- logging on to the system
- the Main Menu

The Logon/Status screen

The Logon/Status screen (Figure 3-1) appears when the administration terminal is idle. However, you can press the softkeys on the logon screen to perform several functions before you actually log on:

- Check T1 status.

  “T1 status” describes the T1 status softkeys, how to get T1 link status, and how to get T1 channel status from the Logon/Status screen.
- Check system status.

  “System status” describes how to get system status from the Logon/Status screen.
- Check Digital Signal Processing (DSP) port status screens.

  “DSP port status” describes how to get DSP port status from the Logon/Status screen.
- Silence any alarms.

  “Silencing alarms” describes how to use the silence alarm softkeys on the Logon/Status screen.

- Reset the system time.

  "Resetting the system time from the logon screen" describes how to reset the system time from the Logon/Status screen.

- Enable or disable a remote terminal.

  "Using a remote terminal" describes how to enable or disable a remote terminal from the Logon/Status screen.

  Note: Sometimes when you power down your terminal and then power it back up, the screen is drawn incorrectly. Instead of the line that appears near the bottom of the screen (above the softkeys), a row of "q"s appears instead. Should this ever happen, press Ctrl-w (a small window opens up), and type **if** to redraw the screen. (You do not have to press <Return>. The "i" means initialize and the "f" means full screen.)

Figure 3-1
The Meridian Mail Logon/Status screen

```
                              Logon/Status


              MMM       MMMERIDIAN
            MMMMM     MMMMMM
           MMMMMM   MMMMMMM
          MMM MMM MMM  MMM     MMM       MMMAIL
         MMM  MMMMMM  MMM    MMMMM     MMMMM
        MMM   MMM    MMM    MMMMMM   MMMMMM
       MMM          MMM    MMM MMM MMM MMM
      MMM          MMM    MMM  MMMMM  MMM
     MMM          MMM    MMM   MMM   MMM
    MMM          MMM    MMM         MMM
   MMM          MMM    MMM         MMM
  MMM          MMM    MMM         MMM
 MMM          MMM    MMM         MMM
MMM          MMM    MMM         MMM


                                  Copyright  (c)  Nortel, 1995
________________________________________________________________________
Select a softkey >

  Logon     T1 Status   System Status   Silence Alarm   DSP Port Status
```

Note: When logging on at a MAT, only the [Logon] softkey is displayed.

T1 status

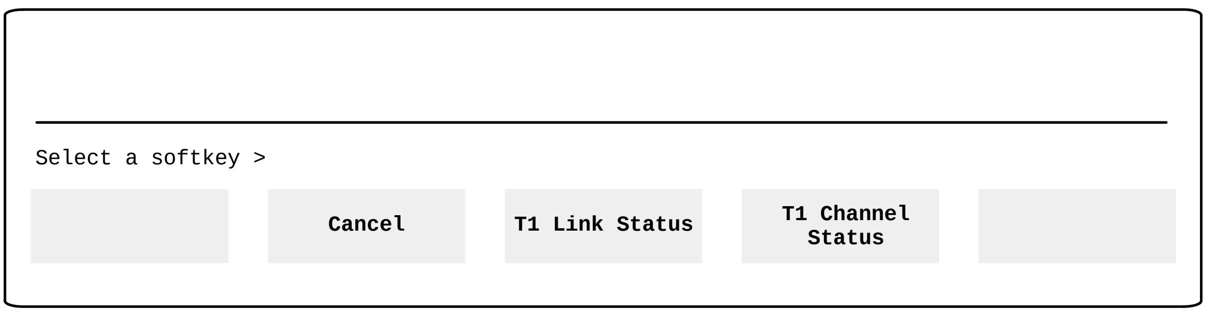
You can access some of the T1 status functions from the logon screen. This section describes the following topics that allow you to use these T1 status logon functions:

- the softkeys that are displayed when you select the [T1 Status] softkey
- how to look at the status of the T1 links
- how to look at the status of the T1 channels

T1 Status softkey

When [T1 Status] is pressed, a new row of softkeys is displayed. These are shown in Figure 3-2.

Figure 3-2
The T1 status softkeys



T1 link status

Use the [T1 Link Status] softkey to view the operational status of the T1 links on the system. The data displayed in this T1 Link Status screen (Figure 3-3) is identical to the T1 Link Status screen in System Status and Maintenance. It is, however, read-only when accessed from the logon screen. Only the [Exit] softkey is displayed and you, therefore, cannot disable, enable, or switch any links from this screen. This can only be done when the screen is accessed from the System Status and Maintenance menu. Procedure 3-1 on page 3-6 describes how to get T1 link status.

Figure 3-3
The T1 Link Status screen

```
                              T1 Link Status

T1 Link Status

System Status: InService   Alarm Status:Critical=Off Major=On Minor=Off

        Clocking   Primary Connection               Redundant Connection
Link Cand Mode    T1    T1                            T1     T1
ID             Number  Location   Status          Number Location   Status
 A    Y           1     11-1-1     InService       5      12-1-1     InService
 B                2     11-1-2     InService       6      12-1-2     OutOfService
 C                3     11-1-3     InService       7      12-1-3     InSvStandBy
 D                4     11-1-4     OutOfService    8      12-1-4     InService
 E        R       9     13-1-1     InService       13     14-1-1     InSvStandBy
 F               10     13-1-2     Faulty          14     14-1-2     InService
 G               11     13-1-3     InService       15     14-1-3     InSvStandBy
 H    Y          12     13-1-4     InService       16     14-1-4     Faulty

Select a softkey >

 Exit
```

The following fields are displayed:

- ***System Status*** This field displays the current system status. Your system can be in one of the following states:
  - ***InService*** This indicates that all critical programs on all nodes are operational and the system is accepting calls.
  - ***CourtesyPending*** This indicates that the system is in the process of shutting down. This occurs after using the [Courtesy Down System] softkey in System Status and Maintenance. Incoming calls are directed to an attendant. Calls in progress are not interrupted. Each port is disabled as it becomes idle. The software remains loaded.
  - ***CourtesyDown*** This indicates that the system has shut down and is no longer operational nor accepting calls.
  - ***Loading*** This indicates that the system is loading software while booting up.
- ***Alarm Status*** This field indicates the state of each of the following alarm categories:
  - ***Critical*** These alarms indicate a service-affecting problem that requires immediate attention.

— ***Major*** These alarms indicate a service-threatening problem that may be allowed to persist (for up to 24 hours). If not attended to, the alarm will become critical.

— ***Minor*** These alarms indicate a problem that has no impact on the system or users.

The status for each type of alarm will be one of the following:

— ***Off*** This indicates that there are no new alarms. This does not necessarily mean that there are no error conditions as alarms may have been silenced from the Logon/Status screen, but the error conditions causing the alarm may still exist.

— ***On*** This indicates that one or more alarm situations was detected.

— ***Unk*** This indicates that the status is unknown.

- ***Link ID*** An alphabetic designation used to identify the T1 link in your system. This corresponds to the Link ID in the T1 Link Configuration screen in Hardware Administration.
- ***Cand*** A “Y” in this field indicates that the link has been nominated as a candidate for clock referencing. A candidate is nominated from the T1 Link Setup screen in Hardware Administration. For more information about clock referencing, see the section “Modifying the T1 link setup” in the “Hardware Administration” chapter in the *System Administration Guide*.
- ***Clocking Mode*** The currently activated clock reference is indicated with an “R” in this field. A link is activated by pressing [Change T1 Clocking Mode] as described in Procedure 11-9 in the “System Status and Maintenance” chapter in the *System Administration Guide*. If none of the links are activated as the clock reference, the system is in free-run mode, meaning that the system is using the internal MSM clock. Only one link at a time will be the active clock reference.
- ***Primary Connection T1 Number*** This is the number of the primary T1 connection within the specified T1 link.
- ***Primary Connection T1 Location*** This is the location of the primary T1 connection in the system. This number represents the location in terms of the node-card-span.
- ***Primary Connection Status*** This is the current state of the primary T1 connection.

  — ***UnEquipped*** This indicates that the link is not defined in the hardware database. For more information about modifying the hardware database, see the *System Administration Tools* guide (NTP 557-7001-305).

— ***Faulty*** This indicates that a hardware problem has been detected on the connection.

— ***InSvYelAlarm*** This indicates that the T1 link is in service but has lost signaling with the far end.

— ***InSvRedAlarm*** This indicates that the T1 link has lost signaling with the near end (host PBX/switch).

— ***InService*** This indicates that the T1 connection is fully operational and is currently accepting calls.

— ***InSvStandBy*** This indicates that the connection is not currently taking calls but is ready to accept calls for the paired T1 connection on the same T1 link.

— ***OutOfService*** This indicates that the connection is not operational due to a forced disable.

— ***Pending*** This indicates that the connection is in the process of shutting down or restarting.

- ***Redundant Connection T1 Number*** This is the number of the secondary T1 connection within the specified T1 link.
- ***Redundant Connection T1 Location*** This is the location of the secondary T1 connection in the system. This number represents the location in terms of the node-card-span.
- ***Redundant Connection Status*** This is the current state of the secondary connection. See the descriptions for the *Primary Connection Status* field.

Procedure 3-1
Viewing the T1 link status

Starting Point: The Logon/Status screen.

1 Press the [T1 Status] softkey.

A new row of softkeys is displayed.

2 Press the [T1 Link Status] softkey.

The T1 Link Status screen is displayed. (Because this is a read-only screen, only the [Exit] softkey is displayed.)

3 Press [Exit].

A new row of softkeys is displayed.

4 Press [Cancel] to return to the Logon/Status screen.

T1 channel status

Press [T1 Channel Status] to view the operational status of the T1 channels in the system. This screen is identical to the T1 Channel Status screen in System Status and Maintenance, except that it is read-only when accessed from the logon screen. (You cannot enable or disable channels.) Procedure 3-2 describes how to get T1 channel status.

Figure 3-4
The T1 Channel Status screen

```
                              T1 Channel Status
T1 Channel Status

System Status:   InService     Alarm Status:  Critical=Off Major=Off Minor=Off

       Channels
Link   1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21 22 23 24
 A     a  a .  a  .  .  .  .  .  .  .  .  a  .  a  a  .  .  .  .  .  .  .  .  .
 B     a  a .  a  o  o  o  o  .  .  .  .  .  .  a  a  .  .  .  a  .  .  .  .  .
 C     .  a .  a  .  .  .  .  .  .  .  .  a  .  a  .  .  .  .  .  .  .  .  .  .
 D     a  a .  a  .  .  .  .  .  .  .  .  a  .  a  a  .  .  .  .  .  .  a  .  .
 E     a  . .     o  o  o  o  a  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
 F     .  a .  a  .  .  .  a  .  .  .  .  a  .  a  a  .  .  .  .  .  .  .  .  .
 G     a  a .  .  .  .  .  .  .  .  .  .  a  .  .  .  .  .  .  .  .  .  .  .  .
 H     a  a .  a  .  .  .  .  .  .  .  .  a  .  a  a  .  F  F  F  F  .  .  .  .

a  = Active/in use        .  =  Idle        O  = Out of Service      R  = No Resource
F  = Faulty               P  =  Pending     space = Unequipped       L  = Loading
C  = Courtesy Down        M  =  MakeBusy

Select a softkey >

    Exit
```

The following fields are displayed on the T1 Channel Status screen:

- ***System Status*** See the description in the section “T1 Link Status” on page 3-4.
- ***Alarm Status*** See the description in the section “T1 Link Status” on page 3-4.
- ***Link*** This is an alphabetic designation used to identify the T1 link in your system. This corresponds to the Link ID in the T1 Link Configuration screen in Hardware Administration.
- ***Channels*** This is the current state of each channel, indicated by a single-character code. (A legend for the codes is at the bottom of the screen.)
  - — ***Active/in use*** This indicates that the T1 channel is operational and in use.

— ***Idle*** This indicates the channel is operational but not currently in use.

— ***OutOfService*** This indicates that the channel is no longer operational.

— ***No Resources*** This indicates that the T1 channel is available, but there is no software associated with it.

— ***Faulty*** This indicates that the system has detected an error in the channel.

— ***Pending*** This indicates that the channel is in the process of shutting down or restarting.

— ***Unequipped*** This indicates that the channel is not defined in the hardware database. For more information about modifying the hardware database, see the *System Administration Tools* guide (NTP 557-7001-305).

— ***Loading*** This indicates that the channel is currently starting up after a request to enable, and that the necessary software is loading.

— ***Courtesy Down*** This indicates that the channel is in a courtesy down state as a result of performing a Courtesy Down System. The channel does not accept calls in this state. The software remains loaded.

— ***MakeBusy*** This indicates that the channel is in a maintenance-busy state (being used for maintenance procedures). The channel does not accept calls in this state.

Procedure 3-2
Viewing the T1 channel status

Starting Point: The Logon/Status screen

1 Press [T1 Status].

A new row of softkeys is displayed.

2 Press [T1 Channel Status].

The T1 Channel Status screen is displayed.

3 Press [Exit].

A new row of softkeys is displayed.

4 Press [Cancel] to return to the Logon/Status screen.

System status

The System Status screen (Figure 3-5) is displayed when you press [System Status] on the Logon/Status screen. The System Status screen is a read-only screen that dynamically updates when the status of the system, system nodes, or DSP ports changes. Procedure 3-3 describes how to get the system status.

Figure 3-5
System Status screen

```
                                System Status

System Status: InService   Alarm Status: Critical=Off Major=Off Minor=Off

Last Event: 60-00 PRM: All System Programs Started   5/31 14:03

                    DSP Port/Channel Status                Storage Used
Node Type   Status  Active Idle OutSv Faulty Pending Others Voice    Text

 1   MSP   InService
 2   MSP   InService
 3   SPN   Faulty      0   0      0      12      0       0     32%    40%
 4   SPN   OutOfService0   0      12      0      0       0     41%    6%

 Select a softkey >

   Exit                                         Next Set
                                                of Nodes
```

The following fields are displayed in the System Status screen:

- ***System Status*** This field displays the current system status. For a description of the system states that can appear in the System Status screen, refer to the descriptions in the “T1 Link Status” section on page 3-4.
- ***Alarm Status*** This field indicates the alarm category. For a description of the alarms that can appear in the System Status screen, refer to the descriptions in the “T1 Link Status” section on page 3-4.
- ***Last Event*** This is the most recent system event or error report (SEER) logged. This field displays the SEER number, SEER description, date, and time.
- ***Node*** This is thhe node number.

- ***Type*** This is thhe type of node. A node may be of the following types: MSP (Multi-Server Processor), SPN (Signal Processing Node), and TIFN (Telephony Interface Node).
- ***Status*** This is thhe status of the nodes in your system. A node may be in one of the following states:
  - — ***InService*** This indicates that the node is running and accepting calls. For the MSP node, it indicates that it is the active MSP node.
  - — ***UnEquipped*** (used with the MSP, SPN, or TIFN node) This indicates that the node is not defined in the hardware database. The "Modify hardware" chapter in the *System Administration Tools* guide (NTP 557-7001-305) describes how to modify the hardware database.
  - — ***Faulty*** This indicates that a hardware problem is detected.
  - — ***Loading*** (used with the MSP, SPN, or TIFN node) This indicates that the node is currently starting up and loading software into memory. No software is running when the node is in this state.
  - — ***InSvStandBy*** (used with the MSP or TIFN node) This indicates that the node is running and is ready to take over operations for the paired redundant node.
  - — ***ShuttingDown*** (used with the MSP, SPN, or TIFN node) This indicates that the node is in the process of shutting down (the software is unloading), as a result of a forced disable.
  - — ***OutOfService*** This indicates that the node is no longer operational, as a result of a forced disable.
  - — ***Booting*** This indicates that an operating system is being loaded on to the node.
- ***DSP Port/Channel Status*** These fields reflect the state of DSP ports on the associated SPN nodes. The entry in each column represents the number of DSP ports in that particular state. A DSP port may be in one of the following states:
  - — ***Active*** This indicates that the port is operational and is currently in use.
  - — ***Idle*** This indicates the port is operational but not in use at the moment. The port is ready to accept calls.
  - — ***OutSv*** This indicates that the associated port is not operational, and is not accepting calls.
  - — ***Faulty*** This indicates that a hardware problem has been detected in the DSP port.

— ***Pending*** This indicates that there has been a request to shut down the port. The port is still active, pending an active call being disconnected before shutting down.

— ***Others*** This indicates that the port is temporarily unavailable. This usually occurs while the system is booting up. The status remains as “Other” while the software is loading. Once fully loaded, the status automatically becomes “Idle.” The status may also appear as “Other” when you reenable a port (for as long as the necessary software is loading). The status returns to “Idle” once the port has been enabled.

- ***Storage Used*** This field indicates the amount of voice and text storage used as a percentage of available storage on the user volume of this node. (If the disk on a node is bad, percentages are not displayed.) It is only valid for the SPN node.

Procedure 3-3
Viewing the system status

Starting Point: The Logon/Status screen

1 Press the [System Status] softkey to view the status of your system.

2 To view the status for the nodes that are not currently displayed, press [Next Set of Nodes].

The [Next Set of Nodes] softkey is replaced by the [Previous Set of Nodes] softkey when the last set of nodes has been displayed.

3 Press [Exit] to return to the Logon/Status screen.

DSP port status

The DSP Port Status screen (Figure 3-6) is displayed when you press the [DSP Port Status] softkey on the Logon/Status screen. This screen is read-only. It is dynamically updated as the status of your DSP ports change. If you suspect that one of your ports is not functioning properly, check this screen.

The example shown in Figure 3-6 illustrates the status for each DSP port with varying numbers of ports per node. Each node can have up to 24 DSP ports. Procedure 3-4 describes how to get a DSP port status.

Note: If you are using multimedia ports, the maximum number of ports you can have decreases. Each multimedia port takes the space that two non-multimedia ports would take. For example, if your system only uses multimedia ports, you can only have a maximum of 16 ports per node instead of 24.

Figure 3-6
The DSP Port Status screen

```
                              DSP Port Status

DSP Port Status

        Ports
Node    1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23 24

  3     a  a  .  .  .  .  .  .  a  .   .   .   .   a   a   .   .   .   .   .   .   .   .  .
  4     .  .  .  .  a  .  a  a
  5     a  a  .  a  .  .  .  .  .  .   .   a
  6     .  .  .  a  a  a  .  .  .  .   .   .   .   .   .   a
  7     a  a  .  .  0  0  0  0  a  .   .   .   .   a   a   .   .   .   .   .   F   F   F  F
  8     a  a  .  .  a  .  a  .  a  .   .   .   .   a   a   .   .   .   .   .   .   .   .  .
  9     a  a  .  .  .  .  .  .  a  .   .   .   .   a   a   .   .   .   .   .   .   .   .  .
  10    a  a  .  .  .  .  .  .  a  .   .   .   .   a   a   .   F   F   F   F   .   .   .  .



  a = Active/In use      . = Idle           O = Out of Service     ? = Unknown
  F = Faulty             P = Pending        U = Unequipped         R = NoResource
  L = Loading            C = CourtesyDown
 ______________________________________________________________________________
 Select a softkey >
     Exit
```

- ***Ports*** This is the port number.
- ***Node*** This is the node number.
- ***DSP Port Status*** These fields reflect the state of each DSP port on the associated SPN node. For each port that is in a particular state, an entry is made in the appropriate column. A DSP port may be in one of the following states:
  - — ***Active/In use*** This indicates that the DSP port is running and accepting calls.
  - — ***Faulty*** This indicates that a hardware problem is detected.
  - — ***Loading*** This indicates that the DSP port is currently starting up and loading software into memory.
  - — ***Idle*** This indicates that the DSP port is operational but not in use.
  - — ***Pending*** This indicates that the DSP port is in the process of shutting down. This occurs after pressing [Courtesy Disable] in the DSP Port Status screen that is displayed from the System Status and Maintenance menu. Calls in progress are not interrupted.

— ***CourtesyDown*** This indicates that the DSP port has been shut down as a result of a Courtesy Down System, and is no longer operational nor accepting calls. The software remains loaded.

— ***Out of Service*** This indicates that the port is no longer operational, as a result of a courtesy disable or forced disable.

— ***UnEquipped*** This indicates that the DSP port is not defined in the hardware database. The *System Administration Tools* guide (NTP 557-7001-305) describes how to modify the hardware database.

— ***Unknown*** This indicates that the status of the port is unknown.

— ***NoResource*** This indicates a transition state that occurs during the initial stages of software loading (after a request to enable a port). When software begins to load, the port is initially in this state, followed by Loading, and finally, once the software has finished loading, Idle.

Procedure 3-4
Viewing the DSP Port Status screen

Starting Point: The Logon/Status screen

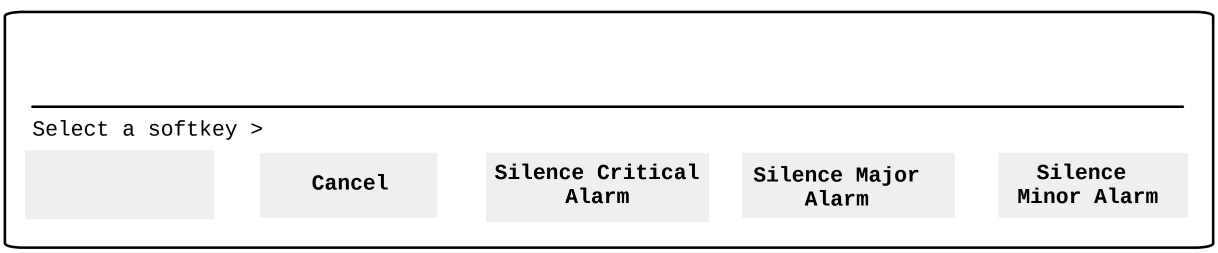
1 Press [DSP Port Status] to view the status of the system DSP ports.

2 Press [Exit] to return to the Logon/Status screen.

Silencing alarms

When the system sounds an alarm, you may silence it using the [Silence Alarm] softkey on the Logon/Status screen. When this softkey is pressed, the softkeys in Figure 3-7 are displayed.

Figure 3-7
The Silence Alarm softkeys screen



An alarm will sound if the corresponding severity level SEER is issued indicating that a problem exists. By using the appropriate softkey you can silence critical, major, or minor alarms. The [Cancel] softkey causes the original set of softkeys to be displayed without silencing any alarms. Try to clear the problem as well, or the alarm could be turned on again if you simply silence it. Alarms persist until you silence them. (There is no timeout period after which they are turned off by the system.)

For more information on alarms, refer to the *Trouble-locating and Alarm-clearing Procedures* (NTP 557-7001-503) and the *Maintenance Messages (SEERs)* manual (NTP 555-7001-510).

Resetting the system time from the logon screen

It is possible that the system time may be undefined, as may happen when a time signal is not provided by the MSM. In this case, the system automatically prompts you for the correct time. You cannot proceed with administrative functions unless the system date and time are defined.

You may be required to enter the time at the Logon/Status screen under unusual circumstances such as power outages. Procedure 3-5 describes how to reset the system time from the Logon/Status screen. At other times, you can perform optional system time changes as desired. See "Changing the system time" in Chapter 6, "General Administration."

CAUTION
Risk of losing read messages
If you set the time ahead by a number of days (if, for example, the current time is incorrect or you are testing time-of-day controllers), all read messages that meet the Read Message Retention value (set in the Add or View/Modify Class of Service screen) will be deleted. For example, today is December 9th and the read message retention limit is seven days. You set the time ahead by 72 hours. Any read messages that are 4, 5 or 6 days old will be deleted before they are supposed to be according to the read message retention maximum.

Procedure 3-5
Resetting the system time

Starting Point: Logon/Status screen, with the system time incorrect or undefined

1 Press [Logon] to log on to the system.

You are prompted for the correct time.

2 Enter the date and time in the format indicated, with leading zeroes, slashes, and colon (for example, 31/01/89 09:35).

3 Press [Cancel] if you choose not to set the system time.

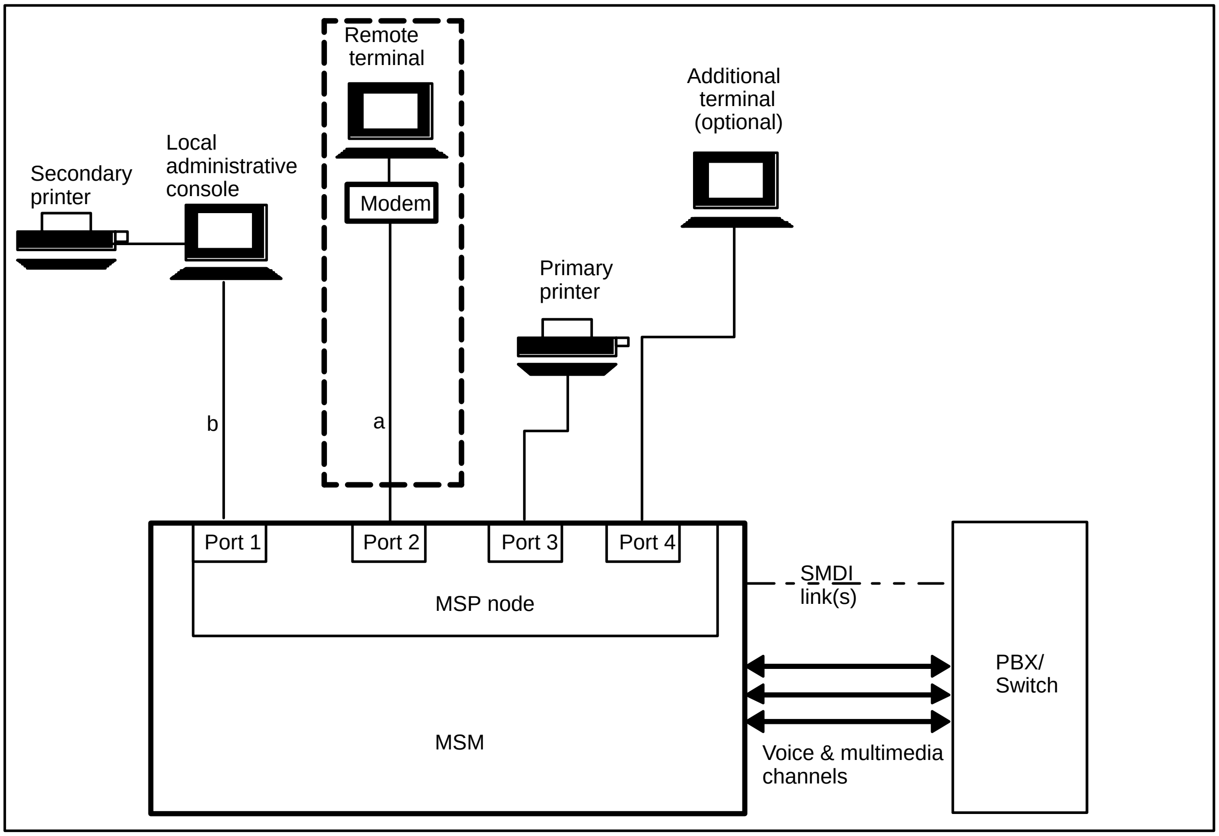
The password prompt is redisplayed.

You may wish to investigate the source of the time discrepancy; see MSM *Trouble-locating and Alarm-clearing Procedures* (NTP 557-7001-503).

Using a remote terminal

If your installation has a remote terminal installed for service personnel, as shown in Figure 3-8 (Connection Option a), the remote access user can log on to the system to perform administrative functions once remote access has been enabled at the local terminal. While a remote logon is in effect, no administrative functions can be carried out from the local console. (When remote access is disabled, a remote user cannot log in to the system.) You should therefore schedule remote logins with the remote user for a time when you will not require access to the system. Procedure 3-6 describes how to enable or disable remote access for a remote terminal.

Figure 3-8
A typical remote administration configuration



“Appendix C: Remote Access” in the *System Installation and Modification Guide* (NTP 557-7001-504) provides information needed to set up a remote terminal and modem.

Procedure 3-6
Logging on to a remote terminal

Starting point: The Logon/Status screen, at the local administration console

1 To bring up the COBRAVT selection window, press **Ctrl-w**. (While holding down the <Ctrl> key, press <w>.)

Note: For help using COBRAVT, type a question mark (?). A help screen is displayed.

2 Type **m** (case does not matter).

3 Notify the user at the remote terminal.

Dial into the modem.

The remote user presses the <Break> key to gain control of the console.

The logon screen appears at the remote console.

The remote user enters the administration password to gain access to the system.

The administrative functions described in this manual are identical when viewed from the local or remote administrative terminal.

4 To disable remote access, repeat steps 1 and 2 at the local administration terminal.

Control is returned to the local console, and the Logon/Status screen is redisplayed.

You can terminate a remote logon by entering **Ctrl-w m** at the local console at any time during the remote log on.

CAUTION
Risk of losing of data
The Ctrl-w m command may cause data loss if the remote administrator is in the process of changing system data and a save was not performed.

Logging on

When you press the [Logon] softkey, you are prompted for a password. If you are logging on for the first time, use the default customer administration password **custpwd**. You will be prompted for a new password immediately after you log on for the first time. The system does not allow you to log on until you have changed the default password.

The customer administrator password is used to access all customer groups. It is not possible to create a separate password for each customer group. If this password is changed at one terminal, it is automatically changed for all of the terminals.

Passwords can be up to 16 characters in length. It is recommended that the password be no less than seven digits in length for added system security. The longer the password, the less probable it is that someone will manage to guess it correctly.

You should change the logon password on a regular basis to ensure the security of your system. In the future, you will change the password from the General Administration menu.

Procedure 3-7
Logging on with the customer administrator password

Starting Point: The Logon/Status screen

1 Press [Logon].

2 Enter the customer administrator password and press <Return>. (The default password is **custpwd**.)

If the system has been down due to a power outage or some other problem, the system prompts you to enter the date and time.

Enter the date and time in the format indicated, with leading zeroes, slashes, and colon (for example, 31/01/89 09:35).

If an invalid password is entered, an error message appears. Try logging on again.

Note: *If you are logging in for the first time, you will be prompted to change the default password. To do so, enter a new password and press <Return>. You are prompted to reenter the password for verification. Enter the password again and press <Return>. If you entered the password incorrectly the second time, you will have to enter the password again.*

The Customer Administration screen (Figure 3-9) is displayed.

Figure 3-9
The Customer Administration softkey screen

```
                    Customer Administration



        To display the List of Customers select the
        Find softkey followed by the List softkey.



 Select a softkey >

  Logoff     Add     View/Modify     Delete*     Find
```

* This softkey is displayed only if more than one customer exists.

> ***Note:*** If you press [Add], [View/Modify], or [Delete], you are prompted for a customer number.

The following actions are possible from this screen:

- Press [Add] to add a customer group to the system.

  See the section “Adding customer groups” for details.
- Press [View/Modify] to view or modify an existing customer group.

  See the section “Modifying a customer group.”
- Press [Delete] to delete an existing customer group.

  Note: This action is only possible if more than one customer group exists on the system. See the section “Deleting customer groups.”
- Press [Find] to find a particular customer group or a subset of customer groups.

  See the section “Finding a customer group.”
- Press [Logoff] to exit this screen and return to the Logon/Status screen.

CAUTION
If you forget your password
If you have forgotten your password, you will have to reboot the system from the install tape. When the system boots from the tape, an item is presented which allows you to reset the password to the original default. Once this has been done, the install tape can be removed from the tape drive and the system will reboot from the disk. Once the system is up, use the default password to log on. You will be prompted to change it immediately. Use a memorable, yet non-obvious, password.

Adding customer groups

When MSM is installed, one default customer group is automatically added to the system. This customer is numbered as customer 1. You may either leave this original customer as it is and add your own customers, or you may modify Customer 1 when you are creating your first customer on the system. (If you want to change the customer name, you will have to do so through the General Options screen.)

When adding customer groups to the system, you can proceed in one of two ways. You can either add all customer groups to the system first and then configure the customer-specific parameters for each one, or you can add a customer group, configure all necessary parameters for that customer, then add the next customer group, and continue in this fashion until all customer groups have been added and configured. You may find that the second method saves some time, since there is less jumping back and forth through various levels of administration screens.

Procedure 3-8
Accessing the Add Customer screen

Starting Point: The Customer Administration screen.

1 Press [Add].

You are prompted to enter the customer number.

2 Enter a number which is not already associated with an existing customer and press <Return>.

You may enter a value from 1 to 2000.

The Add Customer screen is displayed. See Figure 3-10.

Figure 3-10
The Add Customer screen

```
                    Customer Administration

 Add Customer

 Customer Number:  _2_

 Customer Name:    _______________

 Customer Type:    [Private]   Residential

* Interface Type:  [MMUI]    VMUIF

________________________________________________

Select a softkey >

   Save      Cancel
```

*   This field is displayed only if VMUIF is installed.

The following fields are displayed:

- ***Customer Number*** This is a unique number that distinguishes this customer from other customer groups. The valid range is from 1 to 2000.
- ***Customer Name*** This is a unique name to describe the customer.
- ***Customer Type*** This is a customer group can be one of two types:
  - — ***Private*** This type is primarily intended for centrex customers who desire full-featured voice messaging.

— ***Residential*** This type is intended for customer groups that will be made up of residential subscribers.

Customer type and interface type are independent of each other and can be combined in any way. However, the following should be noted. If the customer type is “Residential”, subscribers will not have access to name dialing and name addressing (even if the interface type is MMUI). Name dialing and name addressing are available only if the customer type is “Private” and the interface type is MMUI.

- ***Interface Type*** This field appears only if both types of interfaces are enabled on your system. Two types of interfaces available are

— ***MMUI*** This interface provides users with a command-driven interface and is primarily intended for centrex customers who require full-featured voice messaging. This interface provides users with call answering functionality so that callers can leave a message when the user is away from or on the phone. Compose and send capabilities are always enabled.

The following functions (configured in the class of service) are unique to MMUI and are not available with the VMUIF interface:

- personal verification changeable by user
- dual language prompting (on multilingual systems)
- administrator capability
- retain copy of sent messages
- remote notification keypad interface
- extension dialing
- name dialing and name addressing

— ***VMUIF*** This interface provides users with a simplified menu-driven interface. Compose and send capability are disabled by default, but can be enabled (in the class of service). VMUIF also supports dial pulse telephone sets and allows users to interact with their mailboxes without any keypad input whatsoever. Name dialing and name addressing are not available to users in VMUIF customer groups.

The following functions (configured in the class of service) are unique to VMUIF and are not available with the MMUI interface:

- family mailbox (up to 8 submailboxes)
- dial pulse support
- skip to first new message

– login from call answering

Note: The interface type cannot be changed after the customer group has been added

Procedure 3-9
Adding a customer group

Starting Point: The Customer Administration menu

1 Enter a customer name that is descriptive enough to easily identify the customer.

2 Specify the customer type (Residential or Private).

3 Specify the interface type (MMUI or VMUIF).

4 To save the customer group, go to step 4a. To cancel this operation, go to step 4b.

a. Press [Save].

The Customer Administration Menu is displayed. The name of the customer group you just created will appear in the top-left corner of the Customer Administration Menu as well as all customer administration screens. From the Customer Administration Menu you will specify the specific administrative task you want to perform, such as adding users and configuring mailboxes, creating customer distribution lists, or configuring voice services. The various administrative tasks are described throughout the rest of this guide.

b. Press [Cancel].

The customer is not added to the system, and you are returned to the Customer Administration screen.

Finding a customer group

Use the [Find] softkey on the Customer Administration screen to find a particular customer group or a subset of customer groups. If you only remember part of the number or name, you can use wildcard characters to retrieve a subset of customer groups that match the retrieval pattern you have specified.

The fields on the Find Customer screen accept three wildcard characters: "+" (the plus sign), "_" (underscore), and "?" (question mark).

The plus sign (+) is used to match a number of characters. For example, if you enter **Eno+** in the *Customer Name* field, all customer groups that have a name beginning with "Eno" will be retrieved.

The underscore (_) matches a single character. For example, if you enter **2_** in the *Customer Number* field, customer groups that are numbered between 20 and 29 will be retrieved. To retrieve all customer groups numbered 1100 to 1199, enter **11_ _**.

When you press [Find], the Find Customer screen (Figure 3-11) is displayed.

Figure 3-11
The Find Customer screen

```
                    Customer Administration

Find Customer

List Format:       [Brief]  Attribute  COS

Customer Number:   2+________

Customer Name:     ____________________

Exit                  List        Print
```

The following fields are displayed:

- ***List Format*** Specify the format in which you want the list to be displayed or printed. Your options are
  - — ***Brief*** Only the customer number and customer name are displayed. See Figure 3-12.
  - — ***Attribute*** The resulting list includes the following information: the customer number, customer name, the type of interface (MMUI or VMUIF), the customer type (residential or private), and whether or not the customer group spans multiple MSMs. See Figure 3-13.
  - — ***COS*** The customer number, customer name, and all of the classes assigned to the customer group are displayed. See Figure 3-14.
- ***Customer Number*** If you know the number of the customer group you want to view or modify, enter it in this field. This will be a number between 1 and 2000.

  If you remember only part of the number, you can use wildcard characters to replace the character(s) you cannot remember. For example, if you know the number is in the 50’s, enter “5_.”

- ***Customer Name*** If you know the name of the customer group you want to view or modify, enter it in this field. (The name can be up to 30 characters in length.) If you don't remember the exact name, you can use wildcard characters to specify the name as closely as possible. All customer groups that have a name matching the retrieval pattern you specify will be listed. For example, if you enter "A+ack", the following customer groups might be retrieved: Adarondack and Adtrack.

Once you have specified the customer name or number (or a retrieval pattern), you can either view the resulting list on screen or print it.

Procedure 3-10
Listing customer groups

Starting Point: The Customer Administration screen

1 Press [Find].

The Find Customer screen is displayed.

2 Specify the list format (brief, attribute, or COS).

3 Enter one of the following: the customer's name, the customer's number (either the exact name/number or use wildcard characters to specify a retrieval pattern). To retrieve all customers, leave all fields blank.

4 Press [List].

The List of Customers screen is displayed. The screens that appear vary depending on the list format specified in the Find Customer screen (brief, attribute, or COS).The brief List of Customers screen is shown in Figure 3-12; the List of Customers screen with attributes is shown in Figure 3-13; and the List of Customers screen with COSs is shown in Figure 3-14.

Figure 3-12
The List of Customers screen (Brief)

```
                    Customer Administration

List of Customers

Cust #     Customer Name

20         Medical Center
21         NAC Imports
22         CRCB Head Office
24         B&B
27         Mullen & Edge
28         Tharpe and Sons

Exit                  View/Modify    Delete
```

Figure 3-13
The List of Customers screen (Attribute)

```
                    Customer Administration

List of Customers

Cust #     Customer Name        *I/F    Cust
                                Type    Type

20         Medical Center       VMUIF   Priv
21         NAC Imports          MMUI    Priv
22         CRCB Head Office     MMUI    Priv
24         B&B                  MMUI    Priv
27         Mullen & Edge        VMUIF   Priv
28         Tharpe and Sons      MMUI    Res

Exit                  View/Modify    Delete
```

* This column appears only if both types of interface are enabled on your system.

Figure 3-14
The List of Customers screen (COS)

```
                    Customer Administration

List of Customers

Cust #  Customer Name     Classes of Service
    20  Medical Center    1 4 9 45 89 90 101 125
    21  NAC Imports       1 3 45 47 51 56
    22  CRCB Head Office  5 9 11 23 26 41 56 59 67 73 79 82 88 91 95
    24  B&B               1 21 29 35 41 67 101 108
    27  Mullen & Edge     11 34 101 109 115 120
    28  Tharpe and Sons   72 79

   Exit                    View/Modify    Delete
```

Printing a list of customer groups

From time to time, you may want to print a list of all of the existing customer groups for record-keeping purposes. Once you have filled in the search criteria in the Find Customer screen (described in Procedure 3-10 on page 3-24), you can press [Print] to obtain a printout of the list of retrieved customers.

Procedure 3-11
Printing a list of customer groups

Starting Point: The Customer Administration screen

1 Press [Exit].

The Find Customers screen is displayed.

2 Press [Find].

The Find Customer screen is displayed.

3 Specify the list format (brief, attribute, or COS).

4 Enter one of the following: the customer's name, the customer's number (either the exact name/number or use wildcard characters to specify a retrieval pattern). To retrieve all customers, leave all fields blank.

5 Press [Print].

The following softkeys appear: [Continue Printing] and [Cancel Printing].

You are prompted to make sure your printer is ready and on-line.

6 Choose step 6a to print or 6b to cancel.

a. Press [Continue Printing] to start printing.

Once printing is complete, the Find Customer screen and its softkeys are redisplayed; you may stop printing at any time by proceeding to 6b.

b. Press [Cancel Printing] at any time to cancel printing.

As a result of print buffering, you may experience some delay before control is returned to your screen, and the printer actually stops printing.

7 Press [Exit].

The Find Customers screen is displayed.

Modifying customer groups

You can use one of two methods to select the customer group you want to view or modify:

- Use the [View/Modify] softkey on the Customer Administration screen.

  To use this softkey from the Customer Administration screen, you must know the customer number of the customer group you want to view or modify.

  Once you have specified a valid customer number and pressed [View/Modify], the Customer Administration Menu is displayed (see page 3-31). From this menu you can select to perform one of the following:

  — User Administration

  — General Administration

  — Voice Administration

  — Fax Administration

  — System Event and Error Reports (SEERs)

  — Operational Measurements

  — Network Administration (if AMIS Networking is installed and/or if Meridian Networking is installed and enabled for the customer group)

  — Class of Service Administration (read-only)

  See Procedure 3-12.

- Use the [Find] softkey on the Customer Administration screen.

  Use this method if you do not remember the customer number. In the Find Customer screen, specify the search criteria. From the List of Customers screen, select the customer group you want to view or modify and then press [View/Modify]. See Procedure 3-13. Also see the “Finding customer groups” section for more information about the find function.

Procedure 3-12
Modifying a customer group using the [View/Modify] softkey

Starting Point: The Customer Administration softkey screen

1 Press [View/Modify].

You are prompted for a customer number.

2 Enter the number associated with the customer you want to modify. Press <Return>.

If the number is not valid, try entering another number.

The Customer Administration Menu is displayed. See Figure 3-16 on page 3-31.

3 Select a menu item and refer to the appropriate chapter for details.

Procedure 3-13
Modifying a customer group using the [Find] softkey

Starting Point: The Customer Administration softkey screen

1 Press [Find].

The Find Customer screen is displayed.

2 Specify the list format (brief, attribute, or COS).

3 Enter one of the following: the customer's name, the customer's number (either the exact name/number or use wildcard characters to specify a search pattern).

To retrieve all customers, leave the *Customer Name* and *Customer Number* fields blank.

4 Press [List].

The List of Customers screen is displayed.

5 Move the cursor to the customer group you want to view or modify and press <Space bar> to select it.

6 Press [View/Modify].

The Customer Administration menu is displayed. See Figure 3-16 on page 3-31.

7 Select a menu item and refer to the appropriate chapter for details.

Deleting customer groups

Before you can delete a customer group, you must delete everything associated with it: namely, all users in the customer group, the customer distribution lists that include those users, the entries in the VSDN table, and all voice services (voice menus, announcements, thru-dialers, time-of-day controllers, voice forms, and fax item definitions). See Chapter 5, "User Administration," for more information about deleting users and customer distribution lists, and Chapter 7, "Voice Administration," for information about deleting VSDNs and voice services.

Note: If you only have one customer group, you cannot delete it.

To retrieve the customer group you want to delete, you can either press [View/Modify] from the Customer Administration screen if you know the customer number, or [Find] if you do not know the exact number. Procedure 3-14 describes the first method and Procedure 3-15 describes the second.

Procedure 3-14
Deleting a customer group using the [Delete] softkey

Starting Point: The Customer Administration softkey screen

1 Press [Delete].

You are prompted for a customer number.

2 Enter the number associated with the customer you want to Delete. Press <Return>.

If a valid customer number is entered, the Delete Customer screen is displayed. See Figure 3-15.

Figure 3-15
The Delete Customer screen

```
                        Customer Administration


Delete Customer
Customer Number:    4
Customer Name:      TLC Inc.
Customer Type:      Private  Residential
* Interface Type:   MMUI  VMUIF



Select a Softkey >
 OK to Delete     Cancel
```

* This field is displayed only if VMUIF is installed.

3 Press [OK to Delete] to delete the customer group or [Cancel] to abort the procedure.

Procedure 3-15
Deleting a customer group using the [Find] softkey

Starting Point: The Customer Administration softkey screen

1 Press [Find].

The Find Customer screen is displayed.

2 Specify the list format (brief, attribute, or COS).

3 Enter one of the following: the customer’s name, the customer’s number (either the exact name/number or use wildcard characters to specify a search pattern).

To retrieve all customers, leave the *Customer Name* and *Customer Number* fields blank.

4 Press [List].

The List of Customers screen is displayed.

5 Move the cursor to the customer group you want to delete and press the <Space bar> to select it.

6 Press [Delete].

The Delete Customer screen is displayed. See Figure 3-15.

7 Press [OK to Delete] to delete the customer group or [Cancel] to abort the procedure.

The Customer Administration Menu

From the Customer Administration Menu (Figure 3-16), you can select the type of administrative function you require. The changes you make affect only the current customer group.

CAUTION
Risk of security breach or delays
For security and memory usage reasons, do not leave the administrative console unattended while you are logged on. Also, remember to log out at night. If you do not log out, critical audit and backup routines may not be able to run due to insufficient memory.

Figure 3-16
The Customer Administration Menu

```
ABC Company          Customer Administration Menu

                  1   User Administration
                  2   General Administration
                  3   Voice Administration
              *   4   Fax Administration
                  5   System Event and Error Reports
                  6   Operational Measurements
             **   7   Network Administration
                  8   Class of Service Administration

Select an item >

Exit
```

* This option is displayed only if Fax on Demand is enabled.
** This option is displayed only if AMIS or Meridian Networking is enabled.

Procedure 3-16
Using the Customer Administration Menu

Starting Point: The Customer Administration Menu

1 Choose an item by entering its number and pressing <Return>.

The appropriate menu appears. See the following chapters (in this document) or NTPs for details:

"User Administration"

"General Administration"

"Voice Administration"

Fax on Demand Application Guide *(NTP 555-7001-327) if Fax on Demand is enabled.*

"System Event and Error Reports"

"Operational Measurements"

Network Services Administration Guide *(NTP 555-7001-335) if AMIS or Meridian networking is enabled*

"Class of Service Administration"

2 Carry out the required administrative functions, and then return to the Customer Administration Menu; repeat step 1 to carry out additional administrative tasks, or proceed to step 3.

3 Press [Exit].

The Customer Administration softkey screen is redisplayed.

Logging on at a Multiple Administration Terminal

Note: In previous releases of Meridian Mail MSM, MATs were referred to as UATs.

If the Multiple Administration feature is configured, the MSM can support up to four administration terminals (one main administration terminal and up to three secondary terminals).

However, only a limited number of administrative tasks can be performed on a secondary Multiple Administration Terminal (MAT) as opposed to the main administration terminal. These tasks include:

- user administration (adding, modifying and deleting mailboxes)
- class of service (COS) administration (Note that all COS screens are read-only.)
- voice services administration (which includes administration of the Voice Services-DN [VSDN] Table and creating, modifying, and deleting voice services such as announcements, voice menus, thru-dialers, time-of-day controllers, voice forms, and fax item definitions)

See the *System Administration Tools* guide (NTP 557-7001-305) for more information about configuring MATs.

Use the customer administrator password to log on to a secondary terminal (the default is **custpwd**). The customer administrator password can only be changed at the main administration terminal. A password change is automatically carried over to all configured MATs.

If you log on to a secondary terminal with the default password, you will be prompted to enter a new password immediately. (The system will not allow you to log on until you have changed the default password.)

When you log on successfully, the Customer Administration screen (Figure 3-17) is immediately displayed. You can only view or modify existing customer groups from a multiple administration terminal. You do not have permission to add or delete customer groups.

For information about configuring multiple administration terminals, see the “Configure MATs” chapter in the *System Administration Tools* guide (NTP 557-7001-305.)

Procedure 3-17
Logging on to a MAT

Starting Point: The Logon/Status screen

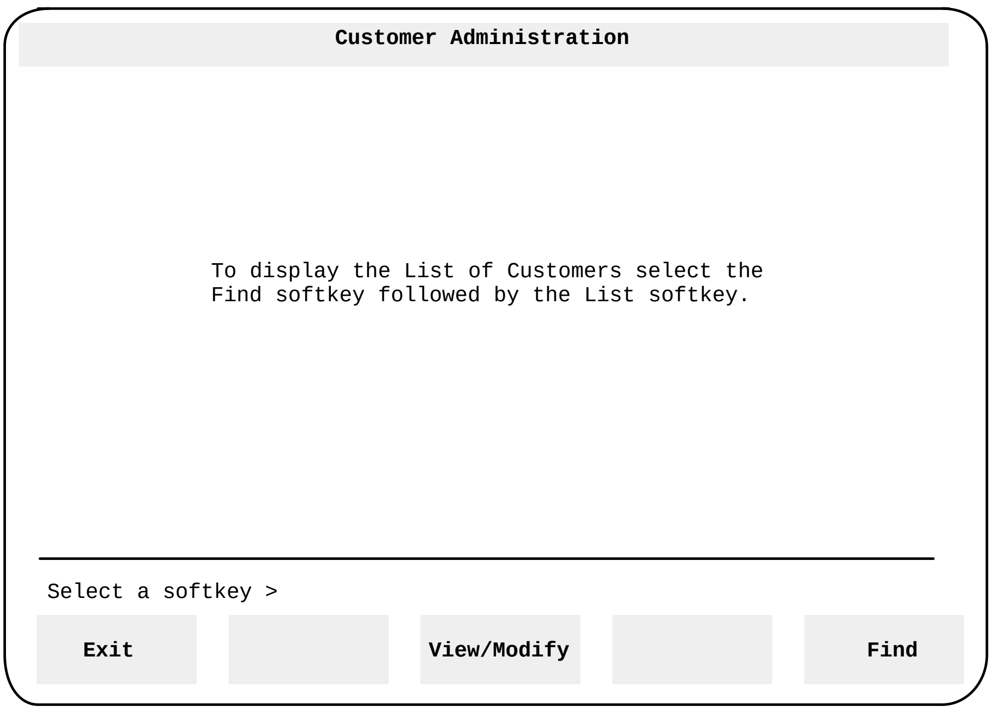
1 Press [Logon].

2 Enter the customer administration password and press <Return>.

If an invalid password is entered, an error message appears. Try logging on again.

If the password is valid, the Customer Administration softkey screen for MATs (Figure 3-17) is displayed.

Figure 3-17
The Customer Administration softkey screen for MATs



Note: This screen is not filled in until a valid operation is performed. Valid operations include pressing [Exit], [View/Modify], or [Find].

3 To view or modify a customer group, you can either press [View/Modify] or [Find].

If you know the customer number, press [View/Modify] (as described in step 3a). If you are not sure of the customer number, press the [Find] softkey first (as described in step 3b). This will allow you to retrieve a particular customer group using other search criteria (such as the customer group's name).

a. Press [View/Modify].

You are prompted for a customer number.

Enter the number associated with the customer you want to modify. Press <Return>.

The Customer Administration Menu for MATs (Figure 3-18) is displayed.

Figure 3-18
The Customer Administration Menu at a multiple administration terminal

```
ABC Company       Customer Administration Menu

              1   User Administration

              2   Voice Services Administration

              3   Class of Service Administration

Select an item >

 Exit
```

b. Press [Find].

The Find Customer screen is displayed. See page 3-23 for more information about using the find function.

4 Select an item from the menu, or go to step 5 to log off.

Select <1> to perform User Administration. See Chapter 5, "User Administration," for more information.

Select <2> to perform Voice Services Administration. See Chapter 7, "Voice Administration," for more information.

Select <3> to view the existing Classes of Service. See Chapter 10, "Class of Service Administration," for more information.

5 Press [Exit].

The Customer Administration softkey screen is displayed.

Chapter 4: Making recordings

This chapter describes

- the four types of recordings and how to record them
- guidelines for making recordings
- voice prompt maintenance
- remote activation
- how to make recordings using the [Voice] softkey

Types of recordings

There are four types of recordings you can make:

- call answering customer greeting
- personal verification
- broadcast mailbox personal verification
- VMUIF introductory tutorial greeting

The call answering customer greeting and personal verification are used for identification purposes. The call answering customer greeting identifies a customer to external callers, and the personal verification identifies users during message composition.

The call answering customer greeting

Note: This greeting is used only by MMUI.

The call answering customer greeting can be recorded for each customer group on the system. This greeting is played when a user's mailbox is reached through call answering from an external caller. It is played before the user's personal greeting (if recorded). It is also played by the remote notification service during notification delivery. If you do not record a custom greeting, there is no default call answering greeting, and external callers simply hear the user's personal greeting when they reach a mailbox. This recording can be used to identify the organization to external callers or to introduce the call answering service to the callers.

Because this greeting is used in a variety of situations, you will have to consider how to best word this greeting (or decide if you want to record a greeting at all). For example, during remote notification calls, the following prompt is played to MMUI users if no call answering greeting is recorded: *"Hello. Meridian Mail has received a message for ...."* For VMUIF systems, the prompt is *"Hello, Call Answering has received a message for..."*.

Considerations for recording call answering customer greetings

When a custom call answering greeting exists, the following prompt is played: *"Hello. <Call Answering Greeting> has received a message for ..."*. If the call answering greeting is something like *"Hello. Thank you for calling the Medici Institute,"* the prompt will not sound right when used during remote notification. Consider the following when deciding whether or not to record a call answering greeting.

- If you do not record a call answering greeting, the organization's name will not be announced at the beginning of a call answering greeting.

  When an external caller is connected to a user's mailbox, the caller will only hear the user's personal greeting. If you feel that the user's personal greeting is sufficient, you may regard this greeting as unnecessary.
- If you record just the organization's name (*"The Medici Institute"*), the greeting that is played during call answering may sound too abrupt.

  However, the prompt that is played during remote notification will sound quite natural.
- A friendlier greeting (*"Thank you for calling the Medici Institute"*) is ideal for call answering scenarios, yet results in an awkward sounding prompt for remote notification.

Recording call answering customer greetings

Procedure 4-1 describes the steps required to record a call answering greeting.

Procedure 4-1
Recording call answering greetings

1. Log on to a mailbox with administrator capabilities.
2. To record a call answering greeting, press **829** on the telephone keypad.
3. Choose step 3a to replace an existing call answering greeting or Personal Verification, or 3b to add a new greeting or verification.
   a. Press **76** to delete the old greeting. Proceed to 3b.
   b. Press **5** to start recording.

      If a previous recording exists, the added recording will be appended to the existing recording.
4. Wait for the tone and say the custom call answering greeting.

5. Press **#** to stop recording. (Do not hang up the phone during recording as this may produce a click sound.)
6. To check the recording, press **2** (play).
7. When recording is finished, press **83** to end the voice messaging session, then hang up.

   Note: The call answering greeting can be recorded from the administration terminal with a telephone nearby.

The personal verification

The personal verification is a recording of a user's first and last names (and extension if desired). It is used to identify the owner of a mailbox. If no personal verification is recorded, the system plays a recording of the user's extension number. Since it is easier to determine if you have reached the correct person by hearing their name rather than hearing their extension number, it is highly recommended that a personal verification is recorded for all users with mailboxes.

The personal verification can be recorded by you (the administrator) as you add each user to the system or it can be recorded by the users, themselves. If you want users to record their own verifications, the system administrator will have to enable this feature in the Add or View/Modify Class of Service screen. The field is called *Personal Verification Changeable by User*, and it is disabled by default for all new classes of service.

The procedure for recording personal verifications at the administration terminal is described later in this chapter in the "Recording prompts or personal verifications using the [Voice] softkey" section. However, it is ideal to have users record their own personal verifications because the user's own voice is likely to be more recognizable to callers. The user's procedure for recording a name for personal verification is covered in the *Call Answering User Guide* or the *Voice Messaging (VMUIF) User Guide*. If you prefer that users record their own personal verifications, ensure that they are informed of this feature and that they are instructed in the procedure.

When personal verifications are used

Personal verifications are used in the following situations:

- During message composition, the personal verification is played after the mailbox number is entered to verify that the correct person is being addressed.
- Messages delivered to non-users (using the Delivery to Non-Users feature) include the personal verification.

  The recipient of the message will be more likely to listen to the message if they recognize who the message is from.

- When a user is called using the name dialing feature, the personal verification is played instead of spelling out the name to the caller.
- During remote notification, the system will play the verification to identify for whom the message is intended.

Note: You can also record verifications for users as you add them to the system. This is done using the [Voice] softkey on the User Administration menus. See “Recording prompts or personal verifications using the [Voice] softkey” in this chapter.

Recording personal verifications

Procedure 4-2 describes the steps required to record a personal verification.

Procedure 4-2
Recording personal verifications

Note: Carry out the following procedure for each customer group. When you log on to the administrative mailbox in step 1, ensure that the mailbox belongs to the correct customer group.

1 Log on to a mailbox with administrator capabilities.

2 To record a Personal Verification for a user

a. Press **89**.

b. Enter the user’s mailbox number.

c. Press **#**.

3 Choose step 3a to replace an existing Personal Verification, or 3b to add a new verification.

a. Press **76** to delete the old greeting. Proceed to 3b.

b. Press **5** to start recording.

If a previous recording exists, the added recording will be appended to the existing recording.

4 Wait for the tone and say the Personal Verification (name of user).

5 Press **#** to stop recording. (Do not hang up the phone during recording as this may produce a click sound.)

6 To check the recording, press **2** (play).

7 When recording is finished, press **83** to end the voice messaging session, and then hang up.

Note: The personal verification can be recorded from the administration terminal with a telephone nearby.

Broadcast mailbox personal verification

There may be times that you will need to send a message to all users in a particular customer group. A message that is sent to all users is known as a *broadcast mailbox personal verification.* A special mailbox number (the broadcast mailbox number) is defined in the Voice Messaging Options screen. (See the chapter “Voice Administration”.) When composing a broadcast mailbox personal verification, you simply specify the broadcast mailbox number and all users in the customer group will receive the message.

Note: Any user who knows the broadcast mailbox number and has access to a mailbox with broadcast capability can also send broadcast messages.

Note: You cannot send a broadcast message to all users on the system (only to all users in a particular customer group). Although the broadcast mailbox number can be the same for all customer groups in the system (for example, 999), the mailbox to which you log on determines to which customer group the message will be sent. For example, when you log on to a mailbox that belongs to Customer Group 101, only the users in this customer group will receive the message. If you are sending broadcast messages to large customer groups, it is recommended that you do so outside of peak hours because the system can become overloaded.

It is a good idea to record a personal verification for the broadcast mailbox (before you record any broadcast messages as described in Procedure 4-3). This verification is played to users when they receive the message. You can either identify who the message is from (that is, the administrator) or that the message is a broadcast message so that each recipient knows that all users have received the message. This verification is recorded from the Voice Messaging Options screen using the [Voice] softkey. See the “Voice Messaging Options” section, in the “Voice Administration” chapter, for details.

Recording broadcast messages

Procedure 4-3 describes the steps required to record a broadcast message.

Procedure 4-3
Sending broadcast messages

Note: *If you have not recorded a personal verification for the broadcast mailbox, do so from the Voice Messaging Options screen before beginning.*

1 Log on to a mailbox with broadcast capability. Make sure the mailbox belongs to the customer group to which you want to send the broadcast message.

2 Press **75**, enter the broadcast mailbox number, and press **#**.

3 Press **#** again to end the list.

4 Press **5** to start recording.

5. Wait for the tone and say the message to be broadcast.
6. Press # to stop recording.
7. To check the recording, press **2** (play).
8. To send the broadcast message, press **79**.
9. When the message is sent, press **83** to end the session, and then hang up.

VMUIF introductory tutorial greeting

The introductory tutorial is played to VMUIF users only, when they log into a new mailbox for the first time. This tutorial familiarizes them with the service. You can record your own custom introductory tutorial greeting or use the default. This introductory tutorial greeting can also be made available to dial pulse (rotary telephone) users.

The following fields in the Voice Messaging Options screen allow you to configure the VMUIF introductory tutorial greeting:

- *VMUIF Introductory Tutorial (Voice)*
- *VMUIF Introductory Tutorial Type*
- *VMUIF Introductory Tutorial for Dial Pulse (Voice)*
- *VMUIF Introductory Tutorial for Dial Pulse Type*

For more information about these fields and using the Voice Messaging Options screen, refer to the section “Voice Messaging Options” in the chapter “Voice Administration”.

Guidelines for making voice recordings

Prompts used solely for administrative purposes can be recorded without much preparation other than deciding on the exact wording of the prompt. For voice menus or announcements played to the public or members of your organization, more formal preparation may be necessary. The following is a list of guidelines you may wish to use when recording prompts:

- Use a voice that is similar to the Meridian Mail prompts and consider using only one voice to avoid distracting callers by changes in pitch, tone, intonation, or accent. Choose a voice that suits your organization’s image. Select the person who will read the text, and print complete, definitive copies of the script. Audition a few candidates by recording their voices and then playing the recordings over the telephone line. Low-pitched voices are reproduced over telephone lines better than high-pitched ones.
- Record in quiet surroundings.
- Start recording immediately after the tone, and stop the recording immediately after the last word.

This prevents unnecessary pauses when system prompts and Personal Verification recordings are joined together.

- Do not hang up the phone while recording as this may produce clicks in the recording. Instead press # to stop recording.
- For applications that provide current information, it is perhaps best to have the person who knows the information monitor the prompts to ensure that the information is always up-to-date.
- When recording a Personal Verification for two or more people in your organization who have the same name (or very similar names), provide more information (their extension number or title, for example) to distinguish them.
- Record a few names for Personal Verification, and listen to them before recording the remaining names.

  This ensures that the procedure is done correctly and the intonation is good. Test each of the following areas where Personal Verification applies:

  — call answering greeting (MMUI customer groups only)

  — message envelope playback

  — address playback in the compose command

  — name dialing and name addressing (MMUI customer groups only)

The [Voice] softkey and its translation capability for a DN

The [Voice] softkey that appears on a number of User Administration screens allows the user to use a phone near the administration terminal to record or listen to specific recordings (prompts for menus, spoken names, and so on). When you use this softkey, you are prompted for the DN of the phone. This DN is not translated according to the values specified in the *Dialing Prefix for Outgoing Calls* and *Customer DN Length* fields that are set in the Voice Messaging Options screen. The DN must be entered as if it were being dialed from an arbitrary phone on the switch.

Voice Prompt Maintenance

If you delegate the task of maintaining recordings used in voice services (voice menus, thru-dialers, and announcements), ensure that your delegates are trained in using the Voice Prompt Maintenance service. You can also use this service when you must rerecord prompts frequently. The service allows you to review and modify voice prompts through a DTMF telephone rather than the administrative console.

Though prompts cannot be deleted through the Voice Prompt Maintenance Service, recording a new prompt automatically overwrites any previous prompt. You cannot update a voice recording through the Voice Prompt Maintenance Service while the voice service is being updated through the

Voice Services Administration screens. Callers hear the old version of the menu, thru-dialer, or announcement while it is being updated.

Most voice services (voice menus, announcements, thru-dialers, and voice forms) contain recorded data or prompts of one kind or another. An announcement contains just one recorded prompt which is played back to callers. A voice menu contains an introductory greeting as well as a prompt which specifies the actions that a user can take by pressing keys on the telephone keypad. Thru-dialers also contain an introductory greeting. Prompts can be recorded by the administrator from the administration terminal or by using the Voice Prompt Maintenance Service.

The voice prompt maintenance service can be used to update recordings in voice menus, announcements and thru-dialers. Although voice forms contain numerous recordings (for the form name, field names, and field questions), these prompts cannot be updated using the voice prompt maintenance service. Voice form prompts can only be recorded from the administration terminal.

To use the voice prompt maintenance service, you must define an Update Password for the application. (See the *Voice Menus Application Guide* [NTP 555-7001-325].) If no Update Password is assigned, the menu or announcement will not be accessible through the Voice Prompt Maintenance Service and can only be updated through Voice Services Administration.

Note: You must assign a DN to the voice prompt maintenance service in the VSDN table (described in the “Voice Services Administration” section in Chapter 7, “Voice Administration”). This DN is dialed directly to access the service.

Updating voice menu prompts, announcements, and thru-dialer greetings

Voice menus consist of a recorded greeting, and a prompt which specifies the actions that a user can take by pressing keys on the telephone keypad. The Add a Voice Menu Definition screen is used to create a voice menu and define its general characteristics. Voice recordings in the new menu can be recorded by the administrator or by a delegate using the voice prompt maintenance service.

Updating voice menu prompts

Procedure 4-4 describes the steps required to update voice menu prompts.

Procedure 4-4
Updating voice menu prompts

1 Dial the Voice Prompt Maintenance Service DN.

The system prompts you for an ID.

2 Enter the required Voice Menu ID and press #.

The system prompts you for the Update Password.

3 Enter the Update Password and press #.

4 The system plays a menu with four choices:

a. Update Greeting prompt (telephone keypad number 1)

b. Update Menu Choices prompt (telephone keypad number 2)

c. Update No Response prompt (telephone keypad number 3)

d. Update Other Menu prompts (telephone keypad number 4)

5 Select the required function.

If you press 1, 2, or 3 on the telephone keypad, you are prompted to play the prompt if it exists.

If you press 4 on the telephone keypad, you are prompted for the number of the prompt. This is the number on the keypad that a caller using the menu must press to hear the prompt. Enter the appropriate number.

6 Play or record the prompt.

If you pressed 4 on the telephone keypad after playing, recording, or updating the prompt, enter a number sign (#) to go back to where you can enter the number (key) of another prompt.

7 To return to the ID prompt, enter a number sign.

You can now work on another menu by going to step 2.

Updating announcements and thru-dialer greetings

An announcement is simply a voice recording that can be played back as part of a voice menu (when a particular menu item is selected), or as a stand-alone service having a unique DN that users dial in order to hear the information recorded in the announcement.

Thru-dialers perform basic call handling within a voice menu or as a stand-alone service. When used within a voice menu, the system recording prompts callers to enter an extension or name (if enabled) and places the call. Custom prompts are not required. However, when a thru-dialer is used as a stand-alone service, a custom greeting should be recorded. For example, a thru-dialer may be used as an auto-attendant in which case the greeting should contain the company name and should inform callers to stay on the line if they don’t have a touch tone phone.

Procedure 4-5 describes the steps required to update announcements and thru-dialer greetings.

Procedure 4-5
Updating announcements and thru-dialer greetings

1 Dial the Voice Prompt Maintenance Service DN.

The system prompts you for an ID.

2 Enter the required Announcement ID or Thru-dialer ID and press **#**.

The system prompts you for the Update Password.

3 Enter the Update Password and press **#**.

You are prompted to use Play or Record. (Use Play to hear the entire prompt from start to finish.)

4 Play the announcement or greeting, or update it and save the new announcement.

Record overwrites the old recording.

5 To return to the ID prompt, enter a number sign.

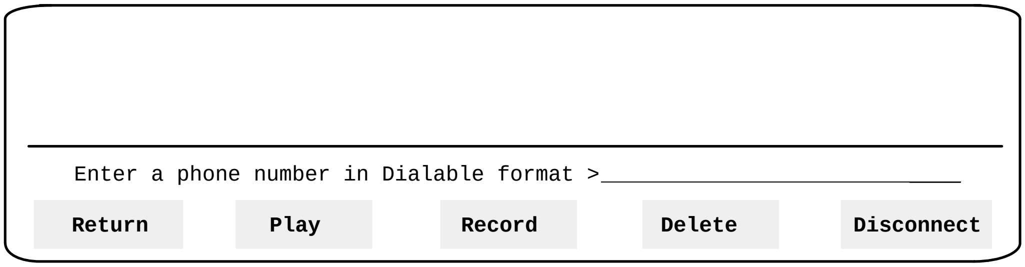
You can update another announcement or thru-dialer greeting by going to step 2.

Recording prompts or personal verifications using the [Voice] softkey

The [Voice] softkey is used to record personal verifications and prompts for voice menus, announcements, thru-dialers, and voice forms. When you use the voice subset of softkeys, the *Personal Verification Recorded (Voice)* field is set to “Yes” or “No.” The [Voice] softkey is available on the Add or View/Modify User screens, the Add or View/Modify Distribution List screens, and several of the Voice Services Administration screens. When [Voice] is pressed, a new set of softkeys is displayed as shown in Figure 4-1.

Note: A telephone set is required to record the personal verification. Ensure that a phone set is available near the administration terminal where you are working.

Figure 4-1
Recording softkeys



Procedure 4-6
Using the recording softkeys

Starting point: The Customer Administration menu

1 Select User Administration.

2 Select the type of user (local voice user, directory entry user, or remote voice user).

3 If you have not added the user yet, go to step 3a. If you want to record a personal verification for an existing user, go to step 3b.

a. Press [Add]. Enter the extension number when prompted and press <Return>.

b. Press [View/Modify]. Enter the extension number when prompted. If you do not know the extension number of the user, press [Find] instead to retrieve the user from a subset of users.

4 From the Add or View/Modify User screen, press the [Voice] softkey.

The current screen remains displayed; the softkey display changes to [Cancel].

You are prompted for an extension number:

Enter a phone number in Dialable format > __

5 Enter the extension number of the phone set you are going to use to make the recording. (The number you enter should be in a form that would allow a caller from any other PBX/switch customer group to reach the phone set.) Press <Return>.

The phone will ring.

6 Pick up the telephone handset.

The recording softkeys are displayed. See Figure 4-1.

7 To listen to the existing recording, go to step 7a. To make a new recording, go to step 7b. To delete the existing recording, go to step 7c.

a. Press [Play].

See Procedure 4-7 on page 4-12 for more details.

b. Press [Record]. At the sound of the beep, begin speaking into the handset.

See Procedure 4-8 on page 4-13 for more details.

c. Press [Delete].

See Procedure 4-9 on page 4-13 for more details.

8 When you are satisfied with the recording and want to disconnect the call through the softkeys, go to step 8a. To disconnect by hanging up, go to step 8b. To return to the original softkeys without disconnecting the extension, go to step 8c.

a. Press [Disconnect]. The line is disconnected and the original softkeys are displayed. If you press [Voice] to access the recording softkeys again, you will have to reenter the telephone extension.

b. Place the receiver on hook.

The call is terminated and [Return] appears.

Press [Return] to return to the current screen with its original softkeys.

c. Press [Return]. The line is not disconnected (unless you hang up the receiver). The original softkeys are displayed. This means that if you decide to rerecord or listen to the recording, you do not have to re-enter the telephone extension after pressing the [Voice] softkey.

9 Press [Save] to save the recording.

Playing a recording

The voice recording can be played using the [Play] softkey.

Procedure 4-7
Playing a voice recording

Starting point: The current screen, Voice softkeys displayed

1 Press [Play].

If there is no current recording, a message is displayed on the console.

If a recording is available, it is played, and the [Stop] softkey is displayed.

2 Press [Stop] at any time to stop the playback.

The Voice Recording softkeys are redisplayed.

Note: If you press [Stop] and then press [Record], the recording starts from the beginning, overwriting the entire recording.

Recording a new message

The voice recording can be recorded using the [Record] softkey. This overwrites any existing recording.

Procedure 4-8
Recording a voice recording

Starting point: The current screen, Voice softkeys displayed

1 Press [Record].

A message is displayed on the console requesting you to make the recording, and a beep can be heard in the telephone receiver.

The [Stop] softkey is displayed.

2 Say the text of the recording, and press [Stop] when you are done.

The Voice Recording softkeys are redisplayed.

The recording will be stopped automatically if you exceed the Maximum Prompt Size or the Record Timeout set in the Voice Service Profile screen.

If a recording existed before, it is overwritten.

Deleting a recording

The recording can be deleted using the [Delete] softkey.

Procedure 4-9
Deleting a voice recording

Starting point: The current screen, Voice softkeys displayed

1 Press [Delete].

A message is displayed on the console requesting you to confirm the deletion; the softkeys [OK to Delete] and [Cancel] are displayed.

2 Choose 2a to delete the recording or 2b to cancel.

a. Press [OK to Delete].

The recording is deleted.

The Voice Recording softkeys are redisplayed.

b. Press [Cancel].

The Voice Recording softkeys are redisplayed; the recording is not deleted.

Remote Activation

Remote Activation allows administrators or delegates to associate a VSDN with a different voice service (voice menu, announcement, thru-dialer, time-of-day controller, voice forms, or fax items) from off-site, using a standard remote DTMF telephone set. If, for example, there is a severe storm and the office is unexpectedly shut down, you would want to make sure that the main office number activates the appropriate service. Using remote activation, you can log in from your home phone (as long as it is a touch-tone phone) and change the service that is associated with the main number so that the announcement stating that your office is closed will be played. For more information see “Remote Activation” on page 7-4.

Chapter 5: User Administration

Note: Before adding any users to a customer group, make sure that Classes of Service (COS) have been created and assigned to this customer group. For information about creating Classes of Service, see the “Class of Service Administration” chapter in the *System Administration Guide*.

ATTENTION

Do not perform user administration during nightly DR audit.

At 3:30 a.m. every day, an audit of the DR directory is performed. Do not perform any user administration (adding, modifying, or deleting users) during this audit. Depending on how unbalanced the system is, this audit can take anywhere from 10 minutes (if the system has not been modified since the last audit) to 2 hours (if there have been many changes such as a lot of users being added).

User administration primarily involves adding users to the system and, once added, maintaining the existing users. When you add a new user to the system, you must specify the user type. The creation and maintenance of customer distribution lists is also a part of user administration.

Types of users

There are three types of users:

- local voice users
- directory entry users
- remote voice users

Local voice users

Local voice users have DNs (or extensions) on the local switch. Each local voice user has a mailbox with call answering capability. This means that if the user is away from his or her phone (or on the phone), callers are connected to their personal mailbox in which they can leave a voice message. Users belonging to MMUI customer groups also have access to voice messaging functions (that is, they can compose and send messages to other users and non-users if delivery to non-user is enabled). Users belonging to VMUIF customer groups tend not to have compose and send capabilities (although these can be enabled). Instead, they typically have access to a simplified call answering interface only.

Directory entry users

Directory entry users are registered in the Meridian Mail directory but do not have a mailbox. As a result, they do not have access to voice messaging functions. They can, however, be referenced by such features as name dialing and thru-dialers (that may be part of an automated attendant service).

Remote voice users

Remote voice users are users on other Meridian Mail systems who have access to your system through the Meridian Networking service (if enabled). Not all voice users at remote sites need to be added to your system as remote voice users. You may only want to do this for those users who most frequently call your site. When a user from a remote site sends a message to a user at the local site, the personal verification is not played unless the user is defined as a remote voice user in your system. (When a user is not defined as a remote voice user, that user’s mailbox number is played instead of the personal verification which makes it harder for local voice users to identify the sender of a message.)

Converting from prior releases

When you convert from a prior release, all existing local voice users are assigned to a personal class of service. This means that each local voice user has a “unique” class of service which is not connected to any of the system classes of service. Therefore, users must be reassigned to system classes of service after a conversion.

There is a class of service conversion utility (“COS conversion”) that is documented in the *System Administration Tools Guide* (NTP 557-7001-305). It checks each local voice user’s personal class of service; if it matches an existing system class of service, the local voice user is assigned to that class of service. Local voice user mailboxes that do not match a system class of service remain with personal COSs. You can use this utility to view these unassigned mailboxes, and then use the utility to either create a system class of service based on the personal COS or assign the unassigned mailbox to a defined system class of service.

Planning how to add new users to the system

Before you begin to add any local voice users to the system, you should do some planning first. Ask yourself the following questions:

1 What types of local voice users will you be servicing?

For local voice users, identify the classes of service that you will need to meet their needs. For more information about classes of service, refer to Chapter 10 “Class of Service Administration.”

2 The system automatically distributes local voice users over volumes so that a new local voice user is added to the volume that is least full.

However, you may want to consider some other strategy for assigning local voice users to volumes. For more information, refer to the section “Distributing local voice users over volumes.”

3 If you are adding large numbers of users in a short time period (that is, in a 24-hour period), there are special considerations.

For more information about adding large numbers of users, refer to the section “Adding large numbers of users.”

Distributing local voice users over volumes

Meridian Mail systems can have from one to eight voice nodes, each of which contains a hard disk drive for data storage. The hard disk drives are partitioned into volumes. Volumes are storage areas for system and user-related information. The volumes are already set up when your system is installed.

Local voice users are automatically distributed over volumes. Whenever you press the [Add] softkey, the volume to which the local voice user is added defaults to the volume with the greatest amount of free voice space. This ensures that certain volumes do not fill up while others remain empty.

However, you should be careful that you do not assign too many local voice users who use the system often to the same volume. Putting certain types of users who share the same usage pattern (especially those who use the system heavily) on the same volume increases the probability that too many channels will try to access the same disk at one time. For example, all secretaries are added to the same volume (volume 203). They all come in at 9:00 a.m. and log on immediately. Suddenly a large number of channels are trying to access the disk. This situation is not desirable. It is therefore recommended that you distribute local voice users across volumes randomly in such a manner that does not result in local voice users with the same access patterns being placed on the same volume.

Before adding local voice users to the system, survey your users to estimate average usage in terms of number of messages and length of each message. Compare this with the capacity of the available disk volumes and the minutes of storage you wish to assign to local voice users, and estimate the number of local voice users each volume can accommodate. Randomly assign local voice users on different disks to distribute traffic evenly to the disk drives. Ideally, each user volume should have an equal number of local voice users. For example, to randomly select local voice users, choose the volume based on the first letter of the user’s surname.

Note: For VMUIF users, the maximum voice storage for each mailbox is equal to the mailbox size plus the maximum message length.

Information on disk usage can be obtained through the Disk Usage report generated by the system administrator (see the chapter “Operational Measurements” of the *System Administration Guide* [NTP 557-7001-300]).

A listing of disk volumes can be obtained by displaying the Volume Administration screen in the “General Administration” chapter of the *System Administrator’s Guide*. For information about volume names and how information is distributed on the volumes, see “Volume naming conventions” and “Types of information contained on the volumes” in the “General Administration” chapter of the *System Administration Guide* (NTP 557-7001-300).

If a volume becomes full and you need to move local voice users to another volume, you can do so by using the Move User utility. This utility is available under the Tools menu. To move a local voice user, you must know the local voice user’s mailbox number. For more information, see the *System Administration and Maintenance Tools Guide* (NTP 557-7001-305).

Adding large numbers of users

It is recommended that you do not add a large number of users (600 or more total, not per customer group) in a short period of time. (A short period of time here means a 24-hour period between two nightly audits. These audits take place between 2:30 a.m. and 5:00 a.m.) When you add such a large number of users, the organization directory which stores user information can become unbalanced and perform less efficiently. The nightly audit rebalances the directory. If you must add a large number of users between audits, consider the following factors. For more information about nightly audit, refer to the “Nightly system audits” section in Chapter 1, “An overview of administration.”

1. Ensure that the number of users to be added is within the engineering guidelines for the system.

   Specifically, Meridian Mail MSM is engineered for up to 5,000 users per voice node.

2. If you have both residential and private customer groups, the type of user affects system load.

   Residential users place less of a load on the system than private users.

Note: When adding users to a private customer group, add them in *reverse alphabetical order*. When you add users to a private customer group in alphabetical order, performance will gradually degrade after approximately 600 users have been added. (The system will get slower and slower.) This degradation in performance will be corrected when the next nightly audit occurs.

When adding users to a residential customer group, you can add them in any order.

3 Distribute local voice users across volumes as evenly as possible.

See the section on “Distributing local voice users over volumes” earlier in this chapter.

4 Do not add more than 2000 users to the same exchange.

Otherwise, the system will become unbalanced. The next nightly audit will rebalance the system. For example, if the exchanges 763, 766, and 769 exist on your switch, do not add more than 2000 users to any of them within a 24-hour period.

5 For MMUI users, be careful how you fill in the *Department* field. Avoid broad categories which will place more than 100 users in a single department.

Considerations for disk shadowing

Disk shadowing is a feature that provides protection against data loss in the event of disk failure. This feature works by writing new information to two disks at the same time. If one disk fails, it is taken out of service without service interruption. Disks are shadowed on each node. Before adding local voice users, find out which nodes are shadowed and which are unshadowed. It is recommended that you put more important mailboxes (such as those of high-level executives) on the shadowed nodes. Local voice users, whose messages may not be as critical, can be placed on nonshadowed nodes. Should a shadowed disk fail, very important messages will not be lost since they will be on the second disk of the shadowed pair.

Multiple administration terminals

Note: Administration can be done from a secondary administration terminal if the Multiple Administration Terminal (MAT) feature is installed. If more than one administrator accesses user information, customer distribution list, or voice service at the same time, the administrator who first gained access to the entry is the only one who can modify the information. The information displayed on the other terminals will be read-only, and the [Exit] softkey will be available instead of the [Save] and [Cancel] softkeys.

Meridian Mail supports up to four administration terminals for MSM systems. This includes one main administration terminal and up to three secondary terminals. All administrative functions can be performed on the main administration terminal. The secondary terminals have limited functionality. They can be used to

- perform user administration
- perform customer-specific voice services administration (such as creating or modifying voice services)
- view class of service definitions.

For information about configuring multiple administration terminals, see the “Configure MATs” chapter in the *System Administration Tools* guide (NTP 557-7001-305).

Using the User Administration screens

The User Administration screens provide the necessary facilities to add, modify, and delete directory entry users, local voice users, and remote voice users.

When you add users to the system, the user is based on the Class of Service (COS) to which he or she is assigned. Classes of service serve as templates to simplify the process of adding new users to the system and provide a way of changing a parameter (such as enabling/disabling a feature, changing a maximum limit) for a group of users (all of the users who belong to the Class of Service). Up to 127 system COSs can be defined. You can assign up to 15 of these COSs to a customer group.

Personal classes of service can be created to meet the needs of a user who does not fit into any of the existing classes of service. This is described in more detail in the “Adding local voice users” section. Classes of service are described in Chapter 10, “Class of Service Administration.”

Note 1: Classes of service can only be created by the system administrator.

Note 2: User administration can be performed from a secondary administration terminal if the Multiple Administration Terminal (MAT) feature is installed. If more than one administrator accesses a user or customer distribution list at the same time, the administrator who first gained access to the user or list is the only one who can modify the information. The information displayed on the other terminals will be read-only, and the only softkey available will be the [Exit] softkey.

Finding users

The Find function can be used to retrieve a list of users for viewing or printing. This is useful for record-keeping purposes. It is also useful if you need to view or modify a particular user but you do not know the mailbox number. (When you press [View/Modify] after selecting Local Voice User or Remote Voice User from the User Administration menu, you are prompted for a mailbox number.) If you only know the last name, for example, press [Find] to retrieve the user according to name.

You can retrieve a particular user or a subset of users by using various search criteria such as first or last name, department (MMUI), personal verification status (to find all those users who do not have personal verifications, for example), or, for local voice users, the mailbox status (disabled, enabled, and so on).

Using wildcard characters

The fields on the Find Users screens (Figure 5-5 is one) accept up to three wildcard characters: “+” (the plus sign), “_” (underscore), and “?” (question mark).

The plus sign (+) is used to match a number of characters. For example, if you enter 2+ in the *Mailbox Number* field, all mailboxes beginning with 2 will be retrieved.

The underscore (_) matches a single character. For example, if you enter 210_ in the *Mailbox Number* field, mailboxes with numbers in the range 2100 to 2109 will be retrieved. To retrieve all mailboxes numbered 2100 to 2199, enter 21_ _.

The question mark (?) produces a “sound match.” This is useful if you are unsure of the spelling of a user’s name. For example, a user calls to inform you that his mailbox has been disabled and tells you that his name is “Roger Braemoore.” You forget to ask him for the spelling of his last name (it could be spelled Braymore, Braemore or Breymore or some other way you may not think of). If you enter “Br+more”, the system will find all surnames that begin with “br” and end with “more.” If you enter “Br__more”, the system will find surnames that begin with “br” followed by two characters and ending with “more.” In both of these cases, the user you are looking for will not be found because you did not think to enter “moore” instead of “more.” If you enter “Braymore?”, the system will find all names that sound like “Braymore” and find the user you are searching for.

Note: The search criteria that you specify in this screen also apply when you press [Print Users].

Deleting users

Before deleting a user, you may want to ensure that there are no voice messages in the user’s mailbox. This can be verified by checking the *Storage Used* field in the Modify Local Voice User screen. If there are messages remaining, you may want to make sure that the user listens to them before you delete the user.

CAUTION
Risk of data loss
If a user's mailbox is removed before user usage data is processed, then the data will be lost. (See the chapter on "Operational Measurements".) To avoid this situation, do not delete the mailbox until the data is processed. (If you have the AdminPlus feature and file downloading capability, do not delete the mailbox until you have downloaded the data.) Instead, the mailbox should be disabled. See the description of the *Logon Status* field in the "View/Modify Local Voice User" section earlier in this chapter. Once data is processed, you can delete the user if you wish.

The User Administration menu

When User Administration is selected, the User Administration menu (Figure 5-1) is displayed. From this menu, you can access the add, modify or delete functions for local voice users, remote voice users, directory entry users, or customer distribution lists.

Figure 5-1
The User Administration menu

```
ABC Company Limited          User Administration


        1  Local Voice User

      * 2  Remote Voice User

        3  Directory Entry User

        4  Distribution Lists



   ____________________________________________________________

   Select an item >

   Exit
```

* This item only appears if Networking is installed and enabled for the customer group.

Procedure 5-1
Using the User Administration menu

Starting point: The Customer Administration Menu

1 Select User Administration.

The User Administration menu is displayed (Figure 5-1).

2 Choose an item by entering its number and pressing <Return>.

a. Select Local Voice User if you want to add a local voice user to a customer group, or modify or delete an existing local voice user.

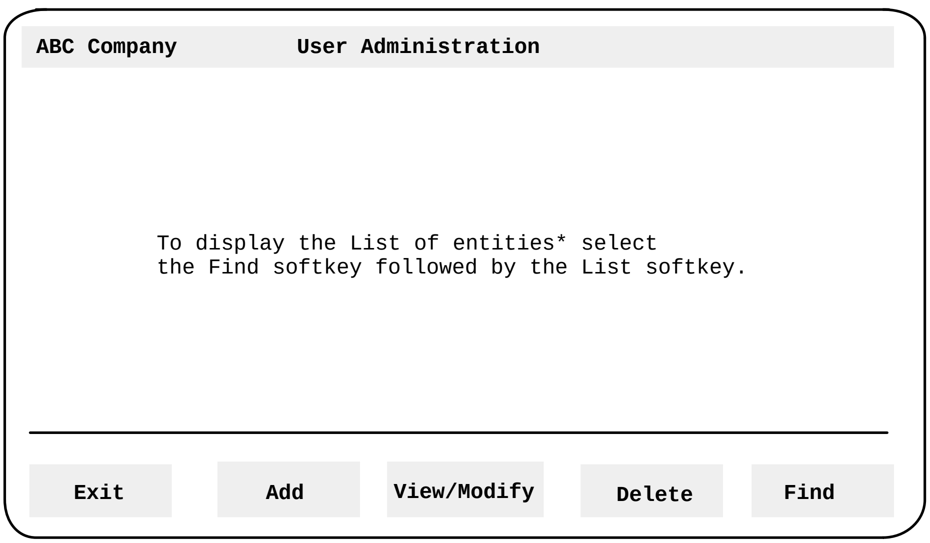
b. Select Remote Voice User if you want to add a remote voice user to a customer group, or modify or delete an existing remote voice user.

c. Select Directory Entry User if you want to add a directory entry user to a customer group, or modify or delete an existing directory entry user.

d. Select Distribution Lists if you want to add a customer distribution list, or modify or delete an existing list.

The screen in Figure 5-2 is displayed when you select any of the options:

Figure 5-2
The User Administration softkeys




```
* "entities" will be one of Local Voice Users, Directory
  Entry Users, Remote Voice Users, or Distribution Lists.
```

The [Cancel] softkey is displayed when you select the [Add], [View/Modify], or [Delete] softkey.

3 Select a softkey:

a. Press [Exit] to return to the User Administration Menu.

b. Press [Add] to add a user or distribution list.

c. Press [View/Modify] to view or modify an existing user or distribution list.

d. Press [Delete] to delete an existing user or distribution list.

e. Press [Find] to find a particular user/distribution list or a subset of users/distribution lists from which you can then retrieve a specific user or list.

Administering local voice users

You can do the following administration tasks for local voice users:

- add
- find
- view or modify
- delete

Adding local voice users

Most of the users that you add to the system will be local voice users. Before adding local voice users you should

1 determine the capacity of your disk volumes

2 survey users to determine the classes of service (COSs) that will be necessary and to estimate the average system usage of each class of user

3 create COSs to reflect the results of your survey

4 assign COSs to customer groups

User passwords

Each local voice user belonging to an MMUI customer group must have a password. When you add a new user, the system assigns a default password (the user's mailbox number). This password can be changed by the administrator or by the user at the telephone set.

When you add a local voice user to a VMUIF customer group, the system does not assign a password. A user that does not have a password can access Meridian Mail from his or her "home phone" only. If the user belongs to a class of service for which remote notification is enabled, a password is necessary so that the user can call from a phone other than the home phone in order to listen to messages. In fact, if the user wants to be able to log on to his or her mailbox from any phone (not just the home phone), a password will be necessary. You can create a password at the administration terminal using the [Change Password] softkey in the Add (or View/Modify) Local Voice User screen. Alternatively, you can inform users that they will have to create a password using their home telephone in order to use remote notification, or to log on to their mailbox from a phone other than the home phone.

Password prefixes

As of Meridian Mail MSM Release 9.0, you can increase mailbox security for MMUI users through the use of a password prefix. If you define a password prefix, it is attached to the initial password at the time of mailbox creation. For example, you create a mailbox for a local voice user at extension 3334. The password prefix is 696. The resulting default password is 6963334. If no prefix is defined, the default password is the user's extension (3334).

When a local voice user changes his or her password, the password prefix is no longer used. If, for example, the above local voice user changes his or her password to 51243, the prefix is not added and the password remains as 51243. Furthermore, when you change the password prefix, it does not affect existing mailbox passwords. It only affects those mailboxes that are created after the change.

This prefix is defined in the Voice Security Options screen at the customer administration level.

Changing passwords

Procedure 5-2 describes the steps you need to follow to change passwords for local voice users.

Procedure 5-2
Changing a user's password

Starting point: The Add Local Voice User screen (Figure 5-3).

1 Press [Change Password].

You are prompted to enter the new password.

2 Enter the new password (up to 16 digits in length) and press <Return>.

(The password is not displayed on the screen.)

You are prompted to reenter the password for verification.

3 Reenter the password and press <Return>.

If there is a mismatch between the first and second passwords, return to step 2.

The Add Local Voice User screen

When you press [Add], you are prompted to enter the new Local Voice User mailbox number. After a valid mailbox number is entered and the <Return> key is pressed, the Add Local Voice User screen (Figure 5-3) is displayed.

The Add Local Voice User screen is actually made up of three screens:

- ***Basic Fields*** This is the first screen that is accessed after you press [Add]. It contains information such as the user's mailbox number, name, COS number, extension DNs, revert DN, and message waiting indication DN.
- ***Class of Service Fields*** This screen is accessed by placing the cursor on the *Class of Service* field and pressing [More Detail]. This screen allows you to view (only) the configuration of the COS that is selected (for verification purposes). However, if the "Personal" COS is selected, you can modify the fields to create a custom COS for the user.
- ***Outcalling Fields*** If Outcalling is enabled on the system and the *Remote Notification Capability* field is set to "Yes" in the class of service selected for the user, you can create a remote notification schedule for the user from this screen. The screen is accessed by moving the cursor to the *Remote Notification Schedules* field and pressing [More Detail].

Procedure 5-3
Accessing the Add Local Voice User screen

Starting point: The Customer Administration Menu

1 Select User Administration.

2 Select Local Voice User.

3 Press [Add].

You are prompted for a mailbox number.

4 Enter the user's mailbox number followed by <Return>.

This number will be used in the Add Local Voice User screen to fill in the Mailbox Number, primary Extension DN, and Message Waiting Indication DN fields.

Note 1: If the system addressing length has been defined as a value other than zero in the General Options screen, all mailbox numbers must equal the system addressing length.

Note 2: For centrex customer groups, enter the DN that is dialable by other local voice users (typically a 4-digit DN).

Note 3: For residential/small business customer groups, this is the 7- or 10-digit directory number.

After the mailbox number has been entered, the Add Local Voice User screen is displayed.

Figure 5-3
The Add Local Voice User screen (basic fields)

```
ABC Company                      User Administration
    Add Local Voice User
    Mailbox Number:    8765432                Volume ID: 203
    Storage Used:      0
    Last Name:         Cardew
    First Name:        Fred                   Initials: F
*   Department:        Information Systems
    Class of Service:  Personal       [001_Standard]      002_Executive      003_Secretary
    (More Detail)      004_Outcalling 005_RNonly          006_DNUonly        009_AMIS/OC
                       024_Admin
    Extension DNs:                             8765432
                                               8762999

    Revert DN:                                 0
!   Message Waiting Indication DN:             8765432
!   Message Waiting Link Name:                 [Link1] Link2  Link3  Link4

    Personal Verification Recorded (Voice):    Yes
#   Remote Notification Schedules:             Yes
    (More Detail)
*   Name Dialable by External Callers:         No   [Yes]
    Logon Status:                              Disabled  [Enabled]
**  Volume Level:                              [Normal]  Loud  Louder  Loudest
!!  Preferred Language:                        [AmericanEnglish]  EuropeanEnglish
                                               Mandarin  Korean

  Save      Cancel      More  Detail      Change Password      Voice
```

* These fields are displayed only if the user belongs to an MMUI customer group.
** This field is displayed only for VMUIF customer groups.
# This field is displayed only if Outcalling is enabled and Remote Notification Capability is set to ”Yes” in the selected COS.
! These fields are displayed only if the MWI option is not set to ”None” in the selected COS.
!! This field is displayed only for multilingual customer groups.

The following fields are displayed:

- ***Mailbox Number*** This field is automatically filled in with the mailbox number you entered to access this screen, although it can be changed from within this screen.

  The mailbox number is usually the same as the user's directory (extension) number. This is the number that is dialable by other local users (typically a 4-digit DN for Centrex customers and a 7- or 10-digit DN for residential customers). If the *System Addressing Length* field is set to a value other than zero, then the mailbox number must equal the system addressing length. If it is not filled in, you will not be able to save the user information.

  The mailbox number can be up to 18 digits in length and can be in the range 10 to 999999999999999999. This number should not conflict with any of the following numbers:

  — the broadcast mailbox number (the default is 999)

  — other DNs

  — the name dialing prefix for which the default is 11 (see "Voice Messaging Options" in "Voice Administration")

  — delivery to non-user dialing prefixes (see "Outcalling Administration" in "Voice Administration")

  — customer distribution list numbers

  — other mailbox numbers

  — the AMIS prefix for which the default is 13

  — the personal distribution list prefix (VMUIF customer groups only)

  Note: People that are not in the office much (such as salespeople) may not have their own telephone set. However, you still can configure a mailbox for these people so that they can collect and listen to messages. All that you need is an available DN on the switch that is not associated with a physical telephone set.

- ***Volume ID*** This field specifies the hard disk volume to which the user is assigned. All users must be assigned to a volume. (The user information cannot be saved if this field is blank.) This field defaults to the volume with the greatest amount of free voice space at the time that [Add] is pressed. This field can be up to three digits long.
- ***Storage Used*** This read-only field indicates how many minutes of voice messages are currently stored for the current user. If Family Mailbox is enabled for this user, all submailbox greetings and messages take up voice storage allocated to the mailbox. This value is rounded up to the nearest minute. Before deleting a user, check this field to make sure that there are no voice messages in the mailbox.

For MMUI, the system still accepts calls when the mailbox is full. However, users experience limited functionality. (For example, users can only listen to messages and delete them. They cannot compose and send messages if their mailbox is full.) For VMUIF, calls are rejected (that is, messages will not be taken) when the mailbox is full.

Note: A user may inform you that he or she has received the mailbox full warning, but that the mailbox is definitely not full. For example, the user is certain that there are only two short messages in the mailbox. A prematurely full mailbox is caused by an unexpected system reboot that leaves inconsistencies between the volume server and what is actually in the mailbox. This problem will be fixed automatically during the scheduled nightly audit. However, if an unexpected reboot happens at a busy traffic time, you can log on at the Tools level and select the menu item “Audit all volumes.” This will update the real mailbox storage information that is stored on disk and prevent prematurely full mailboxes. See the *System Administration Tools* guide (NTP 557-7001-305) for more information about this tool.

- ***Last Name*** This is the last name of the new local voice user. This field accepts any characters with the exception of the restricted characters “+”, “_”, and “?.” However, you should limit yourself to alphanumeric characters. If you use any control characters or special characters, name dialing and name addressing may not work properly. This field is blank by default. Be sure to fill it in and ensure correct spelling because the name dialing and name addressing features use this information. This field can be up to 41 characters long.

> **CAUTION**
> **Risk of data inconsistencies**
> If you must change a user’s last name once the mailbox has been added and is in use, do not modify this field. Instead, make sure the user has listened to all of his or her messages, delete the mailbox, and add it again with the new last name. Meridian Mail uses the user’s last name to keep track of users, mailboxes, and messages. Modifying the *Last Name* field can cause inconsistencies.

- ***First Name*** This is the first name of the new local voice user. This field can include the space and hyphen (-) characters. However, you should limit yourself to alphanumeric characters for the reasons mentioned in the *Last Name* field. Ensure correct spelling because the Name Dialing and Name Addressing features use this information. This field can be up to 21 characters long.

- ***Initials*** These are the initials of the local voice user. This field is for display only and can be used by the administrator to distinguish users with identical first and last names. These initials, however, cannot be used in name dialing. This field can be up to 5 characters long.

  Note: If you do not enter any initials, the system will automatically fill in this field with the first initial of the user's first name after you save the user.

- ***Department*** (MMUI only) This is the department to which the user belongs. The characters "+", "?" and "_" are restricted. It is recommended that you use alphanumeric characters only, and avoid using special characters altogether (even though some are accepted by this field) for the reasons mentioned in the *Last Name* field. When adding the first user to the customer group, this field will be blank by default. For subsequent users, this field defaults to the department entered for the last user added. This field can be up to 31 characters long.

  You can retrieve users on the basis of department when using the Find Local Voice Users function (described later in this chapter). With Find Local Voice Users, however, only the first 12 characters of the department are displayed in the List of Local Voice Users. Therefore, try to assign unique identifiers for each department. For example, if you have the departments Marketing Sales and Marketing Advertising, you should enter them as Sales Marketing and Advertising Marketing.

- ***Class of Service (More Detail)*** This field specifies the Class of Service (COS) to which the user belongs. Up to 15 COSs will be displayed. The COSs that are displayed in this screen depend on the selections made in the General Options screen. (See Chapter 6, "General Administration.") Only the "Personal" COS will be displayed if you have not yet assigned any COSs to this customer group.

- ***Extension DNs*** The user's extension number(s). Users can have up to three extension DNs defined for them. This means that a caller can dial any of these numbers and still reach the user's mailbox. A DN can be up to 30 digits in length.

  The first field is for the primary DN of the user, and it is mandatory. You cannot save the user information if this field is blank. It is automatically filled in with the mailbox number you entered to access this screen and, therefore, is the same as the mailbox number.

  If the mailbox number and primary DN of the user are not identical to the user's directory number on the PBX/switch, you must enter the PBX/switch directory number as the second extension DN. The third extension DN is optional.

- ***Revert DN*** This is the number to which calls are passed in the following situations:

  — a caller presses 0 during a call answering session

— when a user waits more than 2 seconds to enter # after dialing 0 in order to place a call while in his mailbox (known as mailbox thru-dial or extension dialing).

In an office or centrex environment, calls are normally reverted to back-up people such as secretaries or receptionists. The revert DN may be up to 30 digits in length and can begin with 0 (zero).

Subsequent users (that are added within the same user administration session) inherit the revert DN of the previously added user. The Attendant DN is configured in the General Options screen. (See "General Options" in "General Administration.")

This field will typically be left blank. You can, however, enter a DN in this field if the user requests this capability. A small business may ask for this feature so that calls can be reverted to a secretary. Residential users may ask for this feature if they want callers to be able to try them at another number, such as that of a cellular phone. (Note that for VMUIF customer groups, this DN only applies to call answering sessions because users do not have mailbox thru-dial capabilities.)

If this field is filled in, the user will have to include a statement in his or her external and internal greetings to inform callers that they can press the revert DN (usually 0) if they want to be connected to a secretary or cellular phone.

MMUI users can also configure their own Revert DN through their telephone set. This is covered in the *MSM Voice Messaging User Guide*. To block users from changing their own revert DNs, restrict the dialing codes 0–9. This can be done by assigning a restriction/permission code set (that has restriction codes filled in with the digits 0 to 9) to the *Custom Revert Restriction/Permission Codes* field in a class of service. This may be desirable in a university environment in which you want to have a custom revert DN configured for students, but you do not want them to be able to change this DN themselves. When the digits 0–9 are restricted, the administrator is still able to enter a revert DN that will work in the Add or View/Modify Local Voice User screen. However, users will be unable to change it from their telephone sets.

Note: The DNs you are allowed to enter in this field are limited by the Custom Revert Restriction/Permission codes that are set in this user's class of service.

- ***Message Waiting Indication DN*** This field is not displayed if the *Message Waiting Indication Options* field in the user's COS is set to "None." If this field is displayed, it is mandatory. This DN specifies the telephone extension at which the message waiting indication is activated when a new message is put in the user's mailbox. This field defaults to the user's mailbox number. This DN is usually the user's 7- or 10-digit directory number as it is configured on the switch.

This field defaults to the user’s mailbox number. In most cases, the mailbox number, primary DN and MWI DN are the same. However, there may be instances when the MWI DN will be different. For example, a manager might want his secretary to be notified of any of his or her new messages. In this case, the primary DN will be that of the manager; however, the MWI DN will be the secretary’s mailbox number. Note that in this case, when the secretary’s MWI is turned on, he or she will not know who the message is for and will have to log onto both mailboxes.

If you try to save your configuration when the primary DN and the MWI DN are different, the system will give you a warning message indicating that these two DNs are different. At this point, you can either press [Save] a second time to continue, or change your mind and make the two DNs identical.

You cannot enter a DN that is already in use as the primary DN of another mailbox.

Note 1: To modify this DN, make sure the MWI is turned off first. If the MWI DN is changed when the MWI is on, the MWI will never be turned off.

Note 2: If the SMDI link is configured for 10-digit messaging, enter the user’s 10-digit directory number. (This DN includes the area code.)

- ***Message Waiting Link Name*** This field is only displayed if the system has SMDI links and if the *Message Waiting Indication Options* field in the user’s COS is set to something other than “None.” This field will display a list of all available link names. The selected name specifies the link on which the message waiting indication is sent for this user.

  This field is intended for systems with the Multi-SMDI (indicated as SMDI in the General Options screen) feature so that you can distribute users over all available links. If you have only one SMDI link, this field defaults to the link name entered in the hardware database and cannot be changed from this screen.

  If you do have multiple SMDI links, do not put all users on the same link. Instead, distribute users (as evenly as possible) across all available links.

- ***Personal Verification Recorded (Voice***) The spoken name of the user can be recorded by the administrator using the [Voice] softkey or by the user at the telephone. When a verification is recorded, this field is updated to show “Yes.” Otherwise, it will show “No.” For information about recording personal verifications for users, refer to the section “Recording prompts or personal verifications using the [Voice] softkey” on page 4-10. See Chapter 4, “Making recordings,” for more information about the personal verification and when it is used.

- ***Remote Notification Schedules (More Detail)*** This field is displayed only if Outcalling is enabled and if Remote Notification Capability is set to “Yes” in the user’s COS.

  “Yes” indicates that remote notification schedules have been set up for this user. This field will show “Yes” even if the schedules are disabled (as long as at least one schedule has been created).

  To create a remote notification schedule for a user, press the [More Detail] softkey while the cursor is on this field. See the section “Creating a remote notification schedule” on page 6.
- ***Name Dialable by External Callers*** (MMUI only) When this field is set to “Yes”, external callers can use name dialing to call the user. This may not be desirable for all users, since a caller could get through to any extension as long as they know the person’s name. You may, therefore, want to set this field to “No” for those users who have their phone calls screened by a secretary. The default is “Yes.”
- ***Logon Status*** A mailbox will become disabled if too many logon attempts are made using the wrong password. (The maximum number of incorrect logon attempts is set in the Voice Security Options screen.) If the logon status is “Disabled”, an explanation is displayed on the line below this field. When the status is “Enabled,” the user has full access to the mailbox and messages are accepted. The default is “Enabled.”

  If the user belongs to an MMUI customer group and his or her mailbox becomes “Disabled”, the user cannot log on to the system; however, messages are still received. To reenable a mailbox, access the user information through the View/Modify Local Voice User screen and set Logon Status to “Enabled.”

  If the user belongs to a VMUIF customer group, the user will be able to log on, however, the system will no longer take messages (that is, calls are rejected). This field is affected by the *Lockout Duration* field in the user’s class of service. A value other than zero in the *Lockout Duration* field indicates that the user’s mailbox will automatically be reenabled once the specified time period has passed (up to 24 hours). A value of “00:00” indicates that the user will be locked out until the administrator reenables the mailbox manually by setting the *Logon Status* to “Enabled.”
- ***Volume Level*** (VMUIF only) This field controls the default volume level for voice messaging login sessions. The options are: Normal, Loud, Louder, Loudest. The default is Normal. Note that if there are submailboxes, this field affects only the main mailbox.

- ***Preferred Language*** This field applies only to multilingual systems. The language specified in this field determines the language in which prompts are played. (This includes prompts that are played to the user during a login session and to callers during express messaging and call answering sessions.) This field can display a maximum of four of the languages enabled on your system. The default is the first language in the list.

  Note: If the *Default Language Overrides User's Preferred Language* field is set to "Yes" in the Voice Messaging Options screen, prompts played during call answering and express messaging sessions will be in the default language. However, prompts played to the user during login sessions continue to be played in the user's preferred language.

Procedure 5-4
Adding a Local Voice User

Starting point: The Main Menu

1 Select User Administration.

2 Select Local Voice User.

3 Press [Add].

The [Cancel] softkey appears, and you are prompted to enter a mailbox number.

4 Go to step 4a to proceed or 4b to cancel.

a. Enter the mailbox number and press <Return>.

The Add Local Voice User screen appears (Figure 5-3).

b. Press [Cancel].

The User Administration softkeys are displayed.

5 Enter the *Last Name, First Name, Initials,* and *Department* (for MMUI customer groups) of the new user.

6 Assign the user to a Class of Service (either to one of the system COSs or create a personal COS if necessary). To view a COS, press the [More Detail] softkey while the cursor is on the *Class of Service* field. Fields in the COS are read-only. To create a personal COS, make sure "Personal" is selected and then press [More Detail]. The fields in the personal COS are modifiable from this screen.

Press [Return to Basic Fields] when finished.

See Chapter 10, "Class of Service Administration," for screen illustrations and field descriptions.

7 Normally, the primary extension DN is the same as the user's mailbox number and message waiting indication DN. If required, however, it can be modified. Enter optional secondary and tertiary DNs if necessary.

8 Enter a revert DN if this user wants to revert callers to a number other than the attendant DN (defined in General Options).

9 The message waiting indication DN is typically the same as the primary DN and the mailbox number. This is the default. However, it can be changed to another number if required.

10 If you need to create a personal verification for the user, move the cursor to the *Personal Verification Recorded (Voice)* field and press [Voice]. (This is necessary if the field *Personal Verification Changeable by User* is set to “No” in the COS and the user requires or desires a personal verification.)

a. Enter the extension number of the phone you will be using to record the verification.

A new set of softkeys is displayed.

b. Press [Record].

c. At the sound of the beep, say the user’s name into the telephone handset.

d. Press [Stop] to stop recording.

e. If you are satisfied with the recording, press either [Disconnect] or [Return] to display the original softkeys.

When you press [Return], the line is not disconnected (unless you hang up the receiver). This means that if you decide to rerecord or listen to the recording, you do not have to reenter the telephone extension after pressing the [Voice] softkey.

When you press [Disconnect], the line is disconnected. If you press [Voice] to access the recording softkeys again, you will have to reenter the telephone extension.

See “Recording prompts or personal verifications using the [Voice] softkey” on page 4-10 for more information about the recording softkeys.

11 If remote notification is enabled in the COS to which the user belongs and you need to create a schedule for the user, move the cursor to the *Remote Notification Schedules* field and press [More Detail].

See “Creating a remote notification schedule” on page 5-23 for details on setting up a schedule.

12 For VMUIF users, set the volume to the desired level.

13 For multilingual systems, specify the user’s preferred language.

14 For MMUI users, the default password is the same as the user’s mailbox number. For VMUIF users, there is no initial password. To change the password, see Procedure 5-2.

15 Go to step 15a to save the new user, or 15b to discard this user.

a. Press [Save].

If the primary extension DN and the message waiting indication DN are different, the system warns you of this. If you intend these numbers to be different, press [Save] again to save the user. If you have made a mistake, press [Cancel] or modify the MWI DN. If [Cancel] is pressed, the user is not added and you must redefine the user.

The system saves the new user and prompts for another local voice user's mailbox number. Go to step 4a to add another user or 15b to exit this screen.

b. Press [Cancel].

New user information is discarded. The Local Voice User Administration softkeys screen is displayed.

Creating a personal class of service

If a user has special requirements that are not met by any of the existing COSs, you can create a personal COS that is customized for that user. All personal COSs must be maintained individually since any changes made to a system COS will not affect the personal COSs that exist on the system. If, for example, it is decided that all users will be given access to a particular feature, you would have to modify the COSs that are assigned to that customer group as well as all users with personal COSs that exist in that customer group. To create a personal COS, follow Procedure 5-5.

Procedure 5-5
Creating a personal class of service

Starting point: The Add Local Voice User screen

1 Move the cursor to the *Class of Service* field.

2 Select "Personal" (the first COS in the list).

3 Press [More Detail].

The View/Modify Class of Service screen is displayed. Refer to Chapter 10, "Class of Service Administration," for screen illustrations and field descriptions.

4 Make the necessary modifications.

5 Press [Return to Basic Fields] to return to the Add Local Voice User screen.

6 Press [Save] to save the COS.

Creating a remote notification schedule

A remote notification schedule allows you to define the telephone or pager numbers where users can be reached at different times of the business day as well as non-business days. There are three different schedules associated with each user: one for business days, one for non-business days, and one as a temporary schedule. The temporary schedule overrides the other two schedules until the time specified. This schedule is useful if a user will be at a different number than usual for a short period.

See the *Outcalling Application Guide* (NTP 555-7001-323) for detailed instructions on setting up remote notification schedules and other remote notification parameters.

Procedure 5-6
Creating a remote notification schedule

Starting point: The Add Local Voice User or View/Modify Local Voice User screen

1 Move the cursor to the *Remote Notification Schedules (More Detail)* field.

2 Press [More Detail].

The outcalling fields are displayed. See Figure 5-4.

Figure 5-4
Add Local Voice User (Outcalling Fields)

```
ABC Company                    User Administration                   MORE ABOVE

  Add Local Voice User - Outcalling Fields

  Current State of Remote Notification:       On

# Message Remote Notification Option:         [Any]  Urgent

  Business Days Schedule:

  * Period 1 from (hh:mm):____ to (hh:mm):____ [Disabled] Enabled
    Target 1 DN: ___________________________   [Phone] Tone Voice Numeric Service
                                               Pager Callback Number: ________
    Target 2 DN: ___________________________   [Phone] Tone Voice Numeric Service
                                               Pager Callback Number: ________
    Target 3 DN: ___________________________   Phone  Tone Voice Numeric [Service]
                                               Pager ID Number:       ________

  Non-Business Days Schedule:

  * Period 1 from (hh:mm):____ to (hh:mm):____ [Disabled]  Enabled
    Target 1 DN: ___________________________   [Phone] Tone Voice Numeric Service
                                               Pager Callback Number: ________
    Target 2 DN: ___________________________   [Phone] Tone Voice Numeric Service
                                               Pager Callback Number: ________
    Target 3 DN: ___________________________   [Phone] Tone Voice Numeric Service
                                               Pager Callback Number: ________

  Temporary Days Schedule up to midnight of (dd/mm/yy): 03/28/94

  * Period 1 from (hh:mm):___ to (hh:mm):____  [Disabled]  Enabled
    Target 1 DN: ___________________________   [Phone] Tone Voice Numeric Service
                                               Pager Callback Number: ________
    Target 2 DN: ___________________________   [Phone] Tone Voice Numeric Service
                                               Pager Callback Number:________
    Target 3 DN: ___________________________   [Phone] Tone Voice Numeric Service
                                               Pager Callback Number: ________

                        The Outcalling Fields data will be saved only if the user is saved.
 Return to
Basic Fields
```

*There are actually three periods listed for each schedule, each with three targets.
#This field is displayed only for MMUI users.

Note: The *Current State of Remote Notification* field is read-only. This field will be set to “Off” if the maximum number of retry repeats that are set in the Add or View/Modify Class of Service screen have been exceeded.

3 Specify whether the user wants to be notified of any messages or only urgent messages.

4 Create a business days schedule. For each time period necessary, follow these steps:

a. Enter the from and to time.

b. Enable the time period.

c. Enter up to three target DNs. For each target DN, specify the type of device.

d. For numeric pagers, specify the *Pager Callback Number*. For general access pager services, enter the *Pager ID Number*.

5 Create a nonbusiness days schedule. For each time period necessary, follow these steps:

a. Enter the from and to time.

b. Enable the time period.

c. Enter up to three target DNs. For each target DN, specify the type of device.

d. For numeric pagers, specify the *Pager Callback Number*. For general access pager services, enter the *Pager ID Number*.

6 Create a temporary days schedule if necessary.

a. Enter the date on which the temporary days schedule should be disabled.

The schedule will be disabled at midnight of that day and the business days or nonbusiness days schedule will be used.

For each time period necessary, follow these steps:

b. Enter the from and to time.

c. Enable the time period.

d. For each period necessary, enter up to three target DNs. For each target DN, specify the type of device.

e. For numeric pagers, specify the *Pager Callback Number*. For general access pager services, enter the *Pager ID Number*.

7 Press [Return to Basic Fields] when you are done.

8 Press [Save] to save the user and remote notification schedule information.

Note: To temporarily disable a time period, select “Disabled.” To delete a time period, delete the associated “from” and “to” times and the target DNs, and save.

The following outcalling fields are displayed in the Add Local Voice User screen:

- ***Current State of Remote Notification*** This is a read-only field that indicates whether or not remote notification is currently enabled or disabled for this user.
- ***Message Remote Notification Option*** This field is displayed only for MMUI users. This field specifies the type of message that will cause the system to remotely notify the mailbox owner. If “Any” is selected, the user will be notified of all new messages. If “Urgent” is selected, only those messages that are tagged as urgent will trigger a remote notification call.

- ***Schedules*** Up to three remote notification schedules can be defined for each user: one for business days, one for nonbusiness days, and a temporary days schedule for short-term remote notification. (The temporary days schedule overrides the Business and NonBusiness days schedules until midnight of the date specified including the current day. When the duration expires, the temporary days schedule is automatically disabled.)

  To enable a schedule, define a valid time period and set the appropriate schedule to “Enabled.” (Defining the time period alone will not automatically enable the schedule.) For a time period to be valid, the times must be chronologically correct, non-overlapping, and within the 24-hour time window (midnight to midnight) and the targets must be dialable, nonrestricted phone or pager numbers.

  Within each schedule, you can define up to three time periods. For each time period, you can define up to three RN target DNs. The target DN can be a phone number, a directly dialable pager number, or a common pager service number (if this is a general access pager service such as SkyPager).

  For each target DN that you enter, you must define the type of device to which the service will be outcalling. If the device is a phone, select “Phone.” You do not have to enter anything in the *Pager Callback Number* field. To define a pager as the target device, select one of the following options:

  — ***Tone*** This option defines either a Tone-only or Tone and Voice pager. You do not need to enter anything in the *Pager Callback Number* field.

  — ***Voice*** This option defines a Tone and Voice pager. You do not need to enter anything in the *Pager Callback Number* field.

  — ***Numeric*** This option defines a digital or numeric pager with direct inward dialing (DID) access. Fill in the callback number to be displayed in the *Pager Callback Number* field. If you do not enter a callback number here, the *Default Numeric Pager Data* field in the Outcalling Options screen will be used to display the default callback number. For more information about the Outcalling Options screen, refer to the *Outcalling Application Guide* (555-7001-323).

  — ***Service*** This option defines a digital or numeric pager with general access. Enter the pager’s PIN number in the *Pager ID Number* field. In this case, the call-back number is taken from the *Default Numeric Pager Data* field in the Outcalling Options screen. This is a customer-wide callback number that is displayed on all pagers configured with “Service” as the RN target device. For more information about the Outcalling Options screen, refer to the *Outcalling Application Guide* (555-7001-323).

You may also have to change the *Numeric Pager Data Terminator* field (also in Outcalling Options). If the paging service accepts the # terminator, leave the default setting as it is. If the service does not accept this terminator, make sure this field is blank.

Note: To delete a time period, delete the associated “from” and “to” times and save the settings. To temporarily disable a time period, select “Disabled.”

If the *Keypad Interface* field in the user’s COS is set to “Yes”, the user can create his or her own schedules using mailbox commands. (Note that this functionality is not available to VMUIF users.)

Finding local voice users

To access the Find Local Voice Users screen, follow Procedure 5-7.

Procedure 5-7
Accessing the Find Local Voice Users screen

Starting point: The Main menu

1 Select User Administration.

2 Select Local Voice Users.

3 Press [Find].

The Find Local Voice Users screen (Figure 5-5) is displayed.

Figure 5-5
The Find Local Voice Users screen

```
ABC Company                      User Administration

   Find Local Voice Users

   Status:                [Any] Enabled Disabled Expired Violation

   Mailbox Number:        __________________    Volume ID: ____    COS: ____

   Last Name:             ________________________________________

   First Name:            _____________________

 * Department:            _______________________________

   Extension Number (DN):                  ______________________________

   Message Waiting Indication DN:          ______________________________

   Personal Verification Status:           [Any]  Not_Recorded   Recorded

   Display Data:                           [General] MWI

   Only if Primary DN differs from MWI DN: [No]    Yes

   Select a softkey >

   Exit                     List              Print
```

*   This field is displayed only for MMUI customer groups.

The following fields are displayed:

- ***Status*** This field allows you to retrieve and view local voice users according to their mailbox status. You have five choices:
  - — ***Any*** Select this option to retrieve local voice users regardless of their current mailbox status.
  - — ***Enabled*** Select this option if you want to find users whose mailboxes are enabled.
  - — ***Disabled*** Select this option to find users whose mailboxes are disabled. These users cannot log on; however, messages are still received. A mailbox may be disabled if the user has made too many logon attempts with an incorrect password or if his or her password has expired.

- — ***Expired*** Select this option to find users whose passwords have expired. This situation can occur only if users are required to change their password before the number of days stipulated in the *Maximum Days Permitted Between Password Changes* field in the Voice Security Options screen. If this field is set to 0, users' passwords will never expire. If a user's password has expired, their mailbox is disabled and they cannot able to log on.
- — ***Violation*** Select this option to find users who have surpassed the maximum number of allowed invalid logon attempts for their mailbox (configured in the Voice Security Options screen). Users who have made too many invalid logon attempts cannot log on and their mailbox is disabled.

- ***Mailbox Number*** This is the mailbox number of the local voice user. This field can hold up to 18 characters.
- ***Volume ID*** This field specifies the hard disk volume to which a user is assigned.

  Information on disk usage can be obtained (by system administrators only) through the Disk Usage report. (See the "Operational Measurements" chapter.) If you notice that one volume is getting full, you should move some of the users to another volume. Set the *Volume ID* field to the ID of the volume that is almost full in order to get a list of user's names and their mailbox numbers. You can then move some of these users to another volume with the Move User utility accessible through the Tools menu. (See the *System Administration Tools* guide (NTP 557-7001-305).
- ***COS*** The Class of Service associated with the local voice user. This field can hold up to three digits. The only accepted wildcard character is the plus sign (+).
- ***Last Name*** This is the user's last name. Fill in this field if you want to retrieve a particular user and only remember the last name. Use wildcard characters if you are unsure of the spelling. For more information, refer to "Using wildcard characters." However, it is recommended that you use alphanumeric characters only because this field is used by the name dialing and name addressing features. The default is blank.
- ***First Name*** This is the user's first name. Fill in this field if you want to retrieve a particular user and only remember the first name, or if you remember the last and first names (in order to narrow down the search). Use wildcard characters if you are unsure of the spelling. For more information, refer to "Using wildcard characters."

- ***Department*** (MMUI only) You may enter up to 31 characters. You can use wildcard characters to retrieve a subset of users by department. However, only the first 12 characters of the department are displayed in the List of Local Voice Users screen.
- ***Extension Number (DN)*** This is the user's primary extension DN. Enter the user's DN if it is known. Use wildcard characters to retrieve a subset of users in a particular range of DNs. For more information, refer to "Using wildcard characters."
- ***Message Waiting Indication DN*** You may enter up to 30 digits plus the characters "_" and "+." Filling in this field will retrieve users by the MWI DN. Note that this search can take a long time on systems with many users, and should be used only when users cannot be found any other way.
- ***Personal Verification Status*** You may view users according to whether or not they have a personal verification recorded. If you want to ensure that all users have a recorded personal verification, you can generate a list of users who do not have a recorded verification. You should then record verifications for these users or contact them and ask them to do this themselves. The default is "Any", meaning that the personal verification status will not be used as a search criterion.
- ***Display Data*** This field determines the format of the list of users. The following are your choices:
    - ***General*** When selected, the list of users includes the following information: user's name, mailbox number, department, COS number, the amount of storage used, and whether or not a personal verification has been recorded. See Figure 5-6. This is the default format upon entering the Find Local Voice Users screen.
    - ***MWI*** When selected, the list of users includes the following information: user's name, DN, mailbox number, the number of read messages, the number of unread messages, the number of text messages, and the MWI status. See Figure 5-7.
- ***Only if Primary DN differs from MWI DN*** Choose "Yes" to display only those users whose primary DN differs from their MWI DN. Typically, a user's primary DN is the same as his or her MWI DN. If these DNs must be the same for the user to be notified of new mail, then set this field to "Yes" to find all users for whom there is a mismatch between the primary and MWI DN. Furthermore, if a user's MWI DN is different from his or her primary DN, the MWI DN may actually be the extension DN of another user. This field can help you identify such occurrences. The default is "No."

Viewing a list of local voice users

The List of Local Voice Users screen (Figure 5-6) appears when the [List] softkey on the Find Local Voice Users screen is used. It provides a list of user names and mailboxes matching the search parameters entered in the Find Local Voice Users screen. Users are sorted by the first search parameter that is filled in on the Find Local Voice Users screen. From the resulting list, you can select a particular user and view, modify, or delete the user's information.

Procedure 5-8
Viewing a list of local voice users

Starting point: The Find Local Voice Users screen

1 Fill in the screen with the required search parameters.

2 Press [List] to display search results on the screen.

The List of Local Voice Users screen is displayed. If Display Data is set to "General", see Figure 5-6. If Display Data is set to "MWI", see Figure 5-7.

3 To view, modify, or delete a user, move the cursor to the user's name and press the <Space Bar> to select it. To view or modify a user, go to step 3a. To delete a user, go to step 3b. To record a personal verification for the user, go to step 3c.

a. Press [View/Modify].

The View/Modify Local Voice User screen is displayed. See the section "Viewing and modifying local voice users."

b. Press [Delete].

The Delete Local Voice User screen is displayed. See the section "Deleting local voice users."

c. Press [Voice].

The recording softkeys are displayed. Refer to the section "Recording prompts or personal verifications using the [Voice] softkey" on page 4-10.

The List of Local Voice Users screen

When you choose to list the retrieved local voice users on screen, the display format of the screen depends on how the *Display Data* field in the Find Local Voice Users screen is configured. Figure 5-6 shows the general format, and Figure 5-7 shows the MWI format.

Figure 5-6
The List of Local Voice Users screen (General)

```
ABC Company                 User Administration

List of Local Voice Users

                                             Storage     Personal
                                   COS       Used        Verific.
Name         Mailbox   Department* Num.      (mins)      Recorded

Alcott,Tom   2209      Financial   1           2           No
Gordon,John  2145      Sales       1           0           Yes
Jones,Tracy  2134      Admin       12          5           No
Smith,Bod    2291      Accounting  14          9           Yes
Valdez,J     212026    Marketing   15          3           Yes

Select a softykey >

Exit        |           | View/Modify | Delete    | Voice
```

* The Department column only appears if this is an MMUI customer group.

The following information is displayed for each user retrieved:

- ***Name*** This is the user’s last name followed by the first name.
- ***Mailbox*** This is the user’s mailbox number.
- ***Department*** (MMUI only) This is the user’s department name.
- ***COS Num.*** This field indicates the Class of Service to which the user belongs.
- ***Storage Used (mins)*** This is the number of minutes of voice storage used up by the user.
- ***Personal Verific. Recorded*** This indicates whether or not a spoken name has been recorded for this user.

Figure 5-7
The List of Local Voice Users screen (MWI)

```
ABC Company                 User Administration
List of Local Voice Users (MWI Status)


                                          Read      Unread  Text MWI
Name         DN             Mailbox       Msgs      Msgs    Msgs Status

Alcott,Tom   5552557        2005          1         0       0    Off
Gordon,John  9215552344     5552344       3         2       0    On
Jones,Tracy  5551221        1221          0         0       0    Off
Smith,Bod    5553359        5553359       7         1       0    On
Valdez,J     5551212        1212          2         2       0    On

Select a softkey >

    Exit                View/Modify     Delete      Voice
```

The following information is displayed for each user retrieved:

- ***Name*** This is the user's last name followed by the first name.
- ***DN*** This is the user's primary DN.
- ***Mailbox*** This is the user's mailbox number.
- ***Read Msgs*** This is the number of read messages in the user's mailbox.
- ***Unread Msgs*** This is the number of unread messages in the user's mailbox.
- ***Text Msgs*** This column does not apply to MSM.
- ***MWI Status*** This is the status of the message waiting indicator. "On" indicates that there are new unread messages waiting. "Off" indicates that there are no unread messages.

Printing a list of local voice users

The results of your search can also be printed. Instead of using the [List] softkey on the Find Local Voice Users screen, use the [Print] softkey.

Procedure 5-9

Printing a list of local voice users

Starting point: The Find Local Voice Users screen

1 Fill in the screen with the required search parameters. For more information about how to use the search parameters, refer to “Finding users” on page 5-7.

2 Press [Print].

Two new softkeys are displayed: [Continue Printing] and [Cancel Printing].

3 Do one of the following:

a. Press [Continue Printing] to send the results to the printer.

See Figure 5-8 for an example of the printer output.

b. Press [Cancel Printing] at any time to cancel the print job.

Figure 5-8
Print Users output

```
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List of Local Voice Users

                                                Storage     Personal
                                       COS      Used        Verific.
Name         Mailbox   Department *    Num.     (mins)      Recorded

Alcott,Tom   2209      Financial       1           2           No
Gordon,John  2145      Sales           1           0           Yes
Jones,Tracy  2134      Admin           12          5           No
Smith,Bod    2291      Accounting      14          9           Yes
Valdez,J     212026    Marketing       15          3           Yes
```

* The Department column appears only if this is an MMUI customer group.

Viewing and modifying local voice users

Use the View/Modify Local Voice User screen to change the parameters of an existing local voice user. This screen is identical to the Add Local Voice User screen on page 5-3 with several exceptions:

- The *Volume ID* field is read-only.

  To change the volume on which the user information is stored, you must use the Move User tool as documented in the *System Administration Tools* guide (NTP 557-7001-305).
- The following additional fields are displayed at the bottom of the screen:
  - *Invalid Logon Attempts*
  - *Time of Last Logon*
  - *Time of Last Mailbox Lockout* (VMUIF only)
  - *Calls Rejected after Mailbox Full* (VMUIF only)
  - *Personal Greeting Recorded* (VMUIF only)
  - *Internal Personal Greeting Recorded* (MMUI only)
  - *External Personal Greeting Recorded* (MMUI only)
  - *Password Last Changed*.

CAUTION
Risk of data corruption
If you must change a local voice user's last name once the mailbox has been added and in use, do not modify it in this screen. Instead, make sure the user has listened to all of his or her messages, delete the mailbox, and add it again with the new last name. Meridian Mail uses the user's last name to keep track of users, mailboxes, and messages. Modifying the *Last Name* field can cause inconsistencies.

Figure 5-9

The View/Modify Local Voice User screen

```
ABC Company                       User Administration

     View/Modify Local Voice User

     Mailbox Number:  876543            Volume ID: 203

     Storage Used:    2

     Last Name:       Cardew

     First Name:      Fred              Initials: F

*    Department:      Information Systems

     Class of Service: [Personal]     001_Standard      002_Executive        003_Secretary
     (More Detail)     004_Outcalling 005_RNonly        006_DNUonly          009_AMIS/OC
                       024_Admin

     Extension DNs:                          8765432
                                             8765178
                                             8763968

     Revert DN:                              0

!    Message Waiting Indication DN:          8765432

!    Message Waiting Link Name:              [Link1]  Link2  Link3   Link4

     Personal Verification Recorded (Voice): Yes

#    Remote Notification Schedules:          Yes
     (More Detail)

*    Name Dialable by External Callers:      No   [Yes]

     Logon Status:                           Disabled  [Enabled]

**   Volume Level:                           [Normal]  Loud  Louder  Loudest

!!   Preferred Language:                     [AmericanEnglish]  EuropeanEnglish
                                             Mandarin  Korean

                                                                        MORE BELOW

   Save        Cancel        More Detail        Change        Voice
                                                Password
```

* These fields are displayed only if the user belongs to an MMUI customer group.
** This field is displayed only for VMUIF customer groups.
\# This field is displayed only if Outcalling is enabled and Remote Notification Capability is set to ”Yes” in the selected COS.
! These fields are displayed only if the MWI option is not set to ”None” in the selected COS.
!! This field is displayed only in multilingual customer groups.

Figure 5-9 (continued)
Additional fields in the View/Modify Local Voice User screen

```
ABC Company                 User Administration                 MORE ABOVE

     View/Modify Local Voice User

     Invalid Logon Attempts:               2

     Time of Last Logon:                   **/**/** **:**

   * Time of Last Mailbox Lockout:         **/**/** **:**

   * Calls Rejected after Mailbox Full:    No

   * Personal Greeting Recorded:           No

  ** Internal Personal Greeting Recorded:  No

  ** External Personal Greeting Recorded:  No

     Password Last Changed:                **/**/** **:**
____________________________________________________________________________

   Save      Cancel     More Detail     Change      Voice
                                        Password
```

* These fields are displayed only if this is a VMUIF customer group.
** These fields are displayed only if this is an MMUI customer group.

Note: If you have logged on to a terminal while another administrator is modifying the same user, only the [Exit] and [More Detail] softkeys will be displayed.

For descriptions of the fields shown on the previous page (Figure 5-9), see “Adding local voice users” earlier in this chapter. The description of these fields begins on page 5-26. This section describes only the following additional fields that are not displayed in the Add Local Voice User screen:

- ***Invalid Logon Attempts*** This is a read-only field displaying the number of successive logon attempts using an incorrect password. When the maximum number of invalid logon attempts is reached, the user’s mailbox is disabled.

  A large number of invalid logon attempts may indicate a security problem. For example, someone may be trying to get into your system through this particular mailbox. If this happens frequently for this user, contact the owner of the mailbox and determine if he or she has had problems logging in. The owner may have simply forgotten the mailbox password and tried a variety of passwords. If you are sure that there is no security risk, reenable the mailbox by setting the *Logon Status* field to “Enabled.” This action resets the *Invalid Logon Attempts* field to 0.

- ***Time of Last Logon*** This is a read-only field displaying the time of the last successful logon. In the case of a new user who has not logged on yet, no date or time will be displayed.

  A considerable amount of time between the current date and the user's last logon could indicate one of several things. In a centrex environment; the user may be on holiday or off-site and not retrieving messages, or the user may have left the organization. For both centrex and residential/ small business customer groups, the user:

  — may not know how to log on and retrieve messages

  — may have forgotten his or her password (in which case he or she may have stopped trying to log on and has not contacted the administrator to change the mailbox password)

  Try to contact the user to determine if there is a problem. You might also want to check the voice messaging user usage report (described in Chapter 9 "Operational Measurements") to see if the user has messages waiting.

- ***Time of Last Mailbox Lockout*** (VMUIF only) This is a read-only field displaying the time of the last mailbox lockout. This is usually due to an excessive number of invalid logon attempts. To reenable a disabled mailbox, set the *Logon Status* field to "Enabled."

- ***Calls Rejected after Mailbox Full*** (VMUIF only) If any calls have been rejected due to a full mailbox, this field will display "Yes." "No" either indicates that the mailbox is not full or that the user's mailbox is full, but no calls have been rejected.

  You may never actually see this field set to "Yes" because when the user logs on, this field is reset to "No." When a user logs on after messages have been lost, he or she will hear a message indicating that the mailbox is full and that messages have been lost. In turn, the user may inform you of lost messages. Ask the user to delete messages if this has not already been done.

  If a user complains about lost messages, you can reassign him or her to another class of service that has a larger voice storage limit. However, if many users are losing calls, you might want to consider manipulating the following fields in the class of service to which they belong:

  — *Voice Storage Limit*

  — *Maximum Call Answering Message Length*

  — *Maximum Message Length*

  — *Maximum Personal Greeting Length* (VMUIF only)

  — *Read Message Retention*

- ***Personal Greeting Recorded*** (VMUIF only) This is a read-only field that indicates whether or not the user has a recorded personal greeting.

- ***Internal Personal Greeting Recorded*** (MMUI only) This is a read-only field that indicates whether or not an internal personal greeting has been recorded by the user. This greeting is played to callers who have reached the user from a line inside the switch.

  If the internal greeting is not recorded, the external greeting (if recorded) is played to internal callers. If neither an internal greeting nor an external greeting is recorded, the following standard system greeting is played to callers if the user's personal verification is recorded: *"<Personal verification> is not available to take your call. Please leave a message after the tone or press zero for assistance."* If the personal verification is not recorded, callers hear *"The person at extension xxxx ..."*

  This greeting may be less formal and can include information that is not appropriate to external callers. For example, *"Hi, this is David. I'm not at my desk right now, so please leave a message after the tone. If this is an urgent matter, you can find me at Brian's desk."*
- ***External Personal Greeting Recorded*** (MMUI only) This is a read-only field. It indicates whether or not an external personal greeting has been recorded by the user. For users in centrex customer groups, this greeting is played to callers who reach the user's mailbox from an outside trunk. This message should be more formal than the internal greeting.
- ***Password Last Changed*** This is a read-only field displaying the date and time of the last password change. For new MMUI users, this is the time at which the user was added. For VMUIF users, the time is set to "nil."

  If this is an MMUI customer group, there is a maximum imposed on the number of days permitted between password changes. This value is set in the Voice Security Options screen. If this maximum is exceeded, the user will have to change his or her password the next time he or she logs on.

Procedure 5-10
Viewing and modifying local voice users

Starting point: The Main Menu

1 Select User Administration.

2 Select Local Voice User.

3 Press [View/Modify] if you know the user's mailbox number or [Find] to retrieve the user according to some other search criteria (such as name, department, and so on).

If you select [View/Modify], you are prompted to enter a mailbox number. Go to step 4.

If you select [Find], the Find Local Voice Users screen is displayed. See page 5-29.

4 Enter the mailbox number and press <Return>.

The View/Modify Local Voice User screen appears.

5 Make the necessary modifications.

6 If a personal verification has not been recorded for this user, you can record one now by pressing [Voice].

a. Enter the extension number of the phone you will be using to record the verification.

A new set of softkeys is displayed.

b. Press [Play] to see if a verification has been recorded.

If there is no verification, or if you want to record a new one, continue with step 6c. If you do not need to rerecord the verification, go to step 6f.

c. Press [Record].

d. At the sound of the beep, say the user's name into the telephone handset.

e. Press [Stop] to stop recording.

f. If you are satisfied with the recording, press either [Disconnect] or [Return] to display the original softkeys.

When you press [Return], the line is not disconnected (unless you hang up the receiver). This means that if you decide to rerecord or listen to the recording, you do not have to reenter the telephone extension after pressing the [Voice] softkey.

When you press [Disconnect], the line is disconnected and if you press [Voice] to access the voice recording softkeys again, you will have to reenter the telephone extension.

See "Recording prompts or personal verifications using the [Voice] softkey" on page 4-10 for more information about the recording softkeys.

7 If you need to change this user's password, press [Change Password].

You are prompted to enter the new password, and then enter it again for verification. The passwords are not displayed on the screen.

a. Enter the new password.

User passwords must be numeric and up to 16 digits long.

The password is not displayed as you enter it.

You are prompted to enter the password again for verification.

b. Enter the password again.

If there is a mismatch between passwords, return to step 7.

8 Go to step 8a to save the user, or 8b to cancel the modification.

a. Press [Save].

The system saves the modified user and prompts for another local voice user's mailbox number. To view or modify another user, go to step 4. If you do not want to modify another user at this time, go to step 8b.

b. Press [Cancel].

Any unsaved changes you have made are discarded. The Local Voice User Administration softkeys screen is displayed.

Deleting local voice users

Before deleting a user, you might want to ensure that there are no voice messages in the user's mailbox. This can be verified by checking the *Storage Used* field in the View/Modify Local Voice User screen. If there are messages remaining, you might want to make sure that the user listens to them before you delete the user.

When you delete a local voice user, the user's mailbox (including all messages), personal verification, personal greetings, and personal distribution lists are deleted. Furthermore, any instances of this user's mailbox are automatically deleted from customer distribution lists, but not from other users' personal distribution lists. In the case of personal distribution lists, users will hear a message indicating that the mailbox no longer exists when they try composing a message to a personal distribution list in which the deleted mailbox is included. To delete a local voice user, follow Procedure 5-11.

CAUTION
Risk of data loss
User usage data is collected by the system once a day (at approximately 4:00 a.m.). If a user's mailbox is removed before user usage data is processed then the data will be lost. (See the "Operational measurements" chapter.) If you require this information for billing purposes, do not delete the mailbox until the data is processed. (If you have the AdminPlus feature and file downloading capability then do not delete the mailbox until you have downloaded the data.) Instead, the mailbox should be disabled. See the description of the *Logon Status* field in "Viewing and modifying local voice users" earlier in this chapter. Once data is processed, then you can delete the user if you wish.

Procedure 5-11
Deleting a local voice user

Starting point: The Customer Administration Menu

1 Select User Administration.

2 Select Local Voice Users.

3 Press [Delete] if you know the user’s mailbox number. If you do not remember the user’s full mailbox number, press the [Find] softkey instead to retrieve the user from a subset of users.

If you press [Delete], you are prompted for the user’s mailbox number. Continue with step 4.

If you press [Find], fill in the Find Local Voice Users screen, or press [List] to see a list of all local voice users. Once you have found the user, press [Delete] and then continue with step 5a. See “Finding local voice users” on page 5-28 for more details.

4 Enter the mailbox number.

The Delete Local Voice User screen (Figure 5-10) is displayed.

Figure 5-10

The Delete Local Voice User screen

```
  ABC Company                User Administration

      Delete Local Voice User


      Mailbox Number:     7000             Volume ID: 203

      Storage Used:       0

      Last Name:          Smith

      First Name:         John             Initials: JA

   *  Department:         Administration

      Class of Service: Personal       001_Standard   002_Executive  003_Secretary
      (More Detail)     004_Outcalling 005_RNonly     006_DNUonly    009_AMIS/OC
                        024_Admin

      Extension DNs:                        7000
                                            7001
                                            7002

      Revert DN:                            0

 **   Message Waiting Indication DN:        87654321

 **   Message Waiting Link Name:            Link1

      Personal Verification Recorded (Voice): Yes

 ##   Remote Notification Schedules:        No
      (More Detail)

 *    Name Dialable by External Callers:    No   Yes

      Logon Status:                         Disabled  Enabled

 #    Volume Level:                         Normal Loud  Louder  Loudest

 !    Preferred Language                    AmericanEnglish
                                            Canadian French

      Invalid Logon Attempts:               2

      Time of Last Logon:                   **/**/**  **:**

                                                                 MORE BELOW

 OK to Delete    Cancel       More Detail
```

* These fields are displayed only for MMUI systems.
** These fields are not displayed if the MWI option is set to ”None” in the selected COS.
! This field is displayed only for multilingual systems.
\# This field is displayed only for VMUIF systems.
\## This field is displayed only if Outcalling is enabled and Remote Notification Capability is set to ”Yes” in the selected COS.

Note: If you have logged on to a terminal while another administrator is modifying the same user, only the [Exit] and [More Detail] softkeys will be displayed.

Figure 5-10 (continued)

The Delete Local Voice User screen

```
  ABC Company                User Administration                 MORE ABOVE

*    Time of Last Mailbox Lockout:           **/**/**  **:**

*    Calls Rejected after Mailbox Full:      No

*    Personal Greeting Recorded:             No

**   Internal Personal Greeting Recorded:    No

**   External Personal Greeting Recorded:    No

     Password Last Changed:                  **/**/**  **:**

 OK to Delete    Cancel    More Detail
```

```
*  These fields are displayed only for VMUIF customer groups.
** These fields are displayed only for MMUI customer groups.
```

5 Choose step 5a to delete the user or 5b to cancel.

a. Press [OK to Delete].

The user is deleted and the system prompts for another mailbox number. To delete another user, go to step 5a. Otherwise, continue with step 5b.

b. Press [Cancel].

The user is not deleted.

Administering directory entry users

You can do the following administration tasks for directory entry users:

- add
- find
- view or modify
- delete

Adding directory entry users

Directory entry users do not have mailboxes associated with their extensions. This may be the case for one of several reasons. The user may not require or want a mailbox, or perhaps the user is not authorized to have a mailbox. Another common reason is that a user shares the same phone with other users. (In other words, you can associate a number of directory entry users with the same DN. This is unlike local voice users in that each local voice user must have a unique primary DN and mailbox number.) In this case, if you were to create a mailbox for this telephone, it would not be clear for whom new messages are intended when the MWI is turned on.

Because directory entry users do not have mailboxes, they, therefore, do not have access to voice messaging functions (such as compose and send) or other features such as outcalling, AMIS networking, and so on. However, by adding users as directory entry users, they are included in the Meridian Mail directory. This means that these users can be dialed using thru-dial features such as name dialing and automated attendants.

For example, if June Miller, Andy Artaud, and Don Lawrence share the same phone (at extension 2339), another user can call June by using the name dialing feature instead of dialing the extension number. This is also useful when an external caller wants to ring a user’s phone through a voice menu or automated attendant. If the external caller does not remember June’s extension number, the caller can still dial the phone by entering June’s name.

If at some point, a directory entry user needs a mailbox, you will have to delete the directory entry user, and add the user again as a local voice user.

Note: You cannot add users to VMUIF customer groups as directory entry users.

Procedure 5-12
Accessing the Add Directory Entry User screen

1 Select User Administration.

2 Select Directory Entry User.

3 Press [Add].

You are prompted for an extension.

4 Enter the user’s DN followed by <Return>.

This number will be used in the Add Directory Entry User screen to fill in the Primary Extension DN field.

Once the DN has been entered, the Add Directory Entry User screen is displayed.

Figure 5-11
Add Directory Entry User screen

```
   ABC Company             User Administration

    Add Directory Entry User

    Last Name:         ________________________________________

    First Name:        _____________________  Initials: _____

  * Department:        _______________________________

    Extension DNs:     8877665______________________
                       ______________________________
                       ______________________________

    Personal Verification Recorded (Voice):   No

  * Name Dialable by External Callers:        No   [Yes]

 ______________________________________________________________________
   Save        Cancel                                       Voice
```

* These fields are displayed only if this is an MMUI customer group.

The Directory Entry Users screen contains the following fields:

- ***Last Name*** This is the last name of the new directory entry user, up to 41 characters in length. This field is mandatory. This field accepts any characters with the exception of the restricted characters “+”, “_”, and “?.” However, you should limit yourself to alphanumeric characters for name dialing and name addressing to work properly. This field is blank by default. Be sure to fill it in and ensure correct spelling because the Name Dialing and Name Addressing features use this information.
- ***First Name*** This is the first name of the new directory entry user. You can enter up to 21 characters, including the space and hyphen (-). The default is blank. Ensure correct spelling because the Name Dialing and Name Addressing features use this information.
- ***Initials*** These are the initials of the directory entry user. This field can hold up to five alphanumeric characters. This field is for display only and can be used by the administrator to distinguish users with identical first and last names. These initials, however, cannot be used in name dialing.

  Note: If you do not enter any initials, the system will automatically fill in this field with the first initial of the user’s first name.

- ***Department*** (MMUI only) This is the department to which the user belongs. You may enter up to 31 characters. The characters “+”, “?” and “_” are restricted. It is recommended that you use alphanumeric characters only, and avoid using special characters altogether (even though some are accepted by this field) for the reasons mentioned in the *Last Name* field. When adding the first user to the customer group, this field will be blank by default. For subsequent users, this field defaults to the department entered for the last user added.

  You can retrieve users on the basis of department when using the Find Directory Entry Users function (described later in this chapter). With Find Directory Entry Users however, only the first 26 characters of the department are displayed. Therefore try to assign identifiers for each department that are unique in the first 26 characters.
- ***Extension DNs*** This is the user’s extension number or numbers. A user’s DN can be up to 30 digits in length. A user can be associated with three possible extensions.

  The first field is for the primary DN and is mandatory. You cannot save the user information if this field is blank. It is automatically filled in with the DN you entered to access this screen.

- ***Personal Verification Recorded (voice)*** If a personal verification has been recorded for this user, this field displays “Yes.” “No” indicates that no verification is currently recorded. The setting in this field changes when the [Voice] softkey is used to record a verification. The personal verification is used in address lists, during call answering sessions, and when name dialing is used. Refer to “Recording prompts or personal verifications using the [Voice] softkey” on page 4-10 for more information about using the [Voice] softkey.
- ***Name Dialable by External Callers*** (MMUI only) When this field is set to “Yes”, external callers can use name dialing to dial the user. This may not be desirable for all users as a caller can get through to any extension as long as they know the person’s name. Therefore, you may want to set this field to “No” for those users who have their phone calls screened by a secretary. This field defaults to “Yes.”

Procedure 5-13
Adding a Directory Entry User

Starting point: The Main Menu

1 Select User Administration.

2 Select Directory Entry User.

3 Press [Add].

You are prompted to enter a DN.

The [Cancel] softkey is displayed.

4 If you do not want to continue, go to step 4a. If you want to continue, go to step 4b.

a. Press [Cancel].

b. Enter the extension number and press <Return>.

This field is used in the Add Directory Entry User screen to fill in the primary Extension DN field.

Note: Make sure this DN does not conflict with any distribution list numbers. If a distribution list and a directory entry user share the same number, the distribution list number will take precedence over a directory entry user number during compose. The message will not be sent to the directory entry user.

Once a valid DN has been entered, the Add Directory Entry User screen is displayed (Figure 5-11).

5 Enter the *Last Name*, *First Name*, *Initials, Department (MMUI only)*, and *Extension Number(s)* of the new user.

6 Press [Voice] to record a Personal Verification recording.

a. Enter the extension number of the phone you will be using to record the verification.

A new set of softkeys is displayed.

b. Press the [Record] softkey.

c. At the sound of the beep, say the user's name into the telephone handset.

d. Press the [Stop] softkey to stop recording.

e. If you are satisfied with the recording, press either [Disconnect] or [Return] to display the original softkeys.

When you press [Return], the line is not disconnected (unless you hang up the receiver). This means that if you decide to rerecord or listen to the recording, you do not have to reenter the telephone extension after pressing the [Voice] softkey.

When you press [Disconnect], the line is disconnected. If you press [Voice] to access the recording softkeys again, you will have to reenter the telephone extension.

See "Recording prompts or personal verifications using the [Voice] softkey" on page 4-10 for more information about the recording softkeys.

7 Go to step 7a to save the new user or 7b to cancel the addition.

a. Press [Save].

The system saves the user and prompts for another extension number. To add another user, enter the extension and press <Return>. Then go to step 5. Go to step 7b to exit.

b. Press [Cancel].

Any new user information that was entered is discarded and the User Administration softkeys are displayed.

Finding directory entry users

To access the Find Directory Entry Users screen, follow Procedure 5-14.

Procedure 5-14
Accessing the Find Directory Entry Users screen

Starting point: The Main menu

1 Select User Administration.

2 Select Directory Entry Users.

3 Press the [Find] softkey.

The Find Directory Entry Users screen (Figure 5-12) is displayed.

Figure 5-12
The Find Directory Entry Users screen

```
ABC Company                         User Administration

   Find Directory Entry Users

   Last Name:      ____________________________________

   First Name:     ___________________________

 * Department:     _______________________________

   Extension Number (DN): ___________________________

   Personal Verification Status:   [Any]  Not_Recorded   Recorded

   Select a softkey >

 Exit                     List          Print
```

* This field is displayed only if the user belongs to an MMUI customer group.

The following fields are displayed:

- ***Last Name*** This is the user's last name. Fill in this field if you want to retrieve a particular user by last name. Use wildcard characters if you are unsure of the spelling. For more information, refer to "Using wildcard characters." This field can be up to 41 characters long.
- ***First Name*** This is the user's first name. Fill in this field if you want to retrieve a particular user and only remember the first name or if you remember the last and first names (in order to narrow down the search). Use wildcard characters if you are unsure of the spelling. For more information, refer to "Using wildcard characters." This field can be up to 21 characters long.
- ***Department*** (MMUI only) This is the department to which the user belongs. Fill in this field if you want to retrieve a particular user and only remember the department. If you remember the user's name and department, this will help to narrow down the search. Use wildcard characters if you are unsure of the spelling or exact name of the department. For more information, refer to "Using wildcard characters." This field can be up to 31 characters long.

- ***Extension Number (DN)*** This is the user's primary extension DN. Enter the user's DN if it is known. Use wildcard characters to retrieve a subset of users in a particular range of DNs. For more information, refer to "Using wildcard characters." This field can be up to 30 characters long.
- ***Personal Verification Status*** Set this field to "Not_Recorded" to retrieve all directory users who do not have a recorded personal verification. Since it is a good idea for all users to have a personal verification, you should record a verification for the user. If the personal verification status is not important, set this field to "Any" (the default).

Viewing a list of directory entry users

The List of Directory Entry Users screen (Figure 5-13) appears when the [List] softkey on the Find Directory Entry Users screen is used. It provides a list of user names matching the search parameters entered in the Find Directory Entry Users screen.

Procedure 5-15
Viewing a list of directory entry users

Starting point: The Find Directory Entry Users screen

1 Fill in the screen with the required search parameters. For more information about using search parameters, refer to "Finding users" on page 5-7.

2 Press [List] to display the results of the search on the screen.

See Figure 5-13.

3 To view, modify, or delete a directory entry user, move the cursor to the user's name and press the <Space Bar> to select it. To view or modify a directory entry user, go to step 3a. To delete a directory entry user, go to step 3b. To record a personal verification for the user, go to step 3c.

a. Press [View/Modify].

The View/Modify Directory Entry User screen is displayed. See the section "Viewing and modifying directory entry users."

b. Press [Delete].

The Delete Directory Entry User screen is displayed. See "Deleting directory entry users."

c. Press [Voice].

The recording softkeys are displayed. Refer to "Recording prompts or personal verifications using the [Voice] softkey" on page 4-10.

The List of Directory Entry Users screen

The List of Directory Entry Users screen (Figure 5-13) is displayed when you choose to list users from the Find Directory Entry Users screen.

Figure 5-13
The List of Directory Entry Users screen

```
ABC Company                 User Administration

 List of Directory Entry Users

                                                     Personal
                                                     Verific.
 Name                      Department *              Recorded

 Alcott,Tom                Financial                   No
 Gordon,John               Sales                       Yes
 Jones,Tracy               Admin                       No
 Smith,Bod                 Accounting                  Yes
 Valdez,J                  Marketing                   Yes

Select a softkey >

   Exit               View/Modify    Delete       Voice
```

* This column is displayed only if this is an MMUI customer group.

The following information is displayed for each user that is retrieved:

- ***Name*** This is the user's last name followed by the first name.
- ***Department*** (MMUI only) This is the user's department name.
- ***Personal Verific. Recorded*** This field indicates whether or not a spoken name (personal verification) has been recorded for this user.

Printing a list of directory entry users

The results of your search can also be printed. Instead of using the [List] softkey on the Find Directory Entry Users screen, use the [Print] softkey.

Procedure 5-16
Printing a list of directory entry users

Starting point: The Find Directory Entry Users screen

1 Fill in the screen with the required search parameters.

2 Press [Print].

Two new softkeys are displayed: [Continue Printing] and [Cancel Printing].

3 Press [Continue Printing] to send the results to the printer.

See Figure 5-14 for an example of the printer output.

Press [Cancel Printing] at any time to cancel the print job.

Figure 5-14
Print directory entry users output

```
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List of Directory Entry Users

                                                 Personal
                                                 Verific.
Name                   Department *              Recorded

Alcott,Tom             Financial                   No
Gordon,John            Sales                       Yes
Jones,Tracy            Admin                       No
Smith,Bod              Accounting                  Yes
Valdez,J               Marketing                   Yes
```

* This column is displayed only if this is an MMUI customer group.

Viewing and modifying directory entry users

When you choose to view or modify a directory entry user, you are prompted for an extension number. If more than one directory entry user is associated with that extension, you will see the List of Directory Entry Users screen (the top screen illustrated in Figure 5-15). From the list of users, choose the user you want to view or modify. Once you have selected the user, the View/Modify Directory Entry User screen is displayed (the bottom screen illustrated in Figure 5-15). If only one user is associated with the extension you enter, the View/Modify Directory Entry User screen is displayed immediately.

Figure 5-15
View/Modify Directory Entry User screen

```
ABC Company              User Administration

 List of Directory Entry Users

                                              Personal
                                              Verific.
 Name                    Department *         Recorded
 Adams, Joan             Coordination            No
 Smith, John             Administration          No

 Select a softkey >

 Exit                    View/Modify
```

```
ABC Company              User Administration

 View/Modify Directory Entry User

 Last Name:              Smith

 First Name:             John                 Initials:

*Department:             Coordination

 Extension DNs:          7000
                         7001
                         7002

 Personal Verification Recorded (Voice):         Yes

* Name Dialable by External Callers:             [No] Yes

 Save       Cancel                                      Voice
```

* These fields and column are displayed only if this is an MMUI customer group.
Note: If you have logged on to a terminal while another administrator is modifying the same user, only the [Exit] softkey will be displayed.

The fields on this screen are identical to those on the Add Directory Entry User screen, described on page 5-47.

Procedure 5-17
Viewing/Modifying parameters for directory entry users

Starting point: The Main Menu

1 Select User Administration.

2 Select Directory Entry Users.

3 If you know the user’s extension number, press [View/Modify]. If you do not know the extension number, press [Find].

If you selected [View/Modify], you are prompted for an extension number. Go to step 4a.

If you selected [Find], the Find Directory Entry Users screen is displayed. See page 5-51. After you have filled in this screen and the View/Modify Directory Entry User screen is displayed, continue with step 5 in this procedure.

4 Do one of the following:

a. Enter the extension number and press <Return>.

If only one user is assigned to the extension number, the View/Modify Directory Entry User screen appears (Figure 5-15). Go to step 5.

If more than one user shares the extension, the List of Directory Entry Users screen appears.

b. Select a user by placing the cursor on the user you want to view or modify. Press <Space Bar> to select the user, and then press [View/Modify].

5 Modify the fields as needed.

6 Press [Voice] to record a personal verification recording if one is not already recorded.

a. Enter the extension number of the phone you will be using to record the verification.

A new set of softkeys is displayed.

b. Press [Record].

c. At the sound of the beep, say the user’s name into the telephone handset.

d. Press [Stop] to stop recording.

e. Press [Disconnect].

f. Press [Return].

See “Recording prompts or personal verifications using the [Voice] softkey” on page 4-10 for more information about the recording softkeys.

7 Go to step 7a to save the modified user or 7b to cancel all changes.

a. Press [Save].

The system saves the modified directory entry user and prompts for another extension number, or displays the List of Directory Entry Users. To modify another user, go to step 4a or 4b. If you do not want to modify another user at this time, go to step 7b.

b. Press [Cancel].

Any changes will be discarded. The Directory Entry User Administration softkeys screen or the List of Directory Entry Users screen is displayed.

Deleting directory entry users

To delete a directory entry user, follow Procedure 5-18.

When you gain access to the Delete Directory Entry User screen, you are prompted to enter the extension number of the user. A different screen is displayed depending on whether there is more than one user associated with this extension number. When you delete a directory entry user, his or her personal verification is automatically deleted. (The screen illustrated in Figure 5-16 is displayed when there is more than one user. The screen depicted in Figure 5-17 is displayed when there is only one user.)

Procedure 5-18
Deleting directory entry users

Starting point: The Main Menu

1 Select User Administration.

2 Select Directory Entry Users.

3 Press [Delete].

You are prompted for an extension number.

4 Enter the extension number and press <Return>.

If more than one user shares the extension number, the List of Directory Entry Users screen appears (Figure 5-16). Select the required user and press [Delete]. The Delete Directory Entry User screen appears (Figure 5-17). Proceed to step 5.

Figure 5-16

The List of Directory Entry Users screen

```
ABC Company              User Administration

     List of Directory Entry Users

                                                 Personal
                                                 Verific.
     Name                  Department *          Recorded

     Adams, Joan           Coordination             No
     Smith, John           Administration           Yes

  ______________________________________________________________________

  Select a softkey >

   Exit                                     Delete
```

* This field is displayed only if this is an MMUI customer group.

If only one user is assigned to the extension number, the Delete Directory Entry User screen appears (Figure 5-17). Proceed to step 5. The fields on this screen are identical to those on the Add Directory Entry User screen described on page 5-47.

Figure 5-17
The Delete Directory Entry User screen

```
ABC Company              User Administration

   Delete Directory Entry User

   Last Name:          Smith

   First Name:         John                 Initials: AJ

 * Department:         Administration

   Extension DNs:      7000
                       7001
                       7002

   Personal Verification Recorded (Voice):        Yes

 * Name Dialable by External Callers:             No   Yes

OK to Delete    Cancel
```

* These fields are displayed only if this is an MMUI customer group.
Note: If you have logged on to a terminal while another administrator is modifying the specified user, only the [Exit] softkey will be displayed.

5 Choose step 5a to delete the user, or 5b to cancel.

a. Press [OK to Delete].

The user is deleted, and the system prompts for an extension number. To delete another user, go to step 4. If you do not need to delete another user, go to step 5b.

b. Press [Cancel].

The deletion is canceled.

Administering remote voice users

You can do the following administration tasks for remote voice users:

- add
- find
- view or modify
- delete

Adding remote voice users

Note: To add users as remote voice users, Meridian Networking must be enabled for this customer group. Meridian Networking can only be enabled for one MMUI customer group on the system.

Remote voice users only exist on the customer group that has Meridian Networking enabled. The remote voice users item will not appear in the User Administration menu if Meridian Networking is not enabled.

Users at remote Meridian Mail sites can be added to your system as remote voice users, if the Meridian Networking feature is installed and enabled for the customer group. This is by no means necessary. There are, however, benefits to doing this:

- When a remote voice user sends a message to a user at the local site, the sender's personal verification is played. When a user at a remote site (that is not defined as a remote voice user) sends a message, the mailbox number (for example, 63385443, if the dialing plan is ESN) is played to the recipient.
- Remote voice users can be added to customer distribution lists, whereas users at remote sites (not defined as remote voice users) cannot be added.
- Users at the local site can use name dialing to reach remote voice users.
- External callers to your system can reach remote voice users by name dialing (for example, through a voice menu or thru-dialer) if you enable the *Name Dialable by External Callers* field in the Add or View/Modify Remote Voice User screen.

Therefore, you may only choose to add those users who correspond frequently with users at the local site or whom you want included in your customer distribution lists. For more information about Meridian Networking, see the "Meridian Networking administration" chapter in the *Networking Services Administration Guide* (NTP 555-7001-335).

Procedure 5-19
Accessing the Add Remote Voice User screen

Starting point: The Main Menu

1 Select User Administration.

2 Select Remote Voice User.

3 Press [Add].

You are prompted for an extension.

4 Enter the user's DN (in network format including the appropriate location code) followed by <Return>.

This number will be used in the Add Remote Voice User screen to fill in the primary Extension DN field.

The Add Remote Voice User screen is displayed.

Figure 5-18

The Add Remote Voice User screen

```
ABC Company                     User Administration

  Add Remote Voice User

  Mailbox Number:    ____________________________

  Last Name:         _____________________________________________

  First Name:        _____________________   Initials: _____

* Department:        _______________________________

  Extension DNs:     ______________________________
                     ______________________________
                     ______________________________

  Personal Verification Recorded (Voice):   Yes

* Name Dialable by External Callers:        No [Yes}

----------------------------------------------------------------------

  Save        Cancel                                      Voice
```

* These fields are displayed only if this is an MMUI customer group.

The following fields are displayed:

- ***Mailbox Number*** The mailbox number is preceded by the ESN prefix (using an ESN dialing plan), the CDP prefix (if using a CDP dialing plan), or the mailbox prefix (if using no dialing plan). If using an ESN dialing plan, then both the ESN prefix and the mailbox number are preceded by the access code. The access code is the number used to dial out of the system (such as 6 for ESN). (Dialing plans, access codes, and ESN/CDP/mailbox prefixes are described in the *Networking Services Administration Guide* [NTP 555-7001-335].) The length of the entry is limited to 28 digits.
- ***Last Name*** This is the last name of the remote voice user. This field holds up to 41 characters. It accepts any characters with the exception of “+”, “_”, or “?.” However, it is recommended that you use alphanumeric characters only. The default is blank.

- ***First Name*** This is the first name of the new remote voice user. This field can hold up to 21 characters. Spaces and hyphens (-) are allowed. The default is blank.
- ***Initials*** These are the initials of the remote voice user. This field can hold up to five alphanumeric characters. This field is for display only and can be used to distinguish users with identical first and last names. These initials, however, cannot be used during name dialing.

  Note: If you do not enter any initials, the system will automatically fill in this field with the first initial of the user's first name.

- ***Department*** (MMUI only) You may enter up to 31 characters. The characters "+", "?" and "_" are restricted. It is recommended that you use alphanumeric characters only, and avoid using special characters altogether (even though some are accepted by this field). When adding the first user to the customer group, this field will be blank by default. For subsequent users, this field defaults to the department entered for the last user added.

  You can retrieve users on the basis of department when using the Find Remote Voice Users function (described later in this chapter). However, only the first 26 characters of the department are displayed in the List of Remote Voice Users screen. Therefore, make sure that department names are unique based on the first 26 characters of their names.
- ***Extension DNs*** Enter the user's full extension number at the remote site, including any necessary access codes and network dialing prefixes. You can enter up to three DNs (the primary DN is required the others are optional). For example, if the remote voice user is part of an ESN dialing plan, the access code is likely 6. This is followed by the ESN prefix for that site (233) and the mailbox number 4433, making the full extension 62334433).
- ***Personal Verification Recorded (Voice***) When a personal verification has been recorded, this field is set to "Yes." This field is only changed by the administrator using the [Voice] softkey. The personal verification is played when a local user composes a message to the remote user, includes the remote user in a customer distribution list, or uses the name dialing feature to call the remote user. Refer to "Recording prompts or personal verifications using the [Voice] softkey" on page 4-10 for more information about using the [Voice] softkey.
- ***Name Dialable by External Callers*** (MMUI only) When this field is set to "Yes", external callers can reach the remote voice user by entering their name rather than their extension. This may occur when a caller reaches one of your thru-dialers and is prompted to enter an extension or the name of the person he or she wants to speak to. If this feature is not enabled, the callers have to enter the remote user's DN (including access code and network dialing prefix).

This may not be desirable for all users as a caller who is connected to your system through a voice menu can get through to any extension as long as they know the person's name. Therefore, you may want to set this field to "No" for those users who have their phone calls screened by a secretary. The default is "Yes."

Procedure 5-20
Adding a Remote Voice User

Starting point: The Main Menu

1 Select User Administration.

2 Select Remote Voice User.

3 Press [Add].

You are prompted for a remote mailbox number, and the [Cancel] softkey is displayed. The mailbox number is preceded by a location prefix of up to 10 digits and can be up to 28 digits long.

4 Go to step 4a if you do not want to add the user. Go to step 4b to proceed.

a. Press [Cancel].

b. Enter the location prefix (ESN prefix or CDP steering code) and mailbox number and press <Return>.

The Add Remote Voice User screen is displayed (Figure 5-18).

5 Enter the remote voice user's last name, first name, initials (optional), and department.

6 Normally the primary extension DN is the same as the user's mailbox number. If required, however, it can be modified. Enter optional secondary and tertiary DNs if necessary.

7 Press [Voice] to record a personal verification if one is not already recorded.

a. Enter the extension number of the phone you will be using to record the verification.

A new set of softkeys is displayed.

b. Press [Record].

c. At the sound of the beep, speak the user's name into the telephone handset.

d. Press [Stop] to stop recording.

e. If you are satisfied with the recording, press either [Disconnect] or [Return] to display the original softkeys.

When you press [Return], the line is not disconnected (unless you hang up the receiver). This means that if you decide to rerecord or listen to the recording, you do not have to reenter the telephone extension after pressing the [Voice] softkey.

When you press [Disconnect], the line is disconnected, and if you press [Voice] to access the recording softkeys again, you will have to reenter the telephone extension.

See the section, “Recording prompts or personal verifications using the [Voice] softkey” on page 4-10 for more information about the recording softkeys.

8 Disable name dialing by external callers if necessary.

9 Go to step 9a to save the new user or 9b to cancel the addition.

a. Press [Save].

The system saves the new user and prompts for another remote voice user mailbox number. To add another user, go to step 4b. Go to step 9b if you do not want to add more users at this time.

b. Press [Cancel].

The information for the new user is discarded.

Finding remote voice users

To access the Find Remote Voice Users screen, follow Procedure 5-21.

Procedure 5-21
Accessing the Find Remote Voice Users screen

Starting point: The Main menu

1 Select User Administration.

2 Select Remote Voice Users.

3 Press [Find].

The Find Remote Voice Users screen (Figure 5-19) is displayed.

Figure 5-19

The Find Remote Voice Users screen

```
ABC Company                       User Administration

   Find Remote Voice Users

   If a specific location is desired, include the location code prefix
   in the mailbox number field.

   Mailbox Number:    ___________________________

   Last Name:         ________________________________________

   First Name:        ____________________

 * Department:        _______________________________

   Extension Number (DN): ______________________________

   Personal Verification Status:   [Any]  Not_Recorded   Recorded

Select a softkey >
   Exit                      List            Print
```

*This field appears only if the user belongs to an MMUI customer group.

The following fields are displayed:

- ***Mailbox Number*** This is the mailbox number is preceded by the ESN prefix (if using an ESN dialing plan), the CDP prefix (if using a CDP dialing plan), or the mailbox prefix (if using no dialing plan). If using an ESN dialing plan, then both the ESN prefix and the mailbox number are preceded by the access code. The access code is the number used to dial out of the system (such as 6 for ESN). (Dialing plans, access codes, and ESN/CDP/mailbox prefixes are described in the *Networking Services Administration Guide* [NTP 555-7001-335].) The length of the entry is limited to 28 digits.
- ***Last Name*** This is the user's last name. Fill in this field if you want to retrieve a particular user by last name. Use wildcard characters if you are unsure of the spelling. For more information, refer to "Using wildcard characters." This field can have up to 41 characters.
- ***First Name*** This is the user's first name. Fill in this field if you want to retrieve a particular user and only remember the first name or if you remember the last and first names (in order to narrow down the search). Use wildcard characters if you are unsure of the spelling. For more information, refer to "Using wildcard characters." This field can have up to 21 characters.

- ***Department*** (MMUI only) This is the department to which the user belongs. Fill in this field if you want to retrieve a particular user and only remember the department. If you remember the user's name and department, this will help to narrow down the search. Use wildcard characters if you are unsure of the spelling or exact name of the department. For more information, refer to the section "Using wildcard characters." This field can have up to 31 characters.
- ***Extension Number (DN)*** This is the user's primary extension DN. Enter the user's DN if it is known. Use wildcard characters to retrieve a subset of users in a particular range of DNs. For more information, refer to the section "Using wildcard characters." This field can have up to 30 characters.
- ***Personal Verification Status*** Set this field to "Not_Recorded" to retrieve all remote voice users who do not have a recorded personal verification. Since it is a good idea for all users to have a personal verification, you should record a verification for the user. If the personal verification status is not important, make sure this field is set to "Any" (the default).

Viewing and modifying remote voice users

Note: Remote voice users can only be added to the customer group that has Meridian Networking enabled.

This section describes how to do the following tasks for remote voice users:

- view a list of remote voice users
- the List Remote Voice Users screen
- print a list of remote voice users
- the View/Modify Remote Voice Users screen

Viewing a list of remote voice users

The List of Remote Voice Users screen appears when the [List] softkey on the Find Remote Voice Users screen is used. It provides a list of user names and mailboxes matching the search parameters entered in the Find Remote Voice Users screen. Users are sorted by the first search parameter that is filled in on the Find Remote Voice Users screen. From the resulting list, you can select a particular user and view, modify or delete the user.

Procedure 5-22
Viewing a list of remote voice users

Starting point: The Find Remote Voice Users screen

1 Fill in the screen with the required search parameters.

2 Press [List] to display search results on the screen.

The List of Remote Voice Users screen is displayed. See Figure 5-20.

3 To view, modify, or delete a remote voice user, move the cursor to the user's name and press the <Space Bar> to select it. To view or modify a remote voice user, go to step 3a. To delete a remote voice user, go to step 3b. To record a personal verification for the user, go to step 3c.

a. Press [View/Modify].

The View/Modify Remote Voice User screen is displayed. See "Viewing and modifying remote voice users."

b. Press [Delete].

The Delete Remote Voice User screen is displayed. See "Deleting remote voice users."

c. Press [Voice].

The recording softkeys are displayed. Refer to "Recording prompts or personal verifications using the [Voice] softkey" on page 4-10.

The List of Remote Voice Users screen

The List of Remote Voice Users screen (Figure 5-20) is displayed when you choose to list users from the Find Remote Voice Users screen.

Figure 5-20
The List of Remote Voice Users screen

```
ABC Company                 User Administration

 List of Remote Voice Users

                                                   Personal
                                                   Verific.
 Name           Mailbox        Department *        Recorded

 Alcott,Tom     66554321       Financial           No
 Gordon,John    63998907       Sales               Yes
 Jones,Tracy    41534677899    Admin               No
 Smith,Bod      62445336       Accounting          Yes
 Valdez,J       68987008       Marketing           Yes

________________________________________________________________
Select a softkey >

   Exit                  View/Modify     Delete        Voice
```

* This field is displayed only if this is an MMUI customer group.

The following fields are displayed:

- ***Name*** This is the user's last name followed by the first name.
- ***Mailbox*** This is the user's mailbox number (in network format).

- ***Department*** (MMUI only) This is the department to which the user belongs.
- ***Personal Verific. Recorded*** This field indicates whether or not a spoken name (personal verification) has been recorded for this user.

Printing a list of remote voice users

The results of your search can also be printed. Instead of using the [List] softkey on the Find Remote Voice Users screen, use the [Print] softkey.

Procedure 5-23
Printing a list of remote voice users

Starting point: The Find Remote Voice Users screen

1 Fill in the screen with the required search parameters.

2 Press [Print].

Two new softkeys are displayed: [Continue Printing] and [Cancel Printing].

3 Press [Continue Printing] to send the results to the printer.

See Figure 5-21 for an example of the printer output.

Press [Cancel Printing] at any time to cancel the print job.

Figure 5-21
Print remote voice users output

```
8/27/92                 ABC Company                   Page 1

List of Remote Voice Users

                                                 Personal
                                                 Verific.
Name           Mailbox        Department *       Recorded

Alcott,Tom     66554321       Financial          No
Gordon,John    63998907       Sales              Yes
Jones,Tracy    41534677899    Admin              No
Smith,Bod      62445336       Accounting         Yes
Valdez,J       68987008       Marketing          Yes
```

* This column is displayed only if this is an MMUI customer group.

The View/Modify Remote Voice User screen

The fields displayed on the View/Modify Remote Voice User screen (Figure 5-22) are identical to those on the Add Remote Voice User screen and are described on page 5-62.

Figure 5-22

View/Modify Remote Voice User screen

```
                         User Administration
 View/Modify Remote Voice User

 If a specific location is desired, include the location code prefix
 in the mailbox number field.

 Mailbox Number:     2226000
 Last Name:          Jones
 First Name:         Ed                    Initials: EF
* Department:        Accounting
 Extension DNs:      6000

 Personal Verification Recorded (Voice)      Yes
* Name Dialable by External Callers:         [No] Yes

 Save     Cancel                                   Voice
```

Note: If you have logged on to a terminal while another administrator is modifying the same user, only the [Exit] softkey will be displayed.

* These fields are displayed only if the user belongs to an MMUI customer group.

Procedure 5-24
Viewing/Modifying parameters for remote voice users

Starting point: The Main Menu

1 Select User Administration.

2 Select Remote Voice Users.

3 Press [View/Modify].

The [Cancel] softkey appears; you are prompted for a remote mailbox number.

4 Go to step 2a to return or 2b to proceed.

a. Press [Cancel].

b. Enter the location code and mailbox number, and press <Return>.

The View/Modify Remote Voice User screen appears (Figure 5-22). The fields displayed in this screen are the same as those displayed in the Add Remote Voice User screen. For a description of these fields, refer to page 5-62.

5 Make the required changes.

6 If a personal verification has not been recorded for this user, press the [Voice] softkey.

a. Enter the extension number of the phone you will be using to record the verification.

A new set of softkeys is displayed.

b. Press [Play] to see if a verification has been recorded.

If there is no verification or if you want to record a new one, continue with step 6c. If you do not need to rerecord the verification, go to step 6f.

c. Press [Record].

d. At the sound of the beep, speak the user’s name into the telephone handset.

e. Press [Stop] to stop recording.

f. Press [Disconnect].

g. Press [Return].

See “Recording prompts or personal verifications using the [Voice] softkey” on page 4-10 for more information about the recording softkeys.

7 Go to step 7a to save the modified user or 7b to cancel the modifications.

a. Press [Save].

The system saves the modified user information. You are prompted for another mailbox number. To modify another remote voice user, go to step 4b. If you do not need to modify any other users, go to step 7b.

b. Press [Cancel].

Any changes that you have made are discarded. The Remote Voice User Administration softkeys screen is displayed.

Deleting remote voice users

Remote voice users can be removed from your system from the Delete Remote Voice User screen (Figure 5-23). When you delete a remote voice user, the personal verification (if recorded) is also deleted. The fields displayed in the Delete Remote Voice User screen are the same as those displayed in the Add Remote Voice User screen. For a description of these fields, refer to page 5-62.

Figure 5-23
Delete Remote Voice User screen

```
                    User Administration

  Delete Remote Voice User

  Mailbox Number:     22600

  Last Name:          Jones

  First Name:         Ed                Initials: EF

* Department:         Accounting

  Extension DNs:      6000


  Personal Verification Recorded (Voice): Yes

* Name Dialable by External Callers:      No   Yes
 ___________________________________________________________________

 OK to Delete    Cancel
```

Note: If you have logged on to a terminal while another administrator is modifying the specified user, only the [Exit] softkey will be displayed.

* These fields are displayed only if the user belongs to an MMUI customer group.

Procedure 5-25
Deleting remote voice users

Starting point: The Main Menu

1 Select User Administration.

2 Select Remote Voice Users.

3 Press [Delete] if you know the user's extension. If you do not remember the user's full extension, press the [Find] softkey instead to retrieve the user from a subset of users.

If you press [Delete], you are prompted for the user's mailbox number. Continue with step 4.

If you press [Find], fill in the Find Remote Voice User screen, or press [List] to see a list of all remote voice users. Once you have found the user, press the [Delete] softkey and then continue with step 5a. See "Finding remote voice users" for more details.

4 Enter the user’s extension number.

The Delete Remote Voice User screen is displayed.

5 Choose step 5a to delete the user or 5b to cancel.

a. Press [OK to Delete].

The user is deleted and the system prompts you for another extension number. To delete another user go to step 4. If you do not want to delete another user at this time, go to step 5b.

b. Press [Cancel].

The user is not deleted. The Delete User softkeys are displayed.

Administering customer distribution lists

Note: This publication describes the customer distribution list that the administrator configures. Users can also create personal distribution lists from the telephone keypad for the same purpose. Users can create up to nine personal distribution lists using their telephone keypad. Each personal distribution list can contain up to 99 entries. For more information about creating personal distribution lists, refer to the *VMUIF User Guide*.

Customer distribution lists are created by the administrator through User Administration and allow users to address the same voice message to more than one person at a time. When the message is sent, it is deposited in every mailbox included in the list. Customer distribution lists are created in the Add Distribution List screen (Figure 5-24).

You can create any number of customer distribution lists containing up to 120 entries each. To avoid confusion or conflict, you may find it easier to assign numbers to customer distribution lists that are of a different series from those used as mailbox numbers. Ensure that customer distribution list numbers do not conflict with any dialing plan prefixes or codes. Customer distribution list numbers cannot be the same length as either of the local addressing lengths defined in the Voice Messaging Options screen.

You can also record a list title for each customer distribution list that you create. The idea of a list title is similar to that of the personal verification. It is played when a customer distribution list number is entered when addressing messages. It is recommended that you record a list title, describing who is included in the list or the purpose of the list. This will make it easier to identify whether or not you have entered the correct list number when addressing messages.

You can do the following administration tasks for customer distribution lists:

- add
- find
- view or modify
- delete

Limitations for customer distribution lists

The following restrictions are placed on customer distribution list numbers:

- A customer distribution list number must not conflict with any dialing plan prefixes or codes. (These are detailed further in the description of the *List Number* field on page 5-75.)
- If the system addressing length in the General Options screen is set to a value other than zero and the local addressing lengths are defined in the Voice Messaging Options screen, then a customer distribution list number cannot be the same length as either of the local addressing lengths.
- A customer distribution list cannot be assigned a number between one and nine. These numbers are reserved for personal distribution lists.

  Note: All mailbox numbers in a customer distribution list must belong to the same customer group.

Customer distribution lists can include the following types of numbers:

- mailbox numbers of local voice users
- mailbox numbers of remote voice users

Mailbox numbers at AMIS sites cannot be added to a customer distribution list unless Meridian Networking is enabled, the AMIS site has been defined as a virtual node in the Meridian network, and the mailbox has been defined as a remote voice user on the local site. Virtual nodes are described in the “AMIS Networking” and “Meridian Networking administration” chapters of the *Networking Services Administration Guide* (NTP 555-7001-335).

Users at remote sites in a Meridian network cannot be included in customer distribution lists unless they are defined as remote voice users on the local site.

The following types of numbers do not have mailboxes associated with them and, therefore, cannot be included in a customer distribution list:

- numbers of directory entry users
- remote notification targets
- delivery to non-user targets

Adding a customer distribution list

To add a new customer distribution list for the customer, follow Procedure 5-26.

Procedure 5-26
Accessing the Add Distribution List screen

Starting point: The Main Menu

1 Select User Administration.

2 Select Distribution Lists.

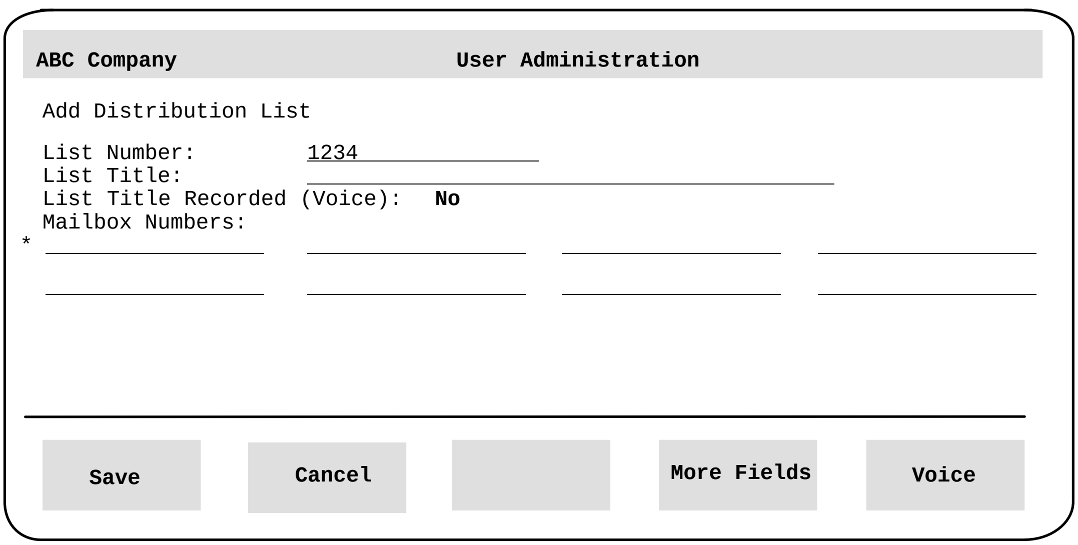
3 Press [Add].

You are prompted for a customer distribution list number.

4 Enter a number that conforms to the rules described under the *List Number* field described on page 5-75.

The Add Distribution List screen is displayed (Figure 5-24).

Figure 5-24
The Add Distribution List screen



* If Meridian Networking is installed and enabled for the customer group, then two 28-digit fields are displayed instead of the four 18-digit fields displayed here.

The screen shows the following fields:

- ***List Number*** This value uniquely identifies the customer distribution list. The valid range is from 10 to 999999999999999999 (only numeric characters are allowed).

A customer distribution list number cannot duplicate any of the following:

— personal distribution list numbers (the single digits one to nine are reserved)

— any mailbox number, including the broadcast mailbox number (which has a default of 999)

— a directory entry user's DN

If a distribution list and a directory entry user share the same number, the distribution list number will take precedence over a directory entry user number during compose. The message will not be sent to the directory entry user.

— the name dialing prefix (The default prefix is 11. Do not use 11 to label a list unless you are sure that the name dialing prefix has been changed.)

— delivery to non-user prefix

— another customer distribution list number

— the personal distribution list prefix (VMUIF customer groups only)

— any dialing plan access code prefixes

- ***List Title*** This is the title of the customer distribution list, up to 41 characters in length. Do not use the special characters "+", "?", or "_." This field is blank by default. This title can also be used with name addressing when you compose and send a message.
- ***List Title Recorded (Voice)*** This is a read-only field that indicates whether or not a spoken name has been recorded for this list. It is a good idea to record a spoken title for each customer distribution list. This will help you to identify the list after you have entered its number when composing a message. Choose a name that uniquely identifies this list.
- ***Mailbox Numbers*** Enter the mailbox numbers of the local voice users who are to be included in the customer distribution list. Each field holds up to 18 digits. (If you have Meridian Networking enabled, the mailbox number can be up to 28 digits long.) Up to 120 mailbox numbers are allowed in a customer distribution list. By default, these fields are blank. The [More Fields] softkey can be used to add fields as additional mailboxes are required.

Procedure 5-27
Creating a customer distribution list

Starting point: The Add Distribution List screen

1 Enter a name for the list in *List Title*.

2 Enter the mailbox numbers of the users you want to include in the customer distribution list.

If you are entering the mailbox number of a remote voice user, enter the network prefix (ESN prefix or CDP steering code) followed by the mailbox number.

You will be informed if any of the numbers you enter are invalid.

3 Press [More Fields] if you have reached the last available *Mailbox Number* field and wish to add more mailboxes to the list. One row of fields is drawn each time you press this softkey. Up to 120 mailboxes can be included in a list.

4 To record a list title, press [Voice].

a. Enter the extension number of the phone you will be using to record the verification.

A new set of softkeys is displayed.

b. Press [Record].

c. At the sound of the beep, speak the list title into the telephone handset.

d. Press [Stop] to stop recording.

e. If you are satisfied with the recording, press either [Disconnect] or [Return] to display the original softkeys.

When you press [Return], the line is not disconnected (unless you hang up the receiver). This means that if you decide to rerecord or listen to the re-cording, you do not have to reenter the telephone extension after pressing the [Voice] softkey.

When you press [Disconnect], the line is disconnected, and if you press [Voice] to access the recording softkeys again, you will have to reenter the telephone extension.

See “Recording prompts or personal verifications using the [Voice] softkey” on page 4-10 for more information about the recording softkeys.

5 Choose step 5a to save the customer distribution list or 5b to cancel.

a. Press [Save].

The customer distribution list is saved. If you have created a long customer distribution list, it may take a few moments to save.

You are prompted to enter a number for a new customer distribution list. Create another customer distribution list, or go to step 5b to leave the screen.

b. Press [Cancel].

The distribution list is not saved, and you are returned to the Distribution Lists softkey screen.

Finding a customer distribution list

The Find function can be used to generate a list of customer distribution lists for record-keeping purposes or to find a particular list or subset of lists in order to modify it (them). The List function allows you to view the customer distribution lists that have been retrieved on the screen.

From the retrieved list, you can select a customer distribution list in order to view, modify, or delete it. If you want a printed copy of the customer distribution lists that are retrieved, use the [Print Titles] softkey to print just the titles and list numbers, or the [Print Entries] softkey to print the mailboxes associated with each customer distribution list.

Procedure 5-28
Find a customer distribution list or a subset of distribution lists

Starting point: The Main Menu

1 Select User Administration.

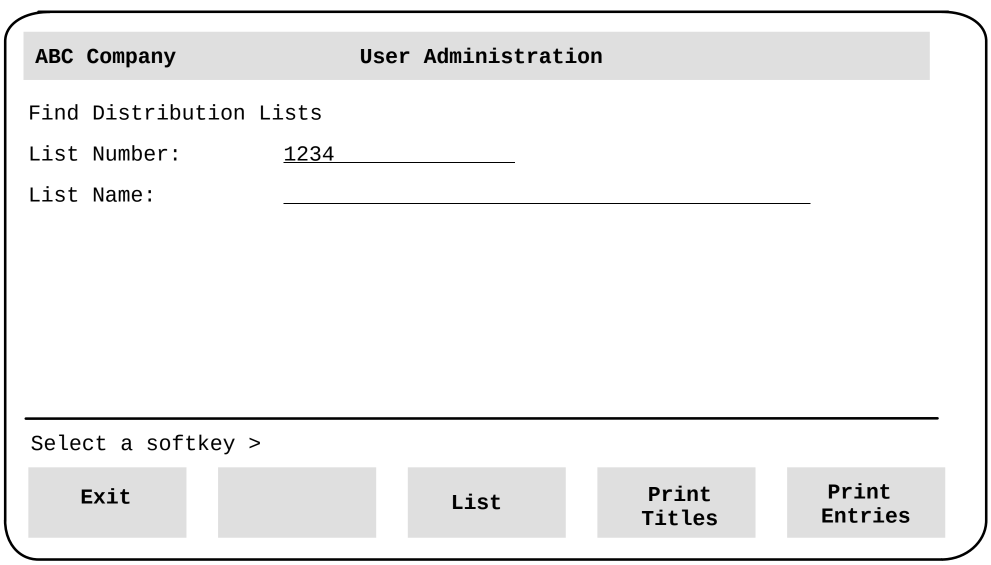
2 Select Distribution Lists.

3 Press [Find].

The Find Distribution Lists screen (Figure 5-25) is displayed.

Figure 5-25

The Find Distribution Lists screen



4 Enter the number or the name of the list you want to find. To find a subset of customer system distribution lists, use wildcard characters to create a search pattern. For example, to retrieve all lists beginning with 1, enter “1+.” You can also use wildcard characters if you want to retrieve a particular list but cannot remember the exact number or name. For more information, refer to the section “Using wildcard characters.”

5 To view a list of the retrieved customer distribution lists, press [List].

This will display the lists sorted by list number in ascending numerical order. Use the list to obtain the number of an existing customer distribution list, if you need to modify, delete, or print it. See Figure 5-26.

Figure 5-26

The List of Distribution Lists screen

```
ABC Company                 User Administration

List of Distribution Lists
                        List Number        List Title

                        123                Whole Group
                        507                Purchasing
                        976                Accounting
                        128                Engineering

____________________________________________________________________

   Exit                       View/Modify      Delete
```

a. To view or modify one of the retrieved lists, move the cursor to the customer distribution list you want to modify, and press <Space bar> to select it. Then press [View/Modify]. See “Modifying a customer distribution list.”

b. To delete one of the retrieved lists, move the cursor to the customer distribution list you want to modify and press <Space bar> to select it. Then press [Delete]. See “Deleting a customer distribution list.”

6 To print the titles of the retrieved customer distribution lists, press the [Print Titles] softkeys.

The following softkeys appear: [Continue Printing] and [Cancel Printing].

You are prompted to check that the printer is ready and on-line.

7 Choose step 7a to print the customer distribution list titles or 7b to cancel.

a. Press [Continue Printing].

The list of customer distribution list titles begins printing.

Once printing is complete, the Find Distribution Lists screen and its softkeys are redisplayed; you may stop printing at any time by proceeding to 7b.

b. Press [Cancel Printing].

The print operation is canceled, and you are returned to the Find Distribution Lists screen.

There may be some delay before control is returned to the screen because the system waits for the printer to stop.

8 To print the entries in the retrieved customer distribution lists, press the [Print Entries] softkey.

The following softkeys appear: [Continue Printing] and [Cancel Printing].

You are prompted to check that the printer is ready and on-line.

9 Choose step 9a to print the customer distribution list entries or 9b to cancel.

a. Press [Continue Printing].

The list of customer distribution list entries begins printing.

Once printing is complete, the List Distribution Lists screen is displayed. You may stop printing at any time by proceeding to 9b.

b. Press [Cancel Printing].

The print operation is canceled, and you are returned to the List Distribution Lists screen.

There may be some delay before control is returned to the screen because the system waits for the printer to stop.

Modifying a customer distribution list

The fields in the View/Modify Distribution List screen are identical to those in the Add Distribution List screen. Refer to page 5-75 for field descriptions.

Figure 5-27
The View/Modify Distribution Lists screen

```
ABC Company                       User Administration

View/Modify Distribution List

List Number:        1234
List Title:         Lost City
List Title Recorded (Voice):    No
Mailbox Numbers:
*2339                 2431

 Save      Cancel              More      Voice
                               Fields
```

* If Meridian Networking is enabled for the customer group, then two 28-digit fields are displayed instead of the four 18-digit fields displayed here.

Note: If you log on while another administrator is modifying the same distribution list, only the [Exit] softkey will be displayed.

Procedure 5-29
Modifying a Customer Distribution List

Starting point: The Main Menu

1 Select User Administration.

2 Select Distribution Lists.

3 Select [View/Modify] if you know the number of the customer distribution list you want to view or modify.

If you do not know the number of the list, press the [Find] softkey instead. Refer to page 5-78 for more information.

If you pressed [View/Modify], you are prompted to enter the customer distribution list number.

4 Enter the customer distribution list number to be modified, then press <Return>.

The View/Modify Distribution List screen appears (Figure 5-27).

5 Modify the customer distribution list number and/or title if you wish.

6 Change, add, or delete any mailbox numbers.

7 Press [More Fields] if you have reached the last available mailbox number and wish to add more mailboxes to the list. Up to 120 mailboxes can be included in a list.

8 To record a list title for this customer distribution list, move the cursor to the *List Title Recorded* field and press [Voice]. Recording softkeys are described on page 4-10 and in the"Making recordings" chapter.

9 Choose step 9a to save the customer distribution list or 9b to cancel.

a. Press [Save].

The customer distribution list is saved; if you have modified a long customer distribution list, it may take a few moments to save.

You are prompted to enter a number of another customer distribution list. To modify another customer distribution list, return to step 4. Go to step 9b to exit the screen.

b. Press [Cancel].

You are returned to the Distribution Lists softkeys screen.

Deleting a customer distribution list

When you delete a customer distribution list, only the list, itself, is deleted. The mailboxes that are referred to in the list are not deleted. This screen is identical to the Add Distribution List screen except that all of the fields are read-only. For a description of the fields in the Delete Distribution List screen, refer to page 5-75.

Figure 5-28

The Delete Distribution List screen

```
ABC Company                User Administration

   Delete Distribution List

   List Number:        1001
   List Title:         Lost City
   Personal Verification Recorded (Voice):   Yes
   Mailbox Numbers:
*  4435                5422                2934                0712

Select a softkey >

OK to Delete    Cancel
Entire List
```

* Two fields, 28 characters in length, are displayed if Meridian Networking is enabled for the customer group.

Note: If you log on while another administrator is modifying the same distribution list, only the [Exit] softkey will be displayed.

Procedure 5-30
Deleting a customer distribution list

Starting point: The Main Menu

1 Select User Administration.

2 Select Distribution Lists.

3 Press [Delete].

You are prompted to enter the customer distribution list number.

If you do not know the number, press the [Find] softkey instead. This allows you to retrieve a *customer* distribution list according to its title, or to retrieve a subset of lists. See page 5-78 for more information.

4 If you pressed [Delete], enter the number of the customer distribution list you want to delete followed by <Return>.

The Delete Distribution List screen appears (see Figure 5-28).

5 Choose step 5a to delete the customer distribution list, or 5b to cancel.

a. Press [OK to Delete].

The customer distribution list is deleted. If you delete a long customer distribution list, the operation may take a few moments to complete.

You are prompted to enter a number for another customer distribution list to delete. To delete another customer distribution list, go to step 4. If you do not need to delete another customer distribution list, go to step 5b.

b. Press [Cancel].

You are returned to the Distribution Lists softkeys screen.

Chapter 6: General Administration

This chapter describes

- the General Administration Menu
- how to use the options on the General Administration Menu
  - — defining the general options

At the customer administration level, there are two items in the General Administration menu. General Options allows you to

- enable features that are enabled on the system for specific customer groups
- define the customer name and customer number (that will appear on administration screens and reports)
- assign classes of service to the customer group, and define the attendant DN for the customer group

You can also change the customer administrator password from this screen. It is recommended that you do this on a regular basis to ensure the security of your system.

The General Administration menu

The General Administration menu displays the options shown in Figure 6-1.

Figure 6-1
The General Administration menu

```
ABC Company                    General Administration


          1  General Options

          2  Change Customer Administrator Password









Select an item >

   Exit
```

Procedure 6-1
Using the General Administration menu

Starting point: The Customer Administration Menu

1 Select General Administration.

The General Administration screen appears (Figure 6-1).

2 Choose an item by entering its number and pressing <Return>.

The menu corresponding to your selection appears.
See the following sections in this chapter for details:

<1> "Defining the general options"
<2> "Changing the customer administrator password"

3 Press [Exit] to return to the Customer Administration Menu.

Defining the general options

The General Options screen contains parameters for configuring broad characteristics of your customers. The General Options screen displays the features that are enabled on the system.

The General Options screen

The General Options screen exists at both the customer administration level and the system administration level. When you are logged on as customer administrator, you can configure the following parameters specifically for each customer group:

- customer name
- customer number
- available classes of service
- available features
- the attendant DN

The system administrator can configure certain parameters in the General Options screen that affect all customer groups. These include

- the system name
- system number
- ACCESS default customer number
- date format (which appears on reports)
- SEER printing
- SEER printer port name
- reports printer port name

Therefore, SEER printing can only be disabled or enabled for the entire system, not selectively on a customer basis. Furthermore, you can only specify one printer port name (for SEERs and reports) so that all customer groups print to the same printer.

If any of the following features are installed on your system, they must be specifically enabled for each customer group (if required by the customer). This is done in the General Options screen at the customer administration level.

- Voice Menus and Announcements
  (described in the *Voice Menus Application Guide* [NTP 555-7001-325])
- Voice Forms
  (described in the *Voice Forms Application Guide* [NTP 555-7001-326])
- Fax on Demand
  (described in the *Fax on Demand Application Guide* [NTP 555-7001-327])

- Meridian Networking
  (described in the *Networking Services Administration Guide* [NTP 555-7001-335])

To enable a feature, log on as customer administrator and access the General Options screen.

Figure 6-2
The General Options screen

```
ABC Company              General Administration

  General Options

  System Name:                Customer

  System Number:              0

  System Addressing Length:   0

* Access Default Customer Number:    1

  Customer Name:            ABC Company

  Customer Number:          2000

  Customer Type:            [Private] Residential

& Interface Type:           MMUI VMUIF

* Available Features:       Multi-Customer
                            Multiple Administration Terminals
                            SMDI
                            Meridian ACCESS
                            AdminPlus
                            Voice Messaging
                            AMIS
                            Dual Language Prompting
                            Outcalling
                            Voice Menus & Announcements [Disabled]  Enabled
                            Voice Forms                 [Disabled]  Enabled
                            Fax On Demand               [Disabled]  Enabled
                            Meridian Mail Networking    [Disabled]  Enabled

  Class of Service Selection:   1__  2__  5__  12_  15_  ___  ___  ___

                                ___  ___  ___  ___  ___  ___  ___

& Attendant DN:                 0_________________

  Date Format for Administration
  and Maintenance Reports:      mm/dd/yy yy/mm/dd dd/mm/yy

  SEER Printing:                Disabled  Enabled

  Valid Printer port names can be viewed from Dataport
  Configuration in the Hardware Administration menu.

  SEER Printer Port Name:                (Blank implies console port)

  Reports Printer Port Name:             (Blank implies console port)

 Select a softkey >

   Save       Cancel
```

* These fields are displayed only if the necessary features are installed.
& This field is read-only and displayed only if VMUIF is installed on the system.

The following fields are displayed:

- ***System Name*** This is the name by which the MSM is identified to the switch. This name is printed on all reports and lists in Meridian Mail MSM. This field is read-only and displays the name supplied during installation or entered by the system administrator.
- ***System Number*** Not applicable
- ***System Addressing Length*** (This field is read-only.) The standard in North America is 10 (nnn-xxx-yyyy, where nnn is the area code, xxx is the NXX, and yyyy is the subscriber number). This field accepts values in the range 0-18. The default is 0 (which means that address expansion is disabled).

  If this field is set to a non-zero value and local addressing lengths are fixed, address expansion is enabled. Address expansion allows users to dial the local addressing length they are used to (and that are shorter than the full 10-digit system addressing length) when composing messages, logging in, or using express messaging. When a DN that is shorter than the system addressing length is entered by a user via the telset, it is expanded out to the full 10-digit DN.

  For example, if address expansion is enabled with a local addressing length set to 4, a user who wants to compose a message to local DN 2335 need only enter a 4-digit DN during message addressing. The DN is expanded out to the full 10-digit DN (such as 416-599-2335). If, however, this field is set to 0, the user has to enter the 10-digit DN when composing messages.

  If you enter a value other than zero in this field, then all of the local voice user mailbox numbers on the system will have to equal system addressing length, and you also have to define values for the following fields:

  — ***Local Addressing Length*** This is the length of the DNs in a particular customer group. It is defined in the Voice Messaging Options screen.

  — ***Expansion Digits*** These are the digits that are used to convert an entered local address to the full system addressing length. These digits must be specified for both Voice Messaging and Express Messaging. They are defined when adding the Voice Messaging DN and Express Messaging DN to the VSDN table. (See the section “Adding DN information” in the “Voice Administration” chapter.)

  These digits are prefixed when a user enters an address that is shorter than the system addressing length to convert a local address to the full system addressing length.

- ***ACCESS Default Customer Number*** This field is displayed only if Meridian ACCESS is enabled. This is a read-only field. It is configured at the system administration level. Each ACCESS application that is created should specify the customer number to which it applies. If there is no customer number specified in the application, the number entered in this field is used by default. This field can be up to four digits long.
- ***Customer Name*** This is the name of the current customer group. If the name is changed and saved, the customer name displayed on the top-left corner of MSM administration screens will change to reflect the new name. This field holds a name up to 30 alphanumeric characters in length. This name will show up on reports and lists printed by the customer administrator.
- ***Customer Number*** This is the number of the current customer group. This is a read-only field. The number is configured when the customer is added from the Customer Administration screen.
- ***Customer Type*** This field reflects the choice that was made when the customer group was added. The following are the two customer types:
  - ***Private*** This customer type is intended for centrex customer groups.
  - ***Residential*** This customer type is intended for residential and small business customer groups.

  Note: Once users are added to the customer group, this field becomes read-only and can no longer be modified.

- ***Interface Type*** This is a read-only field. MMUI is compatible with full-featured voice messaging and is displayed in bold if MMUI is selected as the interface type in the Add Customer screen. If MMUI is not selected, VMUIF is displayed in bold.

  Note: Classes of Service that are assigned to the customer group must have the same voice messaging interface type.

- ***Available Features*** This list displays (1) system-wide features and (2) customer-specific features. The first part of the list indicates system-wide features that are available for all customers. For three of these features (AMIS, Dual Language Prompting, and Outcalling), their availability to users depends on the Class of Service that the user belongs to. Therefore, even though these features may be enabled on the system, a particular user in this customer group may not have access to them if they are disabled in the Class of Service to which he or she belongs. (See Chapter 10, “Class of Service Administration” for more information about enabling these features.)

The second part of the list is modifiable and indicates features that must be selectively enabled (or disabled) for each customer group. Voice Menus and Announcements, Voice Forms, and Fax On Demand are initially set to “Disabled” and must, therefore, be manually enabled for each customer group requiring a particular feature.

Note: Meridian Networking can only be enabled for one customer group.

The following system features are available to all customer groups. Some of these features are optional and may not be enabled on your system.

— Multi-Customer

Note: Do not try changing a multicustomer system to a single customer system after you have added users.

— Multiple Administration Terminals (MATs)

— SMDI (this is the Multi-SMDI feature which provides additional connectivity capability)

— Meridian ACCESS (Unix access)

— AdminPlus

— Voice Messaging

— Fax on Demand

This enables a number of fax-related services: Fax Information Service, Fax Item Maintenance Service, Fax Call Back Delivery, and Fax Same Call Delivery.

The following are system features, and, if enabled, are available to all customer groups. These features can either be enabled or disabled in the class of service definitions. For example, if AMIS is disabled in the COS to which a user belongs, that user will not be able to receive or compose AMIS messages.

— AMIS

— Dual Language Prompting (MMUI customer groups only)

Note: To see the languages installed on your system, see the Voice Messaging Options screen (described in the “Voice Administration” chapter).

— Outcalling

If any of the following features are installed on your system, they must be enabled on a per customer basis:

— Voice Menus & Announcements

— Voice Forms

— Meridian Networking

This feature can only be enabled for one customer group.

Note: If this feature is currently enabled and remote voice users have been added to the system, this feature cannot be disabled until all remote voice users are deleted.

- ***Class of Service Selection*** Assign up to 15 (from the 127) system COSs to the customer group. When adding users, you will be able to assign them to one of the COSs you specify here.

  Note: Meridian Mail MSM classes of service are not the same as classes of service on the PBX/switch. Classes of service in Meridian Mail MSM, Release 9.0 replace user models which were used in previous releases.

- ***Attendant DN*** (MMUI only) This field indicates the extension number to which a caller is transferred when a user-customized revert to the operator is unsuccessful or undefined. (The custom revert is defined in the Add or Modify Local Voice User screen. This is described in the "User Administration" chapter.) The number can be up to 30 digits and may begin with the digit 0. This field may be left blank. The default is 0.

The following fields are read-only. They are configured at the system level by the system administrator.

- ***Date Format for Administration and Maintenance Reports*** The format selected is used on reports generated by the MMI, including lists of users, operational measurement reports, and SEERs. It also specifies the format used for entering dates. The default is mm/dd/yy. Other possibilities are yy/mm/dd and dd/mm/yy.

- ***SEER Printing*** When this field is "Enabled," System Error and Event Reports (SEERs) are printed as events or errors occur. When this field is "Enabled" and no printer is attached, SEERs are printed on the screen as they occur. More detail is given when SEERs are printed than when they are displayed on screen. The default is "Enabled."

  Even when the system is working well and few error reports are generated, many event reports are produced. This means that the SEER buffer fills up relatively quickly. Once full, the contents are automatically deleted. It is therefore recommended that you print your SEERs on a regular basis. This also helps you troubleshoot problems as you can look back through system events to monitor the history of a problem. If you are going to view SEERs on screen only, do so on a daily basis as critical information can be lost within a few days.

- ***SEER Printer Port Name*** This is the printer port to which the dedicated SEER printer is connected. This requires a data port on the Multi-Server Processor (MSP) node which must be defined as a printer port in the hardware database. This field holds up to 12 alphanumeric characters. If this field is left blank, reports will print to the console printer port.
- ***Reports Printer Port Name*** This field indicates the printer port to which the dedicated printer for Operational Measurement reports and general printing from the System Administration menus is connected (if installed). This requires a data port on the MSP node which must be defined as a printer port in the hardware database. If this field is left blank, reports will print to the console printer port.

Procedure 6-2
Modifying General Options
Starting point: General Administration menu

1 Select General Options.

The General Options screen appears (Figure 6-2) with the cursor positioned on the Customer Name field.

2 Use the cursor keys to move the cursor to the field you wish to modify, and make the required changes.

3 Choose step 3a to save the changes or 3b to cancel.

a. Press [Save].

Changes are saved and the General Administration menu is displayed.

b. Press [Cancel].

Changes are saved and you are returned to the General Administration menu.

Changing the customer administrator password

When the system is first installed you are given a default customer administrator password (**custpwd**). When you log on for the first time you are prompted for a new password. For security purposes, you should continue to change it regularly.

Passwords are not case-sensitive; any capitalization used in defining the password need not be used when entering the password. The maximum length is 16 characters. However, it is recommended that your administration password be at least 7 characters for added security.

Procedure 6-3
Changing the customer administrator password

Starting point: General Administration Menu

> ***Note:*** The passwords are not displayed on the screen as you enter them.

1 Select Change Customer Administrator Password.

You are prompted to enter the existing administrator password.

2 Enter the existing password.

You are prompted to enter the new password.

3 Enter the new password.

The customer administrator password is alphanumeric (can contain both letters and numbers), and must be between 1 and 16 characters in length.

You are prompted to enter the new password again for verification purposes.

4 Enter the new password again.

The new password is recorded and you are returned to the General Administration screen.

Chapter 7: Voice Administration

Voice administration comprises all facilities related to processing voice information. These facilities offer a range of functions from the simple playback of a recorded announcement to the more sophisticated automated attendant service. This chapter discusses

- the types of voice services that are available
- an introduction to Voice Administration
- the Voice Administration menu
- how to use Voice Messaging Options
- how to use Voice Security Options
- how to use Voice Services Administration
- a description of Outcalling Administration

  For more information about the Outcalling Administration functions that can be accessed from the administration menus, refer to the *Outcalling Application Guide for Multi-Customer Systems* (NTP 555-7001-323).
- a description of Voice Form Definitions

  For more information about the Voice Forms Administration functions that can be accessed from the administration menus, refer to the *Voice Forms Application Guide* (NTP 555-7001-326).

Types of voice services

The following are the different types of voice services that you can make available to your users:

- Voice Messaging
- Outcalling
- Voice Menus and related services
- Voice Forms
- Fax on Demand
- AMIS Networking
- Meridian Networking

- Meridian ACCESS
- AdminPlus

Some of these features are optional and may not be enabled on your system (such as voice forms, AMIS Networking, Meridian Networking, Meridian ACCESS, and Fax on Demand).

Voice messaging services

There are two types of voice messaging services:

- Voice Messaging
- Express Messaging

Voice Messaging

This service provides call handling and message storage capabilities, thus allowing a user's mailbox to take calls when the user is not available or is currently on the phone. If a caller rings a user's phone, the caller is connected to the user's mailbox. The caller hears a greeting (which may or may not be recorded in the user's voice) and is prompted to leave a message after the tone. This is the call answering functionality of the Voice Messaging service.

In addition, Voice Messaging also provides facilities that permit users to compose and send voice messages. For example, a user can compose a message and then send it to a number of people. Also, a caller can record a message and then request that it be sent at a later date.

MMUI provides all users with compose and send capability.

With VMUIF, the compose/send capability can be turned on or off by setting the *Compose Capability* field in the Class of Service to "No" (the default) or "Yes." If the *Compose Capability* field in the COS is set to "No," the users belonging to the COS will only have call handling and message storing capabilities. They will not be able to compose and send messages.

Furthermore, for VMUIF classes of service, Simplified Call Answering can be enabled for users who do not have touch-tone phones. This is done by setting the *Dial Pulse Support* field to "Yes." This simplified interface does not require any keypad commands, unlike the standard VMUIF interface or the MMUI interface.

Express Messaging

Note: This service is available only to MMUI customer groups.

Express Messaging allows users to place a message directly in another user's mailbox without first ringing the destination phone. Users first dial the Express Messaging directory number to indicate they want to use this service. They are then prompted for the mailbox. A personal verification (if recorded) is played to confirm they have reached the correct user, and they are prompted to leave a message.

Note: Users can only use Express Messaging to deposit a message into another local voice user's mailbox. If networking is enabled, Express Messaging cannot be used to send a message to a user at a remote site even if that user is defined on the system as a remote voice user.

Outcalling (Remote Notification and Delivery to Non-Users)

Remote Notification allows users to be informed of the arrival of new messages through a remote phone or pager. Delivery to Non-Users allows users to compose and send messages to people outside of the MSM system. For more information about Outcalling, refer to the *Outcalling Application Guide* (NTP 555-7001-323).

Voice Menus and related services

Voice menus are custom call answering applications created by the administrator. Using Voice Menus, you can create single-layered or multi-layered menus that present callers with a series of choices about the actions they can perform. A caller selects an action by pressing the key (on the telephone keypad) that corresponds to the action.

They allow callers to

- listen to recorded information (announcements)
- leave messages for specific users
- place calls (thru-dialers)
- activate voice services based on the time-of-day controllers

  They can route callers to particular services based on the time of day (business hours or off-hours), and can handle calls that are received during holidays by passing callers to the appropriate service (time-of-day controllers).
- allow the prompts used in your voice menus to be modified from a telephone (Voice Prompt Maintenance)

- allow voice services to be enabled or disabled from a DTMF telephone set (Remote Activation)

For more information about voice menus, refer to the *Voice Menus Application Guide* (NTP 555-7001-325).

Announcements

This service allows you to record messages that can be played back within a voice menu, or as a stand-alone service that is directly dialable.

Thru-Dialers

This service accesses predefined DNs (only if name dialing) or user-prompted DNs that can be used within a voice menu service, or as a separate service with a directory number. Thru-dialers can be created to provide a variety of dialing options to users. Thru-dialers can be set up to allow Name Dialing, and can have restrictions barring users from dialing unauthorized numbers (such as long distance access codes).

Time-of-Day Controllers

This service allows you to control the activation of voice services based on the date and time at which a call is received. This allows you to control the availability of voice services during off-hours and holidays.

Voice Prompt Maintenance

This service allows you or your delegates to modify the various prompts and greetings available in your voice menus and announcements using a telephone. See Chapter 4, “Making recordings.”

Remote Activation

This service allows you to enable or disable voice services while you are off-site through a standard DTMF telephone set.

For more information, see “Voice services administration” later in this chapter. To determine how many voice services can be created, see the “About Meridian Mail and the Message Services Module (MSM)” chapter in the *System Administration Guide*.

Using voice menus with fax items

Fax item definitions can be added to voice menus to allow callers to select fax services. Voice menus that only use fax items are referred to as fax menus.

However, depending on what type of fax items you add to your voice menus, you will require full-service voice or full-service multimedia ports. To decide, take the following into consideration:

- If the session profile that governs your voice menus requires that the user will have to enter a fax number only (which is call back fax delivery), then full service voice ports may be used.
- If the session profile that governs your Voice Menus requires that same call fax delivery be used, then full service multimedia ports are required.

Voice Forms

There are two things you do with voice forms:

- Administer them.
- Transcribe the information they collect.

Voice Forms administration

Administration involves the creation of applications that collect voice information from callers. An application consists of a series of questions, played in sequential order, to which callers give voice responses. It is as if callers are filling in a form over the phone.

Voice Forms transcription

Transcription refers to the process of retrieving the information collected by a voice form application. Once retrieved, the data can be processed in a number of ways depending on how the information will be used and the goal you intend to achieve by collecting the information. See the *Voice Forms Transcriber User Guide*.

Fax on Demand

The Fax on Demand feature allows you to build simple “fax-on-demand” applications. These applications allow callers to dial a specified telephone number using a faxphone to connect to an application through which they can retrieve specific fax items.

Fax items are created and maintained by the administrator. Although similar in concept to announcements, fax items are distinct and separate from voice menus and announcements. However, the fax information service can be included within a voice menu so that callers can dial into a voice menu in order to retrieve fax items rather than calling the fax service directly. Fax items that are included in a menu are also referred to as fax menus.

The Fax on Demand feature includes the Fax Information Service and the Fax Item Maintenance Service.

For more information about Fax on Demand services, refer to the *Fax on Demand Application Guide* (NTP 555-7001-327).

Fax information service (FI)

The fax information service (FI) is the service by which a caller accesses fax items stored in Meridian Mail. A fax item can be set up to be directly dialed, or to be accessed indirectly through a voice menu.

If the service is configured to support either same call or caller choice delivery, then the service must be serviced by full service multimedia ports. If the fax delivery mode is callback only, then the service can terminate on full service voice ports.

Fax item maintenance (FIM)

The fax item maintenance service (FIM) is used to maintain the content of fax items via a fax phone from a remote location. When fax content is changed, the new fax content can be checked by having a verification fax sent immediately to the administrator or to the owner/sponsor of the information.

The fax item maintenance service requires full service multimedia ports.

Networking services

AMIS Networking

This service allows users to send and receive messages to or from users of other remote voice messaging systems that also use the AMIS protocol (which may include non-MSM systems). Users can also reply to the originator of an AMIS message. Predefined passwords or site information are not required in order to send, receive, or reply to messages. This chapter describes the parameters that you have to configure in Voice Administration for the AMIS Networking feature. For more information about AMIS Networking, refer to the “AMIS Networking” chapter in the *Networking Services Administration Guide* (NTP 555-7001-335).

Meridian Networking

This is a proprietary networking service that allows one customer group to participate in a network that allows users to send messages to users at remote Meridian Mail sites. Meridian Networking provides enhanced capabilities above and beyond AMIS Networking. See the “AMIS Networking” chapter in the *Networking Services Administration Guide* (NTP 555-7001-335) for more information about AMIS Networking.

Note: This feature cannot be enabled for VMUIF customer groups.

Meridian ACCESS

Meridian ACCESS is an optional software program. It uses a Unix interface to provide a development tool for creating specialized voice service applications such as banking-by-phone and order entry-by-phone where the system places orders for callers based on the caller input on a tone-generating telephone. ACCESS applications provide users with access to computer systems without the need for complicated terminals or a human intermediary. ACCESS applications can make use of the full range of voice and telephony functions that a digital voice processing system and a telephone switching system can offer.

The only extra hardware that you need is a UNIX workstation running a Meridian ACCESS application. No special voice or telephone interface cards are needed as the PBX/switch and Meridian Mail together provide all of the necessary resources. ACCESS can be used to create applications for incoming or outgoing calls or for administrative purposes.

Meridian ACCESS allows customers to provide specialized services combining the convenience of a telephone with the power of a computer. Often these services are Interactive Voice Response (IVR) applications which enable a person to retrieve information or place an order over the telephone simply by pressing the telephone keys.

Meridian ACCESS applications can be developed to meet a wide variety of requirements. An application can receive or place telephone calls, play prompts, receive “input” in the form of digitone keypresses (which can be interpreted as commands or data), transfer calls, record messages, and use Meridian Mail services. All of these functions can be built into a voice service that is tailored to meet special requirements:

- Voice Security Options
- Voice Services Administration
- Outcalling Administration

The following NTPs document Meridian ACCESS:

- *Meridian ACCESS Configuration Guide* (NTP 555-7001-315)
- *Meridian ACCESS Developer’s Guide* (NTP 555-7001-316)
- *Meridian ACCESS API Reference Manual* (NTP 555-7001-317)
- *Meridian ACCESS Voice Prompt Editor User Guide* (NTP 555-7001-318)

An introduction to Voice Administration

This section introduces the following voice services administration topics:

- Voice Messaging Options
- Voice Form Definitions

Voice Messaging Options

Voice Messaging Options determine the general characteristics of the Voice Messaging service for each customer group.

For MMUI customer groups, you will configure the broadcast mailbox number, the maximum delay for timed delivery, the name dialing prefix, and the maximum read message retention. The custom call answering greeting is also recorded in this screen (once for each language that is installed on the system).

For VMUIF customer groups, you will configure: the lockout revert DN and the maximum read message retention. From this screen, you will also record any introductory tutorials that describe the call answering service to new subscribers, and the login greeting.

Voice Security Options

Voice Security Options parameters allow you to control the level of security provided to users. For example, you can set the maximum number of invalid logon attempts that are allowed before a user's mailbox is disabled as well as several parameters related to user passwords. At the customer administration level, voice security options allow you to set other parameters to control the level of security of your users' mailboxes.

Voice Services Administration

Voice Services Administration allows you to

- add service DNs to the system (and maintain existing DN information)
- create a Voice Services Profile
- create and maintain voice services such as announcements, thru-dialers, voice menus, and time-of-day controllers
- create and maintain fax services such as fax item definitions and fax menus

  Fax item definitions can be directly associated with a DN in the VSDN table to provide the ability to fax a single item of information to callers. Fax item definitions can alternatively be associated with a voice menu, allowing users to select a fax item of information. Fax menus allow a user to select from a series of fax item definitions.

These services offer a range of functions, from the simple playback of a recorded announcement to the more sophisticated voice and fax menus which allow callers to make choices by pressing keys on their telephone keypads, and automated attendants that take calls during off-hours or holidays.

Note: Voice menus and related services are documented in the *Voice Menus Application Guide* (NTP 555-7001-325). Fax item definitions and fax menus are documented in the *Fax on Demand Application Guide* (NTP 555-7001-327).

Outcalling Administration

Outcalling Administration allows you to specify outcalling parameters that affect the Remote Notification and Delivery to Non-User features. Outcalling features are documented in the *Outcalling Application Guide* (NTP 555-7001-323).

Voice Form Definitions

Voice Form Definitions allow you to develop custom applications that ask specific questions of callers and collect their voice responses. These applications can be thought of as the electronic equivalent of the traditional paper form or questionnaire.

Note: Voice Forms are documented in the *Voice Forms Application Guide* (NTP 555-7001-326).

The Voice Administration menu

The Voice Administration menu (Figure 7-1) is displayed by selecting Voice Administration from the Customer Administration Menu.

CAUTION
Risk of data loss
You should not leave the administrative console in any Voice Administration menu overnight or important system audits may fail due to a lack of available memory.

Figure 7-1

The Voice Administration Menu

```
ABC Company                  Voice Administration



        1  Voice Messaging Options
        2  Voice Security Options
        3  Voice Services Administration
      * 4  Outcalling Administration
     ** 5  Voice Form Definitions








Select an item >

   Exit
```

* This item is displayed only if Outcalling is enabled. Outcalling is documented in the Outcalling Application Guide.
** This item is displayed only if Voice Forms is enabled. Voice Forms are documented in the Voice Forms Application Guide.

Procedure 7-1

Selecting items from the Voice Administration Menu

Starting point: The Customer Administration Menu

1 Select Voice Administration.

The Voice Administration menu appears (Figure 7-1).

2 Select an item by entering its number and pressing <Return>.

The menu corresponding to your selection appears. See the following sections and user guides for details:

<1> "Voice Messaging Options" section

<2> "Voice Security Options" section

<3> "Voice Services Administration" section

<4> The Outcalling Application Guide

<5> The Voice Forms Application Guide

3 Press [Exit] to return to the Customer Administration Menu.

Voice Messaging Options

The Voice Messaging Options screen allows you to set Voice Messaging parameters for each customer group. This includes setting the broadcast mailbox number, the maximum allowed delay for time delivery, the name dialing prefix, and the maximum read message retention. The custom call answering greeting is also recorded in this screen. For multilingual systems, you can record a custom call answering greeting in all of the languages that are installed on your system. For VMUIF customer groups, this means recording various greetings (tutorials and the login greeting), and setting the personal distribution list prefix, the lockout revert DN, and the maximum read message retention.

Setting up address expansion

Address expansion has been provided to make it more convenient for users to enter mailbox numbers when logging in, composing messages, or using Express Messaging. When address expansion is enabled, users will be allowed to enter the shorter local addressing length of the mailbox number rather than the full system addressing length.

For example, the system addressing length is often 10 digits, whereas the local addressing length in a private customer group is 4 digits (or 7 digits in a residential customer group). If address expansion is not enabled, users have to enter the full 10-digit mailbox number when addressing voice messages or using Express Messaging. However, when address expansion is enabled, they need only enter the shorter local address length of the mailbox number.

To enable address expansion

1. Make sure the *System Addressing Length* field is set to a value other than zero. This field is located in the General Options screen and is configurable only at the system administration level.
2. Specify up to two Local Addressing Lengths for each customer group. The local addressing lengths indicate the short form of users' mailbox numbers for a customer group. For private customer groups, a typical local addressing length is four (extension XXXX). For residential customer groups, a typical local addressing length is seven (NXX-XXXX). Local addressing lengths are defined in the Voice Messaging Options screen.
3. Specify the expansion digits. These are the digits that are used to convert the short form of a mailbox number to the full mailbox number (with a length equal to the system addressing length). These digits must be specified for both Voice Messaging and Express Messaging. They are defined when adding the Voice Messaging DN and Express Messaging DN to the VSDN table. (See the “Adding DN information” section in the “Voice administration” chapter.)

Example

The system addressing length is 10. Therefore, all users' mailbox numbers must also be 10 digits in length. You have a residential customer group with a local addressing length of seven digits. Numbers are in the format NPA-NXX-XXXX. The NPA is 416 and the NXX is 267. You have a private customer group with a local addressing length of four digits.

1. The system addressing length is 10.
2. The local addressing length for the private customer group is four.
3. The local addressing length for the residential customer group is seven.
4. The expansion digits (for Voice Messaging and Express Messaging) are specified when adding a DN to the VSDN Table in Voice Services Administration. For the private customer group, the expansion digits are 416267. For the residential customer group, they are 416.

When a user in the private customer group composes a message to another user, he or she will only have to enter the 4-digit DN, not the full 10-digit DN. A user in the residential customer group can enter the shorter 7-digit DN.

Address reduction is the complement of address expansion. Reduction is used when addresses are played back to the mailbox owner. The address is reduced to a local addressing length based on the user's mailbox number.

For example, the system addressing length is 10 and the local addressing length is seven. The owner of mailbox number 416-555-1009 plays a message that was received from address 416-556-2090. In the header, the address is played as *"... from phone number 556-2090."* If the area code of the calling party is different from the user's area code, it is included in the header.

Setting up Meridian Mail to originate calls

The following two fields, *Dialing Prefix for Outgoing Calls* and *Customer DN Length*, are necessary when you are using Meridian Mail in one of the following configurations:

- Meridian Mail is connected to a single switch with each Meridian Mail customer group corresponding to a distinct switch customer group.

  For more information about using these fields to set up this kind of configuration, refer to "Setting Voice Messaging Options for a single switch configuration" on page 7-13.
- Meridian Mail is connected to several switches with each Meridian Mail customer group connected to a given switch.

For more information about using these fields to set up this kind of configuration, refer to “Setting Voice Messaging Options for a multiple switch configuration” on page 7-15.

Also, for a more detailed description of these fields refer to the descriptions starting on page 7-26.

The *Dialing Prefix for Outgoing Calls* and *Customer DN Length* fields are essential for the proper operation of situations in which Meridian Mail originates a call. These situations include:

- operator revert
- thru-dial
- delivery to non-user
- remote notification
- call sender
- fax on demand
- [Voice] softkey

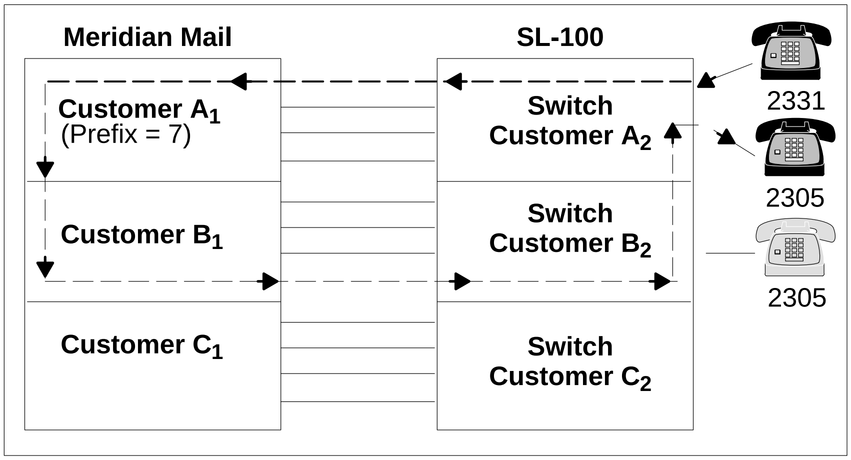
Note: The DN entered as the *Modem DN* (entered in the Modify Data Port [NWModem] screen that is described in the section “NWModem Data Port” in the “Hardware Administration” chapter) and the DN used by the [Voice] softkey (described in the “Making recordings” chapter), are not translated using the values entered in the *Dialing Prefix for Outgoing Calls* and the *Customer DN Length* fields. These DNs must be entered in a format that is dialable from any switch customer group (in a single-switch configuration) or switch (in a multiple-switch configuration).

Setting Voice Messaging Options for a single-switch configuration

When Meridian Mail presents a DN to the switch in a multi-customer setup (several customer groups on the switch, and corresponding customer groups on Meridian Mail with, potentially, Meridian Mail having its own customer group), it communicates with the switch on an arbitrarily picked channel. This outgoing channel may, therefore, be associated with any customer group on the switch whose agents are forwarded to Meridian Mail.

If the DN presented to the switch was specified by a caller belonging to a certain Meridian Mail customer group, the caller’s specification of the DN can be expected to conform to the caller’s dialing habits within their own switch customer group, and may not necessarily match the view of the same DN as seen by the switch customer group that owns the outgoing channel. Figure 7-2 shows an example of a thru-dial call in a single switch scenario.

Figure 7-2
Thru-dial scenario in a single-switch scenario



In Figure 7-2, the caller at extension 2331 requests Meridian Mail to thru-dial to extension 2305 in the same switch customer group (A_2). However, to make the call as shown in this example, Meridian Mail happens to use a channel associated with switch Customer B_2. The call is, therefore, external to switch Customer A_2 and must be prefixed with the digit(s) that all callers external to A_2 would use in order to reach someone in A_2 (which is 7 in this case). This is the prefix that will go into the *Dialing Prefix for Outgoing Calls* field. Meridian Mail, therefore, uses this prefix together with the next field, *Customer DN Length*, as follows:

1 In placing a call, Meridian Mail compares the length of the DN supplied by the caller to the *Customer DN Length* for the user's Meridian Mail customer group.

2 If it is equal to (or shorter than) the *Customer DN Length* (which means that the caller is trying to reach someone in the same switch customer group), Meridian Mail will add the *Dialing Prefix for Outgoing Calls* to the beginning of the DN.

   When a caller is trying to reach someone who is external to their customer group, they will add the dialing prefix when they dial the telephone number, making it unnecessary for Meridian Mail to add the dialing prefix.

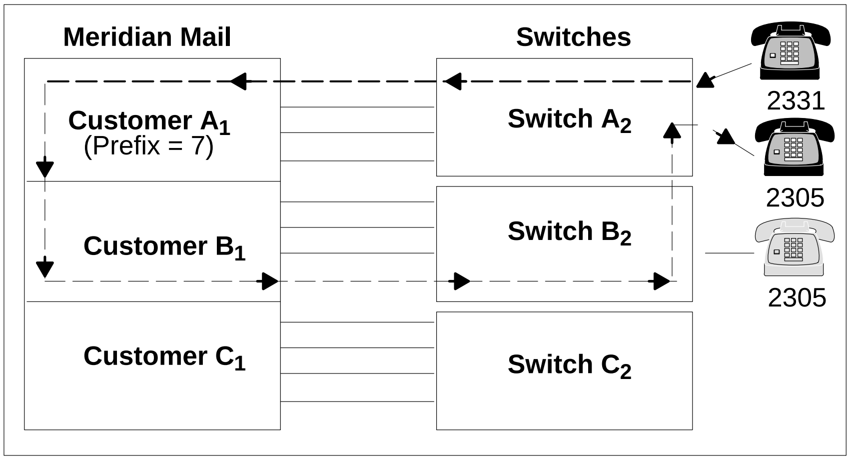
   For example, if a user in Customer A_2 supplies 4 digits to Meridian Mail (for example, 2305) to reach an extension within Customer A_2, Meridian Mail will add the digit 7 to the beginning of the extension and will present 72305 to the PBX/switch.

Setting Voice Messaging Options for a multiple-switch configuration

When Meridian Mail presents a DN to switch in a multiple-switch setup (several switches, and corresponding customer groups on Meridian Mail), it communicates with the other switch on an arbitrarily picked channel. This outgoing channel may, therefore, be associated with any switch in the multiple switch configuration whose agents are forwarded to Meridian Mail.

If the DN presented to the switch was specified by a caller belonging to a certain Meridian Mail customer group, the caller's specification of the DN can be expected to conform to the caller's dialing habits within their own switch, and may not necessarily match the view of the same DN as seen by the switch that owns the outgoing channel. Figure 7-2 shows an example of a thru-dial call in a multiple switch scenario.

Figure 7-3
Thru-dial scenario in a multiple-switch scenario



In Figure 7-2, the caller at extension 2331 requests Meridian Mail to thru-dial to extension 2305 in the same switch (A_2). However, to make the call as shown in this example, Meridian Mail happens to use a channel associated with switch B_2. The call is, therefore, external to switch A_2 and must be prefixed with the digit(s) that all callers external to A_2 would use in order to reach someone in A_2 (which is 7 in this case). This is the prefix that will go into the *Dialing Prefix for Outgoing Calls* field. Meridian Mail, therefore, uses this prefix together with the next field, *Customer DN Length*, as follows:

1 In placing a call, Meridian Mail compares the length of the DN supplied by the caller to the *Customer DN Length* for the user's Meridian Mail customer group.

2 If it is equal to (or shorter than) the *Customer DN Length* (which means that the caller is trying to reach someone on the same switch), Meridian Mail will add the *Dialing Prefix for Outgoing Calls* to the beginning of the DN.

When a caller is trying to reach someone who is external to their switch, they will add the dialing prefix when they dial the telephone number, making it unnecessary for Meridian Mail to add the dialing prefix.

For example, if a user in Customer A_2 supplies 4 digits to Meridian Mail (for example, 2305) to reach an extension within Customer A_2, Meridian Mail will add the digit ‘7’ to the beginning of the extension and will present ‘72305’ to the PBX/switch.

The Voice Messaging Options screen

The screens will display different fields depending on

1 which interface is selected when the system is installed (MMUI or VMUIF)

2 whether or not multiple languages are installed on the system

Figure 7-4 displays the screen for a single-language system with the MMUI interface, and Figure 7-5 displays the screen for a multilingual system with the MMUI interface. Figure 7-6 displays the screen for a single-language system with the VMUIF interface, and Figure 7-7 displays the screen for a multilingual system with the VMUIF interface.

Figure 7-4
The Voice Messaging Options screen for single-language systems (MMUI interface)

```
   ABC Company          Voice Administration


  Voice Messaging Options

  Customized recording for AmericanEnglish

    Call Answering Greeting (Voice):              No

  Maximum Delay for Timed Delivery (days):        31

  Name Dialing and Name Addressing:               Disabled [Enabled]

* Prefix for Name Dialing and Name Addressing:    11

  Broadcast Mailbox Number:                       999

  Broadcast Mailbox Personal Verification (Voice):No

  Billing DN:                                     2365778

  Dialing Prefix for Outgoing calls:              416

  Customer DN Length:                             30

  Local Addressing Lengths:                       0    0

**Default Message Delivery Priority:              Standard [Economy]

  Mailbox Full Warning Threshold (percentage):    85

  Maximum Read Message Retention (days):          7
  ("0" implies that there is no organization
   maximum limit. Read Message Retention will
   be determined from each user's profile.)


  Select a softkey >
    Save      Cancel                                 Voice
```

* This field is displayed only if the Name Dialing and Name Addressing field is set to "Enabled."

** This field is displayed only if Meridian Networking is enabled for the customer group.

Figure 7-5
The Voice Messaging Options screen for multilingual systems (MMUI interface)

```
   ABC Company              Voice Administration


  Voice Messaging Options

  Default Language:                                [AmericanEnglish]
                                                    Canadian_French
                                                    Japanese

* Secondary Default Language:                      [AmericanEnglish]
                                                    Canadian_French
                                                    Japanese

  Default Language Overrides User's
  Preferred Language for Call Answering:           [No] Yes

  Customized recording for AmericanEnglish

    Call Answering Greeting (Voice):               Yes

  Customized recording for CanadianFrench

    Call Answering Greeting (Voice):               No

  Customized recording for Japanese

    Call Answering Greeting (Voice):               No

  Maximum Delay for Timed Delivery (days):          31

  Name Dialing and Name Addressing:                Disabled [Enabled]

**Prefix for Name Dialing and Name Addressing:     11

  Broadcast Mailbox Number:                        2335

  Broadcast Mailbox Personal Verification(Voice):No

  Billing DN:                                      2365778

                                                          MORE BELOW
   Select a softkey >
     Save      Cancel                                     Voice
```

* This field is displayed only if Dual Language Prompting is enabled.

** This field is displayed only if the Name Dialing and Name Addressing field is set to "Enabled."

Figure 7-5 (continued)
The Voice Messaging Options screen for multilingual systems (MMUI interface)

```
ABC Company              Voice Administration                MORE ABOVE

  Dialing Prefix for Outgoing calls:           416

  Customer DN Length:                          30

  Local Addressing Lengths:                    0   0

**Default Message Delivery Priority:           Standard [Economy]

  Mailbox Full Warning Threshold (percentage): 85

  Maximum Read Message Retention (days):       7
  ("0" implies that there is no organization
   maximum limit. Read Message Retention will
   be determined from each user's profile.)

Select a softkey >
   Save      Cancel                              Voice
```

** This field is displayed only if Meridian Networking is enabled.

Figure 7-6
The Voice Messaging Options screen for single-language systems (VMUIF interface)

```
ABC Company                 Voice Administration

Voice Messaging Options

Customized recordings and Recording Selections for AmericanEnglish

  VMUIF Introductory Tutorial (Voice):  No   Type: None [Default] Custom

  VMUIF Introductory Tutorial for
  Dial Pulse (Voice):                   Yes  Type: None [Default] Custom

  Login Greeting (Voice):               No   Type: None [Default] Custom

Lockout Revert DN:                      ______________________________
(Blank implies no revert)

Personal Distribution List Prefix:                14

Broadcast Mailbox Number:                         999

Broadcast Mailbox Personal Verification (Voice):  No

Billing DN:                                       2346669

Dialing prefix for Outgoing calls:                _____________________________

Customer DN Length:                               30

Local Addressing Lengths:                         0   0

Maximum Read Message Retention (days):            7
("0" implies that there is no organization
maximum limit. Read Message Retention will
be determined from each user's profile.)

Select a softkey >

  Save         Cancel                                        Voice
```

Figure 7-7
Voice Messaging Options screen for multilingual systems (VMUIF interface)

```
    ABC Company              Voice Administration

Voice Messaging Options

Default Language:                         [AmericanEnglish] Swedish

Default Language Overrides User's
Preferred Language for Call Answering:    [No] Yes

Customized recordings and Recording Selections for AmericanEnglish

  VMUIF Introductory Tutorial (Voice):    No   Type: None  [Default] Custom

  VMUIF Introductory Tutorial for
  Dial Pulse (Voice):                     No   Type: None  [Default] Custom

  Login Greeting (Voice):                 Yes  Type: None  [Default] Custom

Customized recordings and Recording Selections for Swedish

  VMUIF Introductory Tutorial (Voice):    No   Type: None  [Default] Custom

  VMUIF Introductory Tutorial for
  Dial Pulse (Voice):                     Yes  Type: None  [Default] Custom

  Login Greeting (Voice):                 No   Type: None  [Default] Custom

Lockout Revert DN:                        _____________________________
(Blank implies no revert)

Personal Distribution List Prefix:        14

Broadcast Mailbox Number:                 999__________________

Broadcast Mailbox Personal Verification (Voice):  No

Billing DN:                               2355908______________________

Dialing Prefix for Outgoing Calls:        149__________________________

Customer DN Length:                       30

Local Addressing Lengths:                 0_  0_

Maximum Read Message Retention (days):    7_
("0" implies that there is no organization
 maximum limit. Read Message Retention will
 be determined from each user's profile.)

   Select a softkey >
     Save      Cancel                            Voice
```

The following fields appear in the Voice Messaging Options screen. Those fields that are exclusive to the MMUI or VMUIF interface are indicated. The first five fields are displayed only on multilingual systems.

- ***Default Language*** This field lists all of the languages that are installed on the system. The primary default language (the first language installed) is highlighted. The selection made here determines the language in which prompts are played to callers during call–answering sessions.
- ***Secondary Default Language*** (MMUI only) This field is available only if the Dual Language Prompting feature is installed. When this feature is installed, introductory Meridian Mail prompts are played in two languages. A prompt is first played in the primary default language (as specified in the previous field) followed by the secondary default language as specified in this field. Dual language prompting is designed for bilingual environments and is only used for initial prompting when the caller's language preference is not known.

  Dual language prompting only applies to call–answering and express messaging sessions.
- ***Default Language Overrides User's Preferred Language for Call–Answering*** When two or more languages are installed, users can specify a "preferred" language which is different from the default language. (The user's preferred language is defined in the Add or View/Modify Local Voice User screen.) When this field is set to "No," callers will hear Meridian Mail prompts in the preferred language of the user they have called. However, if this field is set to "Yes," the language specified in the *Default Language* field overrides the user's preference. This may be desirable if the customer wants to present a common language to all callers regardless of the preferred language of the called party.

  When set to "Yes," only those prompts that are played to callers during call–answering sessions are affected. Subscribers will still hear prompts in their preferred language while they are logged on to Meridian Mail. For example, if the default language is AmericanEnglish, and a user's preferred language is Mandarin, the user will still hear Meridian Mail prompts in Mandarin. However, callers will hear prompts in English.
- ***Customized Recording for <language>*** (MMUI only) On multilingual systems, this field is displayed once for each language that is installed.

— ***Call Answering Greeting (Voice)*** (MMUI only) This field indicates whether or not a custom call–answering greeting has been recorded. The call–answering greeting is played to external callers when they are connected to a user's mailbox through call–answering. This greeting is played before any personal greetings and typically contains the spoken name of the customer. To make a custom greeting, use the [Voice] softkey at the bottom of this screen. If you do not record your own greeting, no call–answering greeting is played. (There is no default greeting).

- ***Customized recordings and Recording Selections for <language>*** (VMUIF only) These fields are displayed once for each language that is installed. The standard is American English.
- ***VMUIF Introductory Tutorial (Voice)*** (VMUIF only) This field indicates whether or not a voice recording has been made for the introductory tutorial. The introductory tutorial is played to subscribers when they log on for the first time in order to familiarize them with the service. If a recording is made, the following field, *VMUIF Introductory Tutorial Type*, will allow you to select "Custom."
- ***VMUIF Introductory Tutorial Type*** (VMUIF only) This field identifies the type of introductory tutorial to be played the first time a subscriber logs into a new mailbox. The "Custom" option is available if there is a voice recording of the introductory tutorial. If you do not record a custom tutorial, you can select the default recording. You also have the option of not playing an introductory tutorial at all.
- ***VMUIF Introductory Tutorial for Dial Pulse (Voice)*** (VMUIF only) This field indicates whether or not a voice recording has been made for the tutorial for dial pulse users. If a recording is made, the following field, *VMUIF Introductory Tutorial for Dial Pulse Type*, will allow you to select "Custom."
- ***VMUIF Introductory Tutorial for Dial Pulse Type*** (VMUIF only) This field identifies the type of introductory tutorial to be played the first time a subscriber logs into a new mailbox from a dial pulse (rotary) telephone. The "Custom" option is available if you have recorded your own custom tutorial. If you have not recorded a custom tutorial, you can choose to play the default tutorial or no tutorial at all.
- ***Login Greeting (Voice)*** (VMUIF only) This field indicates whether or not a voice recording has been made for the Login Greeting. This is the greeting that is played when subscribers log on to Meridian Mail.
- ***Login Greeting Type*** (VMUIF only) This field determines which greeting is used, if there is one. If a custom login greeting has been recorded (see the previous field), you may select "Custom." If one has not been recorded, you can use the default greeting or select "None."

- ***Maximum Delay for Timed Delivery (days)*** (MMUI only) This field displays the maximum number of days that a message can be delayed before being delivered. For example, a user may compose a message that he or she does not want delivered until one week from now. The user can tag the message for timed delivery and specify when the message is to be delivered as long as it falls within the limit set by this field.

  The valid range is from 0 to 365 days. The default is 31. If this field is set to 0, timed delivery of messages will not be available to users.

- ***Name Dialing and Name Addressing*** (MMUI only) This field allows you to disable the name dialing and name addressing features. These features should be disabled in those countries where the telephone keypads do not map to an alphabetical sequence recognizable to Meridian Mail. This field defaults to “Enabled.”

  Note: If you disable name dialing and name addressing and then reenable them, the prefix for name dialing and name addressing is changed from the current value to null. Be sure to enter the correct prefix after reenabling these features.

- ***Prefix for Name Dialing and Name Addressing*** (MMUI only) This field is displayed only if the *Name Dialing and Name Addressing* field is set to “Enabled.” This field defines the prefix that users must dial in order to use name dialing or name addressing. The valid range is from 1 to 99. The default is 11.

  Note: Check that this number does not conflict with any of the following:

  — mailbox numbers (including the broadcast mailbox number)

  — telephone extensions

  — distribution list numbers

  — the DNU prefix

  — location prefixes

  — the AMIS compose prefix

  These numbers conflict if their first two digits match the name dialing prefix.

  Note: If name dialing and name addressing were disabled and then reenabled, this field is reset to null.

- ***Lockout Revert DN*** (VMUIF only) This field specifies the DN to which subscribers are reverted when they try logging into a disabled mailbox (if, for example, a subscriber has made too many invalid logon attempts). This should be the DN of an administrator or operator who has been designated to deal with subscriber problems. The administrator/operator can reenable a disabled mailbox by setting the *Logon Status* field in the View/Modify Local Voice User screen to "Enabled." If the subscriber has forgotten his or her password, you may have to change it for him or her using the [Change Password] softkey in the View/Modify Local Voice User screen. This field is blank by default, indicating that there is no revert.
- ***Personal Distribution List Prefix*** (VMUIF only) This prefix is used by subscribers to indicate personal distribution list addressing. This prefix informs the MSM that the number that follows is a distribution list number. For example, if the prefix is 22 and the subscriber wants to address a message to his or her personal distribution list number 3, the subscriber would enter 22 3 when addressing the message. You may enter a value from 1 to 99. The default is null (that is, this field is blank).

  Note: This field cannot conflict with other prefixes defined as the following:

  — mailbox numbers (including the broadcast mailbox number)

  — telephone extensions

  — distribution list numbers

  — the DNU prefix

  — network location prefixes

  — AMIS compose prefixes.

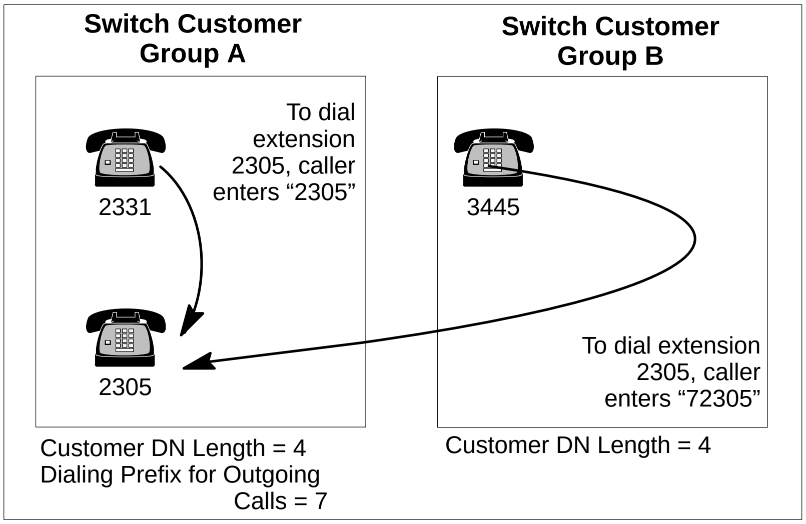
  These numbers conflict if they start with the name dialing prefix.
- ***Broadcast Mailbox Number*** A broadcast message is a voice message that is delivered to all users in the customer group. In order to send a broadcast message, you (or a user) must specify a special mailbox number (the broadcast mailbox number) when composing the broadcast message. (Broadcast capability is enabled in the user's class of service.) The default mailbox number is "999."

  This number can be the same for all customer groups because the customer group to which a broadcast message is sent depends on the customer group to which the mailbox you log on to belongs. For example, to send a broadcast message to the users in customer group 100, log on to a phone with broadcast capability that belongs to this customer group.

If this default number conflicts with the ESN access code (for example, if “9” is used as the ESN access code), change the broadcast mailbox number. If you change the broadcast mailbox number for this reason (or any other reason), ensure that the new number does not conflict with other numbers in the system.

- ***Broadcast Mailbox Personal Verification (Voice)*** This field indicates whether or not a spoken name has been recorded for the broadcast mailbox number. If recorded, this verification is announced when composing a message to the broadcast mailbox. It confirms that the correct number has been entered. The verification is recorded using the [Voice] softkey at the bottom of the Voice Messaging Options screen.
- ***Billing DN*** Whenever an outgoing call is made, it is charged against a DN. Typically, the mailbox number of the user that initiates the outcall is stored and used for billing purposes. However, if for some reason the mailbox number is not known (if, for example, the call is dropped), the Billing DN will be used instead. It is essentially a standby DN for those cases in which the mailbox number is unattainable. This DN can be up to 30 digits in length. This field is optional and can be left blank. The default is “null.”
- ***Dialing prefix for Outgoing calls*** This prefix is a string of digits that callers external to a switch customer group must use before dialing a particular extension number in that group. The length of this prefix should be the difference between the *Customer DN Length* (as defined in the following field) and the number of digits dialed by callers external to the group.

Figure 7-8
Dialing within and between switch customer groups



- ***Customer DN length*** This is the length of DNs in the corresponding switch customer group as dialed by callers within that group. This DN can be up to 30 digits in length. The default is 0.

  For example, a caller dials 4 digits (such as 2305) to reach a phone within his or her customer group. However, callers from other customer groups may need to dial 5 digits to reach the same phone (72305, for example). In this example, the customer DN length is 4.

  In placing a call, Meridian Mail compares the length of the DN supplied by the user to the customer DN length of the user's Meridian Mail customer group. If it is equal to or shorter than the customer DN length, the dialing prefix for outgoing calls is prepended to the DN.

- ***Local Addressing Lengths*** These fields specify the length of the mailbox numbers that must be entered by users in the current customer group. You can enter up to two addressing lengths. However, in most cases, you will only need to define one addressing length.

  This field is applicable only if the *System Addressing Length* field (in the General Options screen at the system administration level) is set to a value greater than 0. If the System Addressing Length is greater than 0, this field and the *Expansion Digits* field (in the Add DN Information screen in Voice Services Administration) will have to be configured.

  By defining the local addressing length and expansion digits, users will not have to enter the full system addressing length of the mailbox number. If a user enters a mailbox number that is the same length as one of the local addressing lengths, then the number will be expanded to the system addressing length, thus allowing users to enter the shorter local addressing length of the mailbox number that they are used to dialing.

  These values must be less than the system addressing length or 0. Both fields default to 0.

Example

You have a system with 10-digit DNs on the PBX/switch (416-267-9221, for example). You have a centrex customer group with local DNs that are 7 digits in length (267-9221 is an example of a local DN in this customer group).

1. The system addressing length is 10.
2. The local addressing length for the Centrex customer group is 7.
3. The expansion digits (for Voice Messaging and Express Messaging) are specified when adding a DN to the VSDN Table in Voice Services Administration. The expansion digits, for the centrex customer group, are 416.

When a user in the centrex customer group composes a message to another user, he will only have to enter the 7-digit DN, not the full 10-digit DN.

- ***Default Message Delivery Priority*** (MMUI only) This field is displayed only when Meridian Networking is enabled. Your choice determines when messages are delivered across a network. When “Standard” is selected, messages are retained for a certain period of time before they are sent to remote sites. If ”Economy” is specified, messages are sent at a specific time each day (usually off hours). The *Standard Holding Time* and *Economy Initiation Time* are set in the Network Scheduling Parameters screen accessible through the Network Administration Menu. The default is “Standard.” For more information about using the Network Scheduling Parameters screen, refer to the *Network Services Administration Guide* (NTP 555-7001-335).
- ***Mailbox Full Warning Threshold (percentage)*** (MMUI only) This field allows you to determine how full a user’s mailbox must become before the system plays the mailbox full prompt when the user logs on. A value of 0 means that the user will never hear the mailbox full-warning prompt. The valid range is 0 to 100 (percent). The default is 85.

  Note: A user may inform you that he or she has received the mailbox full warning, but that the mailbox is definitely not full. For example, the user is certain that there are only two short messages in the mailbox. A prematurely full mailbox is caused by an unexpected system reboot that leaves inconsistencies between the volume server and what is actually in the mailbox. (Also, time-stamped messages may be taking up additional space.) This problem will be fixed automatically during the scheduled nightly audit. However, if an unexpected reboot happens at a busy traffic time, you can log on at the Tools level and select the menu item, “Audit all volumes.” This will update the real mailbox storage information that is stored on disk and prevent prematurely full mailboxes. See the *System Administration Tools Guide* (NTP 557-7001-305) for more information about this tool.

- ***Maximum Read Message Retention (days)*** This field determines the maximum number of days that messages will be kept in the user’s mailbox after being read. When the maximum is reached, read messages are deleted. The valid range is from 0 to 31 days. If this field is set to 0, messages are not deleted by the system and are retained until deleted by the user. The default is 7 days. For Dial Pulse residential users, the default is 3 days.

Note: The read message retention limit can also be configured in the Add or View/Modify Class of Service screen. (See Chapter 10, "Class of Service Administration.") The user's limit is overridden by the limit defined here (if it is a value other than zero).

Procedure 7-2
Modifying Voice Messaging Parameters

Starting point: The Voice Administration menu

1 Select Voice Messaging Options.

The Voice Messaging Options screen appears (Figure 7-4 through 7-7).

2 Move the cursor to the field you wish to modify, and make the required changes.

3 Choose step 3a to save the changes or 3b to cancel.

a. Press [Save]. The changes are saved and you are returned to the Voice Administration menu.

b. Press [Cancel].

Changes are discarded. The Voice Administration menu reappears.

Voice Security Options

The Voice Security Options screen (Figure 7-9) allows you to configure parameters that affect mailbox security for each customer group. The restriction and permission codes displayed in this screen are read-only. They are configured in the Voice Security Options screen at the system administration level.

The password prefix

The password prefix is defined for new mailboxes using the *Password Prefix* field in the Voice Security Options screen. When the prefix is changed, the new prefix only affects mailboxes that were created after the password prefix was changed. The default password that the system assigns to a mailbox at creation time contains the password prefix. However, after a user changes his or her password, he or she does not have to include the password prefix. Mailboxes that were created before a change in the password prefix are not affected. You should communicate these differences to your users.

For more information about using the Voice Security Options screen, refer to the next section, "The Voice Security Options screen."

The Voice Security Options screen

For VMUIF customer groups, the only modifiable fields in the Voice Security Options screen are those used to specify the maximum invalid logon attempts permitted (per session and per mailbox) and the password prefix. For MMUI customer groups, additional fields related to mailbox password security can also be modified. The restriction/permission codes cannot be modified in this screen. (They are modifiable only at the system administration level.)

Figure 7-9
Voice Security Options screen

```
ABC Company                          Voice Administration

  Voice Security Options

  Password Prefix:                                        359

  Maximum Invalid Logon Attempts Permitted per Session:   3

  Maximum Invalid Logon Attempts Permitted per Mailbox:   3

# Maximum Days Permitted Between Password Changes:        60

#*Password Expiry Warning (days):                         5

#*Minimum Number of Password Changes before Repeats:      5

# Minimum Password Length:                                4

# External Logon:                                         Enabled

# Call Answering/Express Messaging Thru_Dial              Unrestricted On_switch [Local]
  Restriction/Permission codes:                           Long_Distance_1 Long_Distance_2


**List Name:           On switch
**Restriction Codes:   90    28    41
**Permission  Codes:   90123 60245 90123

  List Name:           Local
  Restriction Codes:   90    28    41
  Permission  Codes:   90123 60245 90123

  List Name:           Long_Distance_1
  Restriction Codes:   90    28    41
  Permission  Codes:   90123 60245 90123

  List Name:           Long_Distance_2
  Restriction Codes:   90    28    41
  Permission  Codes:   90123 60245 90123

  ____________________________________________________________

   Select a softkey >
   Save    Cancel
```

* These fields are displayed only if Maximum Days Permitted Between Password Changes is greater than 0.

\# These fields are not displayed for systems using VMUIF.

** These fields are read-only.

The following fields are displayed:

- ***Password Prefix*** This prefix is optional. (The field is blank by default meaning no prefix will be assigned to mailbox passwords.) If this prefix is defined, it will be inserted at the beginning of the default mailbox password *when a new mailbox is created*. For example, when a new mailbox is created, the default password is the user's extension (such as 2339). If the prefix is 319, the password would be 3192339.

  Note: The *Password Prefix* is not used for VMUIF users.

  When a user changes his or her password, the password prefix is no longer used. If, for example, the user changes his or her password from the initial default password of 3192339 to 4518, the password would be 4518, not 3194518.

  When you change the password prefix, passwords for existing mailboxes are not affected. When the password prefix is modified, it affects only those mailboxes that are created after the change. The password prefix can be up to four digits in length.

  This prefix should be changed on a regular basis to reduce the risk of security breaches.

  Note: Due to the maximum length of a password, the password prefix plus the user's DN cannot exceed 16 digits.

- ***Maximum Invalid Logon Attempts Permitted per Session*** This field determines the maximum number of times that a user can make an invalid logon attempt within a single session. (This limit also applies if the user tries to log on to a number of different mailboxes.)When this maximum is reached within one session, the session will be terminated. When the user logs on the next time (and a new logon session is initiated), this counter is reset to 0. You may enter a value from 1 to 99. The default is 3.

- ***Maximum Invalid Logon Attempts Permitted per Mailbox*** This field specifies the maximum number of unsuccessful logon attempts allowed for each mailbox. (This is a cumulative number.) When the limit is reached, the mailbox is disabled and the user is not able to log on. The range is from 1 to 99. The default is 9.

  If MMUI is enabled, go to the View/Modify Local Voice User screen, and enable the *Logon Status* field to reenable a mailbox.

  For VMUIF customer groups, a lockout duration is configured in the subscriber's class of service. If a value other than zero is specified, the subscriber's mailbox will automatically be reenabled after the specified time has passed. If zero is specified, the administrator will have to manually reenable the mailbox in the View/Modify Local Voice User screen by setting the *Logon Status* field to "Enabled."

- ***Maximum Days Permitted Between Password Changes*** (MMUI only) This field determines the maximum number of days allowed between password changes. If you do not want users to have to change their passwords, set this field to 0.

  If this field is set to a value other than zero, users who do not change their password in the specified time will not be able to log on to their mailbox. (The current password expires after the exact number of days specified in this field, including partial days.) To reenable a user's mailbox, go to the View/Modify Local Voice User screen for that mailbox and enable the *Logon Status* field. The valid range is from 0 to 90. The default is 0.

  Note: If this field has been set to 0 on an operational system and you then decide to enforce password changes by setting it to a value other than zero, warn users to change their passwords *immediately*. (You should inform them that they will now be forced to change their passwords every x days.) If you change this value from "0" to a value other than zero, user passwords will expire immediately. After the change, when users log in, they will be prompted to change their passwords. If they do not do this (and hang up instead), this will cause a heavy system load and the system will slow down. (The system will also generate a number of 3134 DR SEERs during this update period.) If you are planning on changing this value to a value other than zero, it is recommended that you do so during a slow traffic time.

- ***Password Expiry Warning (Days)*** (MMUI only) This field appears only when the field *Maximum Days Permitted Between Password Changes* is not 0. The value you enter in this field determines the number of days advance notice given to a user before their password expires. The range is from 0 to 60. The default is 5.

- ***Minimum Number of Password Changes before Repeats*** (MMUI only) This field appears only when the field, *Maximum Days Permitted Between Password Changes*, is not 0. This number determines the number of password changes required before the same password can be reused. The range is from 0 to 5. The default is 5.

- ***Minimum Password Length*** (MMUI only) This field determines the minimum number of digits required in passwords that are entered from a telephone keypad. This includes mailbox passwords, the access password used to restrict access to voice services, and the update password used to update voice services from a DTMF phone set. It does not include the administration password that is entered when logging on at the administration terminal. The default and minimum password length is 4.

  Note for VMUIF subscribers: Subscribers can have passwords (from 0 digits—no password—to 16 digits in length). If a subscriber has a password (of at least one digit in length), he or she can log on to the MSM to listen to messages from a remote phone (for example, if the subscriber is sent a remote notification). Without a password, subscribers can only log on from their home phones.

- ***External Logon*** (MMUI only) This is a read-only field in the Voice Security Options screen, and it is enabled by default. When enabled, access to Voice Messaging from external trunks is allowed. If, for security reasons, you need to disable external logon, this can only be done by a field service representative.

> **CAUTION**
> **Risk of losing trunk access**
> Once external logon is disabled, access from external trunks is permanently revoked. External logon cannot be reenabled.

- ***Call Answering/Express Messaging Thru-Dial Restriction/Permission codes*** (MMUI only) Select the restriction/permission set that will apply to Call Answering Thru-Dial and Express Messaging Thru-Dial. The selection made here affects all users in this customer group.(Restriction/permission codes are specified in the Voice Security Options screen at the system administration level.)

  Call Answering and Express Messaging Thru-Dial allows callers who are connected to the MSM during call–answering or express-messaging sessions to place calls by pressing 0 followed by an extension DN or an external phone number. This can become a crucial security hole if restriction codes are not put in place to prevent callers from placing calls that will be charged to the customer.

  You can either choose to leave Call Answering and Express Messaging Thru-Dial unrestricted (this is not recommended), or choose from one of the four options displayed in Figure 7-9. (Note that On_switch, Local, Long distance 1, and Long distance 2 are the default names and may be different on your system.)

- ***List Name, Restriction Codes, Permission Codes*** These fields are read-only. They are configured in the Voice Security Options screen at the system administration level where up to four restriction/permission sets can be created. Once defined, these codes can be applied to the following services in your class of service definitions:

  — Extension Dialing (MMUI only)

  — Custom Revert

  — External Call Sender

— AMIS Networking

— Remote Notification

— Delivery to Non-User

This is done from the Add or View/Modify Class of Service screen. (See Chapter 10, “Class of Service Administration”). When a user dials a number beginning with one of the restricted codes, the call will be rejected. When this occurs, the user hears a message indicating that the number cannot be reached from the service.

Procedure 7-3
Setting Voice Security Parameters

Starting point: The Voice Administration menu

1 Select Voice Security Options.

The Voice Security Options screen appears (Figure 7-9).

2 Move the cursor to the field you wish to modify; make the required changes.

3 Choose step 3a to save the changes or 3b to cancel.

a. Press [Save].

The changes are saved, and you are returned to the Voice Administration menu.

b. Press [Cancel].

Changes are discarded. The Voice Administration menu reappears.

Voice Services Administration

Voice services administration involves the following activities:

- adding DNs to the Voice Services-DN Table (VSDN table) and keeping the VSDN table up-to-date.

  The VSDN table lists all of the services that are available to a customer group and the corresponding DNs for each service. These DNs are the numbers that users/callers dial to access particular services.
- configuring the Voice Services Profile, where you specify the broad operational parameters common to all voice services.
- creating and maintaining voice menus and related services.

  (Note that these voice services are described in the *Voice Menus Application Guide* (NTP 555-7001-325).) These include:

  — announcement definitions

  Announcement definitions are recorded announcements for playback within a voice menu, or as a stand-alone voice service.

  — thru-dial definitions

  Thru-dial definitions define call handling services to act as stand-alone services or to allow users to place calls to permitted numbers from a voice menu.

  — time-of-day control definitions

  Time-of-day control definitions define the activation of voice services according to the time and date at which a call arrives.

  — voice menu definitions

  Voice menu definitions define voice menus as sets of actions to be offered to the user. Each action corresponds to a key on the telephone keypad.
- creating and maintaining fax item definitions

  See the *Fax on Demand Application Guide* (NTP 555-7001-327) for details.

  Note: If two administrators log on to the same VSDN Table (using the MAT feature), or Voice Services Profile, or the same voice service definition (announcement, voice menu, thru-dialer, time-of-day controller), the administrator who first accessed the table or definition has write access. All other administrators can only view the VSDN/definition.

Because Voice Services Administration can also be performed at a Multiple Administration Terminal, it is possible that a number of administrators can be logged on to the same voice service definition at the same time. If two administrators log on to the same VSDN, or Voice Services Profile, or the same voice service definition (announcement, voice menu, thru-dialer, time-of-day controller) for the same customer group, the administrator who first accessed the table or definition has write access. All other administrators can only view the VSDN/definition.

Figure 7-10
The Voice Services Administration menu

```
ABC Company                       Voice Services Administration


   1     Voice Services-DN Table

 # 2     Voice Services Profile

 *  3    Announcement Definitions

 *  4    Thru-Dial Definitions

 *  5    Time-of-Day Control Definitions

 *  6    Voice Menu Definitions

 ** 7    Fax Item Definitions


Select an item >
 Exit                                          Find Subset of
                                               VSDNs/Services
```

This option does not appear on MATs.
* These options only appear if the Voice Menus feature is enabled for at least one customer group.
** This item is displayed only if Fax on Demand is enabled for the customer group.

> **ATTENTION**
> Do not perform user administration during nightly DR audit.
>
> At 3:30 a.m. every day, an audit of the DR directory is performed. Do not perform any voice services administration at this time (adding, modifying or deleting DNs in the VSDN table, or adding, modifying or deleting voice menu-related definitions and fax item definitions) at this time. Depending on how unbalanced the system is, this audit can take anywhere from 10 minutes (if the system has not been modified since the last audit) to 2 hours if there have been many changes (such as a lot of users or services being added or modified).

Finding a subset of VSDNs or services

If the VSDN table is accessed directly from the Voice Services Administration menu, all VSDN entries associated with this customer group are retrieved and displayed. If you want to view or modify a particular VSDN or a subset of VSDNs and do not want to have to search through the entire list of VSDNs, use the [Find Subset of VSDNs/Services] softkey. By specifying your search criteria, you can retrieve a particular VSDN (by specifying the exact DN) or a subset of VSDNs (by using wildcard characters to create a search pattern). Wildcard characters are explained in the following section.

The Find function can also be used to find a particular service definition or a subset of service definitions (such as an announcement, thru-dialer, time-of-day controller, or voice menu). When you select Announcement Definitions, Thru-Dial Definitions, Time-of-Day Control Definitions, or Voice Menu Definitions from the Voice Services Administration menu, all announcements, thru-dialers, time-of-day controllers, or voice menus associated with the customer group are listed. Depending on how many services are defined, this list can be quite long. To retrieve a particular service definition or a subset of definitions, use the [Find Subset of VSDNs/Services] softkey.

To use the find functionality, you will have to remember some information about the VSDN or service you are trying to retrieve. In the case of a VSDN, you must be able to specify part or all of the DN, the service that is represented by the VSDN (announcement, voice menu, and so on), or the comment that is stored as part of the DN information. In the case of a voice service, you must be able to provide the exact service ID or part or all of the service title.

If you leave all of the fields in the Find Subset of VSDNs/Services screen blank, a list of all VSDN entries/services will be displayed.

A [Find] softkey is also available in the VSDN table to help you retrieve a particular VSDN or a subset of VSDNs once you have accessed the VSDN table. This softkey is also available from the service definition selection menus (such as the Announcement Definitions screen). When you press the [Find] softkey, the Find Subset of VSDNs/Services screen is displayed (Figure 7-11). This allows you to switch between different service definitions and DN definitions without having to sort through a hierarchy of menus. Since there is no restriction on the order in which objects (DNs, announcements, thru-dialers, and so on) are added to the system, you can manipulate DN information, and then cross-check the associated service definitions or vice versa.

Using wildcard characters

Most of the fields in the Find Subset of VSDNs/Services screen accept three wildcard characters: "+" (the plus sign), "_" (underscore), and "?" (question mark).

The plus sign (+) is used to match a number of characters. For example, if you enter 2+ in the *DN* field, all DNs beginning with 2 will be retrieved.

The underscore (_) matches a single character. For example, if you enter 210_ in the *DN* field, DNs in the range 2100 to 2109 will be retrieved. To retrieve all DNs numbered between 2100 and 2199, enter 21_ _.

The question mark (?) produces a "phonetic match"—a match between names that sound the same. This is useful if, for example, you are unsure of the spelling of a customer's name. For example, you want to retrieve all announcement definitions for a customer called Braemore. However, you cannot remember how to spell this name. If you enter "Br+," the system will find all customer groups whose names begin with Br. If you enter "Braymore?", the system will find all names that sound like "Braymore." This might include Braymore, Breymore, Braemer, and so on.

The Find Subset of VSDNs/Services screen

The same screen is displayed regardless of how it is accessed—either from the Voice Services Administration menu using the [Find Subset of VSDNs/Services] softkey, or from the VSDN table or a service definition using the [Find] softkey.

Figure 7-11
The Find Subset of VSDNs/Services screen

```
ABC Company                    Voice Services Administration

 Find Subset of VSDNs/Services

 Choice of Services:
 AN   AMIS Networking       AS   Announcement Service       EM   Express Messaging
 FI   Fax Info Service      FIM  Fax Item Maintenance       GS   Greeting Service
 ACC  Meridian ACCESS       NW   Meridian Networking        PM   Prompt Maintenance
 RA   Remote Activation     TD   Time-of-Day Controls       TS   Thru-Dial Service
 TR   Transcription Service VF   Voice Forms Service        MS   Voice Menu Service
 VM   Voice Messaging


   Type:             [VSDN Entry] Announcement Thru-Dial TOD_Control  Voice_Menu  Fax_Item&

 * DN:               233+________________________________

 * Service:          MS

 * Comment           _______________________________

 ** ID:              _________

 ** Title:           ________________________________________

 ______________________________________________________________________________________
 Select a softkey >

                   Cancel          Find          Print
                                   Selection     Selection
```

```
*  These fields are displayed if Type is VSDN Entry.
** These fields are displayed if Type is not VSDN Entry.
&  Fax_Item is displayed only if Fax on Demand is enabled.
```

Note: If this screen is accessed from the VSDN table or one of the service definition screens, the screen may or may not be prefilled with some information. This depends on whether or not an item was preselected when the [Find] softkey was pressed. If no item was selected, the fields in the form will be blank. If an item was selected (such as a DN in the VSDN table), then some of the fields will be datafilled with the information obtained from the selected item (such as the *DN*, *Service*, and *Comment*).

The fields that appear on the Find Subset of VSDNs/Services screen can vary depending on whether or not “VSDN Entry” is selected in the *Type* field. The following sections “General fields on Find Subset of VSDNs/Services screen,” “VSDN Entry fields on Find Subset of VSDNs/Services screen,” and “Fields on Find Subset of VSDNs/Services screen for non-VSDN Entry” describe all of the fields that can appear on this screen.

General fields on Find Subset of VSDNs/Services screen

The following fields appear on the Find Subset of VSDNs/Services form:

- ***Choice of Services*** This is a list of available services and their acronyms.
- ***Type*** This field is displayed only if Voice Menus or Fax on Demand is enabled. If they are not enabled, you can only retrieve VSDNs. This field specifies the type of information you wish to retrieve.

  Your choices are

  — VSDN Entry

  — Announcement

  — Thru-Dial

  — TOD_Control (Time-of-Day Control)

  — Voice Menu

  — Fax Item (if Fax on Demand is enabled)

VSDN Entry fields on Find Subset of VSDNs/Services screen

The following fields are displayed only if *Type* is “VSDN Entry”:

- ***DN*** To find a particular DN, enter the full DN in this field. To retrieve a subset of DNs, use wildcard characters to create a search pattern.
- ***Service*** To retrieve all of the VSDNs for a particular service type (announcements, thru-dialers, time-of-day controllers, or voice menus), enter the acronym for that service. For example, to retrieve only announcement DNs, enter AS in this field.
- ***Comment*** Any comment you enter here must match the comment that was entered in the Add or View/Modify DN Information screen. Wildcard characters are acceptable.

Fields on Find Subset of VSDNs/Services screen for non-VSDN Entry

The following fields are displayed only if *Type* is *not* “VSDN Entry”:

- ***ID*** To retrieve a particular service definition, enter the service ID in this field. You cannot use wildcard characters in this field.

- ***Title*** To retrieve a specific service definition, enter the title. The title must match exactly the title that was entered when the service definition was created. If you cannot remember the exact title of the service, use wildcard characters to create a search pattern.

Once you have filled in this screen, use the [Find Selection] softkey to display the results or the [Print Selection] softkey to print the results.

Procedure 7-4
Finding or printing a subset of VSDNs or services

Starting Point: The Voice Services Administration menu

1 Press [Find Subset of VSDNs/Services].

The Find Subset of VSDNs/Services screen is displayed.

2 Fill in the Find Subset of VSDNs/Services screen. See the field descriptions on the preceding pages.

3 To view the results on the screen, go to step 3a. To print the results, go to step 3b. If you do not want to continue, go to step 3c.

a. Press [Find Selection].

If the data type was VSDN Entry, the VSDN Table is displayed.

If the data type was a voice service (announcement, thru-dialer, time-of-day controller, or voice menu), the list of service definitions is displayed (such as the Announcement Definitions screen).

b. Press [Print Selection].

You are prompted to verify that the printer is ready and the following set of softkeys are displayed:

```
Select a softkey >

            Cancel                    Continue
            Printing                  Printing
```

Press [Continue Printing] to go ahead with printing.

Press [Cancel Printing] if you do not want to print at this time. You can also press this softkey once printing has begun in order to cancel a print job.

c. Press [Cancel].

The search is not performed, and the Voice Services Administration menu is displayed.

4 If you have retrieved a subset of DNs or services, you can select one of them and then press [View/Modify] or [Delete].

The Voice Services-DN Table

The Voice Services-DN (VSDN) Table (Figure 7-12) lists the Directory Numbers (DNs) associated with specific voice services. A DN is required for each voice service that you want users to be able to access directly by dialing a unique DN. The VSDN Table maps voice services onto DNs so that when the MSM receives an incoming call, it looks up the DN in the table to determine which service is being requested and which prompts to play.

VSDNs for UCD or line DNs

For every service you plan to add to the VSDN table, an existing line DN (or UCD DN) must already be configured on the switch. Your system administrator should have a list of available DNs. For information about configuring DNs and UCD queues (if necessary), see Chapter NO TAG, “Configuring Meridian Mail MSM services” in the *System Administration Guide*.

If a voice service is going to share the agents in the Voice Messaging queue, you must first ensure that there is an available DN on the PBX/switch, or configure one if there is not. If you are going to dedicate agents to the service, you must create a UCD queue on the PBX/switch for the service (if there are none available). Your system administrator is usually responsible for ensuring that there are DNs and UCD queues available on the PBX/switch.

At the very least, you must define a DN for Voice Messaging. This is the DN that users dial to log on to the MSM and access their mailboxes.

Note: Each customer group requires a unique Voice Messaging DN to ensure that the proper service and prompts are accessed (Call Answering versus Voice Messaging, for example). Each customer group’s Voice Messaging DN will forward to the primary voice messaging UCD queue.

Optional VSDNs

The other DNs are essentially optional. However, the following DNs are commonly configured:

- at least one Express Messaging DN (if MMUI is enabled)
- if the Voice Menus feature is enabled, a DN for both Remote Activation and Voice Prompt Maintenance
- DNs for any directly dialed voice services such as Announcements, Thru-Dialers, Time-of-Day Controllers, Voice Menus, and Voice Forms (if enabled).

Figure 7-12
The Voice Services-DN Table

```
ABC Company          Voice Services Administration
Voice Services-DN Table


  DN                        Service     Comment

  2663650                   EM          Express Messaging
  2663651                   PM          Prompt Maintenance
  2663654                   VM          Voice Messaging
  2663661                   RA          Remote Activation
  2663662                   TS   2000   Thru-Dial
  2663663                   EM          Express Messaging
  2663665                   AS   2001   Announcement Service

Move the cursor to the item and press the space bar to select.

   Exit      Add      View/Modify      Delete      Find
```

Note 1: The entries in the VSDN Table are sorted by *DN*, by default. This can be changed in the Set Display Options screen by the System Administrator so that they are sorted alphabetically according to the contents of the *Comment* field.

Note 2: If you tried accessing the VSDN table and no entries were retrieved, the following message is displayed near the bottom of the screen: "There are no DNs associated with any service. Select Add to define one."

The Voice Services-DN Table includes the following read-only fields:

- ***DN*** (Directory Number) This is the DN for the voice service.

  Note: If the SMDI link is set to 10-digit messaging, the full 10-digit DN (including the area code) will be shown.

- ***Service*** The service that is reached when the corresponding DN is dialed. Voice services display a corresponding ID number.
- ***Comment*** This is the description of the voice service.

You can use the [Find] softkey to retrieve a subset of DNs or a particular DN. When you press the [Find] softkey, the Find Subset of VSDNs/Services screen is displayed. See the description of this screen on page 7-40.

Procedure 7-5
Adding, Modifying and Deleting Voice Service DNs

Starting point: The Voice Services Administration menu

1 Select Voice Services-DN Table.

The Voice Services-DN Table is displayed (Figure 7-12).

2 Choose step 2a to add a service DN, 2b to view or modify an existing service DN, 2c to delete an existing service DN, 2d to find a particular DN or a subset of VSDNs, or 2e to exit the VSDN Table.

a. Press [Add].

The Add DN Information screen appears; proceed to the next section, "Adding DN information," on page 7-45.

b. Use the cursor keys to move the cursor to the required voice service DN, and press <Space Bar> to select it. Press the [View/Modify] softkey.

The View/Modify DN Information screen appears. Refer to the "Viewing and modifying DN information" section later in this chapter for details.

c. Use the cursor keys to move the cursor to the required voice service DN, and press <Space Bar>. Press [Delete].

The Delete DN Information screen appears. Refer to the "Deleting DN information" section later in this chapter for details.

d. Press [Find].

The Find Subset of VSDNs/Services screen is displayed. If a DN was selected when you pressed [Find], the screen will be datafilled with information taken from the selected DN. If no DN was selected, all of the fields in the screen are blank. See page 7-40 for more information about the Find function.

e. Press [Exit].

The Voice Services Administration menu is redisplayed.

Adding DN information

The Add DN Information screen (Figures 7-13 and 7-14) is accessed from the VSDN Table and is used to assign available DNs to voice services.

Figure 7-13 shows this screen before any information is entered. Different fields may appear depending on the type of service that is specified. Figure 7-14 shows an example of the *Service* field for all types of services, and the additional fields that are displayed (if any) for each of them.

Figure 7-13
The Add DN Information screen

```
ABC Company               Voice Services Administration

Add DN Information

Choice of Services:
AN   AMIS Networking       AS   Announcement Service       EM   Express Messaging
FI   Fax Info Service      FIM  Fax Item Maintenance       GS   Greeting Service
ACC  Meridian ACCESS       NW   Meridian Networking        PM   Prompt Maintenance
RA   Remote Activation     TD   Time-of-Day Controls       TS   Thru-Dial Service
TR   Transcription Service VF   Voice Forms Service        MS   Voice Menu Service
VM   Voice Messaging

Access DN:   ____________________________

Service:     _______________

Comment:     ____________________________

Select a softkey >

  Save        Cancel
```

Note: For DNs with Voice Menu Service (MS), Time-of-Day Controls (TD), Fax Information Service (FI), or Fax Item Maintenance (FIM) displayed in the *Service* field, the [Session Profile Detail] softkey is displayed. Press this softkey to update the session profile information for these Service types. For more information about updating the session profile information, refer to the “Defining the custom session profile values for new or existing DNs” section.

Figure 7-14
Additional service fields in the Add DN Information screen

```
ABC Company              Voice Services Administration

Add DN Information

Choice of Services:
 AN     AMIS Networking       AS     Announcement Service       EM   Express Messaging
 FI     Fax Info Service      FIM    Fax Item Maintenance       GS   Greeting Service
 ACC    Meridian ACCESS       NW     Meridian Networking        PM   Prompt Maintenance
 RA     Remote Activation     TD     Time-of-Day Controls       TS   Thru-Dial Service
 TR     Transcription Service VF     Voice Forms Service        MS   Voice Menu Service
 VM     Voice Messaging

Access DN:  ____________________________

Service:          AN
Service:          AS        Announcement ID:      344_________
Service:          EM        Mailbox ID:           _________________________
                       &+   or Expansion Digits:  _________________________
                       +       Enforce Prefix:    No  [Yes]
Service:          GS
Service:          ACC       Class:  ________
                            Revert DN: _______________________
Service:          NW
Service:          PM        Language of Service:  [American_English]
                                                  Canadian_French
Service:          RA        Password:               ___________________
Service:          TS        Thru-Dial ID:           ______________
Service:          TD        Time-of-Day Control ID: ______________
* Session Profile:  Custom Full_Multimedia  [Full_Voice]   Basic
Service:          TR        Voice Form ID:          ______________
Service:          VF        Voice Form ID:          ______________
Service:          MS        Voice Menu ID:          ______________
* Session Profile:  Custom Full_Multimedia  [Full_Voice]   Basic
Service:          VM      +& Expansion digits:      _________________________
                          +  Enforce Prefix:        No  [Yes]
Service:          FIM       Language of Service:    [AmericanEnglish]
                                                     Canadian_French
* Session Profile:  Custom [Full_Multimedia]
Service:          FI      Fax Item ID:              ______________
* Session Profile:  Custom Full_Multimedia  [Full_Voice]

Comment:          ____________________________

Select a softkey >

| Save | Cancel | Session Profile Detail* |  |  |
```

Note: To enter expansion digits, both the local and system addressing length must be specified.

* These fields and softkey are displayed for FI, FIM, TD, and MS service types only.
+ Expansion Digits and Enforce Prefix will only be displayed if the system addressing length is defined (that is, is greater than zero) in the General Options screen.
& To enter expansion digits, local addressing lengths must be defined in the Voice Messaging Options screen.

The following fields are displayed:

- ***Choice of Services*** This field lists the available voice services. The list is sorted horizontally according to the feature description, not the acronym. The list is ordered according to the feature description, not the acronym. This can be changed in the Set Display Options screen.

  If a service is enabled on your system but does not appear in this list, ensure that the feature has been enabled for the customer. This can be verified in the General Options screen for this customer group.

- ***Access DN*** This is the DN that callers dial when accessing the voice service. This is either the line DN or UCD DN as configured on the PBX/switch. If there are no available DNs, they will have to be programmed into the switch by a technician. You must define a DN for Voice Messaging. This is the MSM Access Number required by users to log on to MSM and access their mailboxes. The other DNs are optional.

> **CAUTION**
> **Access DNs, Service IDs, and Mailbox IDs**
> Each Access DN, Service ID, and Mailbox ID must be unique. Ensure that the DNs and IDs you enter do not duplicate existing DNs/IDs.

- ***Service*** This field defines which service is to be called up when the Access DN is dialed. Depending on the service selected, an extra field may be displayed. These are explained in the following descriptions.

  AN **AMIS Networking** This selection is possible only if AMIS Networking is enabled. No other fields are displayed when this service is selected.

  AS **Announcement Service** This selection is possible only if voice menus are enabled. You are prompted to enter an *Announcement ID*. This ID is defined when you add an announcement definition. It distinguishes the announcement from all other voice services. When the access DN is dialed, the announcement associated with the ID entered in this field is played. (You do not have to define the announcement before making an entry in the VSDN table. However, if you enter an ID in this field, be sure to write it down and use it when defining the announcement.)

  Announcement ID The ID specifies which announcement to retrieve when the access DN is dialed.

EM **Express Messaging** When you specify Express Messaging, three additional fields may be displayed: *Mailbox ID*, *Expansion Digits* and *Enforce Prefix*. You can use either the *Mailbox ID* field or the *Expansion Digits* field (or neither one), but not both.

Note: Express Messaging is not available for VMUIF customer groups.

Mailbox ID This is an optional field. If you fill in this field, you cannot enter anything in the *Expansion Digits* field.

It is possible to have several Express Messaging services. Express Messaging is typically used to provide users with a service whereby they can leave messages in mailboxes without actually ringing the destination phone. Do not enter a Mailbox ID for this type of service.

You can also create Express Messaging services that connect callers to a specific mailbox. In this case you will need to enter a mailbox number in the *Mailbox ID* field. This is useful if, for example, you want to create a 'suggestion box'. You can ask users to dial the Express Messaging DN and leave their suggestions in the mailbox. You can then play the messages back. If the mailbox number you specify has not been added to the system (through User Administration), do so after adding the Express Messaging DN.

Each Express Messaging service you create will have a unique Access DN. (Make sure there are enough line DNs in the switch to accommodate a number of Express Messaging services).

Up to 18 digits can be entered in the *Mailbox ID* field. Systems with Networking allow 28 digits.

Expansion Digits This is an optional field.

This field is only displayed if the system addressing length is defined (that is, is a value greater than zero).

This feature allows you to make it more convenient for users to enter mailbox numbers when using Express Messaging by allowing them to dial a mailbox number that is shorter than the system addressing length.

Note: To enter a value in this field, both the system addressing length and the local addressing lengths must be specified. The system addressing length is specified in the General Options screen at the system administration level. The local addressing lengths are defined in the Voice Messaging Options screen.

For example, the system addressing length is 10 digits (an example of a full 10-digit DN is 416-598-2011). For a centrex customer group, the local DN length is typically 4 (if any residential customer groups have MMUI, the local DN length would be 7).

If expansion digits are not used, the user would have to enter the full 10-digit DN when using Express Messaging. However, if expansion digits are implemented, the user need only enter the 4-digit DN (for centrex users) or the 7-digit DN (for residential users). The shortened DN is expanded out to the full system addressing length using the expansion digits in this field.

Continuing with this example, you would enter six expansion digits for a centrex customer group (in this example you would enter 416598) since the local DN length is 4. For a residential customer group, you would enter 3 expansion digits (416 in this example) because the local DN length is 7. When a user belonging to a centrex customer group specifies the DN 2339, it is expanded to 4165982339.

Enforce Prefix This field is displayed only if you have entered expansion digits in the previous field, and the system addressing length is specified (that is, greater than 0).

Enforce Prefix ensures that addressing is done within a defined set of expansion digits (in the case of Express Messaging), and it ensures that login is done within a defined set of expansion digits (in the case of Voice Messaging).

If expansion digits are implemented, users can still enter a 10-digit DN. However, if *Enforce Prefix* is implemented, they will not be allowed to enter a DN that conflicts with the expansion digits. For example, if *Enforce Prefix* is set to “No,” users would be able to specify a 10-digit DN such as 416-575-2115 when using Express Messaging. If, however, *Enforce Prefix* is set to “Yes,” the message would not be sent in this case since 416575 conflicts with the expansion digits (416598).

This field also affects user login from Express Messaging. For example, if a user dials “81” to log into his mailbox after leaving an express message, the user will not be allowed to enter a number that conflicts with the expansion digits.

GS **Greeting Service** This selection is possible only if VMUIF is enabled. This service allows subscribers to update their greetings in a manner that requires no keypad input. A DN should be created for this service to allow subscribers without digitone phones (that is, those with rotary phones) to directly connect to the Greetings Service by dialing the specified Access DN. Once connected, the service prompts the subscriber to speak at certain times and requires no keypad input. This can also be provided to subscribers with digitone phones, if they desire a simplified interface for changing greetings.

The greetings service can also be included within a voice menu. However, keep in mind that rotary phone users will not be able to access voice menus, and, therefore, cannot access this service through a voice menu. To service your rotary phone subscribers you need to define a DN in the VSDN table.

ACC **Meridian ACCESS** This service accesses a voice application. The following additional fields are displayed.

Class This field identifies which ACCESS application should be started for an incoming call to the service DN. The application will use this same class value to identify which calls it wants to handle.

Revert DN This field specifies the DN to which calls are transferred if the Meridian ACCESS application has gone off-line.

Note: Meridian ACCESS is not available for VMUIF systems.

NW **Meridian Networking** This selection is possible only if Meridian Networking is enabled. This DN is used to establish a network connection for message transmission. No other fields are displayed when this service is selected.

Note: Meridian Networking is not available for VMUIF systems.

PM **Prompt Maintenance** This service is used to update prompts in voice menus and related services by a remote phone. The following field is displayed if multiple languages are installed on the system.

Language of Service The selection made here determines the language in which system prompts are played to the user of the service.

RA **Remote Activation** This service is used to call into the system from an off-site phone and assign a different service (such as an autoattendant or announcement) to a particular DN.

Password This password must be defined. The Remote Activation service cannot be accessed without a password.

Note: If the password field is left blank, Remote Activation is disabled.

TS **Thru-Dial Service** This service allows a caller to place a call (limited by restriction/permission codes).

Thru-Dial ID This field is mandatory. This is the ID of the thru-dial service to be accessed when the access DN is dialed.

TD **Time-of-Day Control Service** This service directs calls to different services based on the time-of-day (and day of the week) that the call is received.

Time-of-Day Control ID This is the ID of the time-of-day control service to be accessed when the access DN is dialed.

Session Profile Select “Full_Multimedia,” “Full_Voice,” or “Basic” to use a default session profile or “Custom” to create a customized profile. The session profile can be viewed by pressing the [Session Profile Detail] softkey. To view a default profile, make sure one of the above defaults is selected. To create a customized profile, make sure “Custom” is selected before pressing [Session Profile Detail].

TR **Transcription Service** This service allows a transcriber to log into a voice form and listen to and transcribe the recorded responses.

Voice Form ID This field is optional. If you enter an ID, the associated voice form will automatically be retrieved for the transcriber. If you do not enter an ID, the transcriber will have to enter the ID of the form he or she wants to transcribe. If you want to provide transcribers with automatic logon to particular voice forms, you will need several DNs for TR. You should also create a DN that does not reference a particular form, so that it can be used as a general access to the transcription service.

VF **Voice Forms Service** This service connects a caller to the specified voice form. The voice form then asks the caller a series of questions to which the caller responds with spoken answers.

Voice Form ID This is the ID of the voice form service to be retrieved when the access DN is dialed. This ID is defined when the voice form is created in the Add a Voice Form Definition screen.

MS **Voice Menu Service** This service provides callers with a series of options from which they can make a selection by pressing the appropriate key on their telephone keypad (provided they have DTMF capability). The following additional fields are displayed.

Voice Menu ID This is the ID of the top-level voice menu service to be retrieved when the access DN is dialed. This ID is defined when the voice menu is created in the Add a Voice Menu Definition screen.

Session Profile Select “Full_Multimedia,” “Full_Voice,” or “Basic” to use a default session profile or “Custom” to create a customized profile. The session profile can be viewed by pressing the [Session Profile Detail] softkey. To view a default profile, make sure one of the above defaults is selected. To create a customized profile, make sure “Custom” is selected before pressing [Session Profile Detail].

VM **Voice Messaging** Two additional fields, *Expansion Digits* and *Enforce Prefix*, may be displayed.

Expansion Digits This is an optional field, and is only displayed if the system addressing length is a value greater than zero.

This feature allows you to make it more convenient for users to enter mailbox numbers when logging on to the MSM by allowing them to dial a mailbox number that is shorter than the system addressing length.

Note: To enter a value in this field, both the system addressing length and the local addressing lengths must be specified. The system addressing length is specified in the General Options screen at the system administration level. The local addressing lengths are defined in the Voice Messaging Options screen.

For example, the system addressing length is 10 digits. (An example of a full 10-digit DN is 416-598-2011). For one customer group, the local DN length would be 4, and for another customer group, the local DN length could be 7.

If expansion digits are not used, the user would have to enter the full 10-digit DN when logging on. However, if expansion digits are implemented, the user need only enter the 4-digit DN (for the first customer group) or the 7-digit DN (for the second customer group). The shortened DN is expanded out to the full system addressing length using the expansion digits in this field.

Continuing with this example, you would enter six expansion digits for the first customer group (416598, in this example) since the local DN length is 4. For the second customer group, you would enter 3 expansion digits (416, in this example) because the local DN length is 7. When a user belonging to the first customer group specifies the DN 2339, it is expanded to 4165982339.

Enforce Prefix This field is displayed only if you have entered expansion digits in the previous field, and the system addressing length is defined (that is, is a value greater than 0).

Note: Enforce prefix for Voice Messaging applies only to log on, not message addressing.

Enforce Prefix ensures that addressing is done within a defined set of expansion digits (in the case of Express Messaging), and it ensures that login is done within a defined set of expansion digits (in the case of Voice Messaging).

If expansion digits are implemented, a user can enter a 10-digit mailbox number to log on to his or her mailbox. However, if *Enforce Prefix* is implemented, the subscriber will not be allowed to enter a mailbox number that conflicts with the expansion digits.

For example, if *Enforce Prefix* is set to "No," a subscriber could specify a mailbox number of 416-575-2115 to log on. If, however, *Enforce Prefix* is set to "Yes," the subscriber would not be allowed to log on since 416575 conflicts with the expansion digits (416598).

FI **Fax Information Service** This service allows a caller to retrieve one specific fax item as identified by the fax item ID. Two additional fields are displayed when FI is the selected service.

Fax Item ID This ID specifies which fax item is to be retrieved when the access DN is dialed. This ID is defined when the fax item is created in the Add a Fax Item Definition screen.

Session Profile Select "Full_Multimedia" or "Full_Voice" to use a default session profile, or "Custom" to create a customized profile. The session profile can be viewed by pressing the [Session Profile Detail] softkey. To view a default profile, make sure one of the above defaults is selected. To create a customized profile, make sure "Custom" is selected before pressing [Session Profile Detail].

FIM **Fax Item Maintenance Service** This service allows an administrative delegate to maintain fax items. The following two additional fields are displayed.

Language of Service This field is displayed if more than one language is installed. The selection made here determines the language in which modifying and deleting system prompts are played to the caller.

Session Profile Select “Full_Multimedia” to use the default session profile or “Custom” to create a customized profile. The session profile can be viewed by pressing the [Session Profile Detail] softkey. To view the default profile, make sure “Full_Multimedia” is selected. To create a customized profile, make sure “Custom” is selected before pressing [Session Profile Detail].

- ***Comment*** This field is optional and can be used for descriptive purposes. The following, characters cannot be used in this field: “?,” “+,” and “_.” These are reserved wildcard characters (used when specifying search criteria for retrievals). This field holds up to 19 alphanumeric characters. In the VSDN table, you can have entries sorted alphabetically according to the comments entered here by making the appropriate selection in the Set Display Options screen.

Procedure 7-6
Adding DN information

Starting point: The Customer Administration Menu

1 Select Voice Administration.

2 Select Voice Services Administration.

3 Select Voice Services-DN Table.

4 Press [Add].

The Add DN Information screen appears (Figure 7-14).

5 Enter the Access DN.

6 Specify the service.

7 Fill in any additional fields that appear (if necessary). See the field descriptions on the preceding pages.

8 Enter any comments that you may have.

9 If you are defining a DN for a voice menu, time-of-day controller, the fax information service, or the fax item maintenance service, select the desired session profile if the default is not appropriate. Otherwise, continue with step 10.

a. Move the cursor to the Session Profile field.

b. Select a session profile.

c. Press [Session Profile Detail] to view or modify the session profile.

d. If you selected Custom, modify the Session Profile as required. Otherwise, just view it.

e. See the “Defining the custom session profile values for new or modified DNs” section on the following page for details.

10 Choose step 10a to save the changes or 10b to cancel.

a. Press [Save].

The addition is made and you are returned to the Voice Services-DN Table.

b. Press [Cancel].

The addition is not made and you are returned to the Voice Services-DN Table.

Viewing and modifying DN information

Once added to the system, voice service directory numbers can be modified by accessing the View/Modify DN Information screen (Figures 7-15 through 7-19). See the field descriptions for the Add DN Information screen on page 7-48.

Depending on the service that is specified, additional fields may appear on this screen. (The field that is displayed depends on the service.) Figure 7-19 displays an entry for each type of service and the associated fields that are displayed.

Note: Figure 7-19 is for illustrative purposes only and cannot be displayed by the system.

Figure 7-15
The View/Modify DN Information screen excluding MS, FI, FIM, and TD service types

```
ABC Company              Voice Services Administration

View/Modify DN Information

Choice of Services:
AN   AMIS Networking       AS   Announcement Service       EM   Express Messaging
FI   Fax Info Service      FIM  Fax Item Maintenance       GS   Greeting Service
ACC  Meridian ACCESS       NW   Meridian Networking        PM   Prompt Maintenance
RA   Remote Activation     TD   Time-of-Day Controls       TS   Thru-Dial Service
TR   Transcription Service VF   Voice Forms Service        MS   Voice Menu Service
VM   Voice Messaging

Access DN:    3651

Service:     AS            Announcement ID:    6054

Comment:     Personnel Division

Select a softkey >
  Save        Cancel
```

Figure 7-16
The View/Modify DN Information screen for MS and TD service types

```
ABC Company                  Voice Services Administration


View/Modify DN Information

Choice of Services:
AN   AMIS Networking       AS   Announcement Service       EM   Express Messaging
FI   Fax Info Service      FIM  Fax Item Maintenance       GS   Greeting Service
ACC  Meridian ACCESS       NW   Meridian Networking        PM   Prompt Maintenance
RA   Remote Activation     TD   Time-of-Day Controls       TS   Thru-Dial Service
TR   Transcription Service VF   Voice Forms Service        MS   Voice Menu Service
VM   Voice Messaging


Access DN:  3651

Service:    MS          Voice Menu ID:   6054

**Session Profile:    Custom    Full_Multimedia+  [Full_Voice]   Basic

Comment:    Personnel Division



Select a softkey >
   Save        Cancel      Session Profile Detail**
```

* The Choice of Services will vary depending on the features that are enabled on your system.
\+ This option appears only if FOD is enabled.
**This field and softkey are displayed only if the service type is MS, TD, FI, or FIM.

Figure 7-17
The View/Modify DN Information screen for the FI service type

```
ABC Company                  Voice Services Administration

View/Modify DN Information

Choice of Services:
AN   AMIS Networking       AS   Announcement Service       EM   Express Messaging
FI   Fax Info Service      FIM  Fax Item Maintenance       GS   Greeting Service
ACC  Meridian ACCESS       NW   Meridian Networking        PM   Prompt Maintenance
RA   Remote Activation     TD   Time-of-Day Controls       TS   Thru-Dial Service
TR   Transcription Service VF   Voice Forms Service        MS   Voice Menu Service
VM   Voice Messaging

Access DN:   3651

Service:     FI            Fax Item ID:   6054

**Session Profile:     Custom    [Full_Multimedia]   Full_Voice

Comment:     Personnel Division

Select a softkey >

Save | Cancel | Session Profile Detail** |  |
```

**This field and softkey are displayed only if the service type is MS, TD, FI, or FIM.

Figure 7-18
The View/Modify DN Information screen for the FIM service type

```
ABC Company                 Voice Services Administration

View/Modify DN Information

Choice of Services:
AN   AMIS Networking       AS   Announcement Service       EM   Express Messaging
FI   Fax Info Service      FIM  Fax Item Maintenance       GS   Greeting Service
ACC  Meridian ACCESS       NW   Meridian Networking        PM   Prompt Maintenance
RA   Remote Activation     TD   Time-of-Day Controls       TS   Thru-Dial Service
TR   Transcription Service VF   Voice Forms Service        MS   Voice Menu Service
VM   Voice Messaging

Access DN:   3651

Service:     FIM          Language of Service:     [American_English]
                                                   Canadian_French

**Session Profile:    Custom    [Full_Multimedia]

Comment:     Personnel Division

Select a softkey >

Save | Cancel | Session Profile Detail** |  |
```

**This field and softkey are displayed only if the service type is MS, TD, FI, or FIM.

Figure 7-19
Additional service fields in the View/Modify DN Information screen

```
ABC Company              Voice Services Administration

View/Modify DN Information

*Choice of Services:
AN   AMIS Networking       AS   Announcement Service      EM   Express Messaging
FI   Fax Info Service      FIM  Fax Item Maintenance      GS   Greeting Service
ACC  Meridian ACCESS       NW   Meridian Networking       PM   Prompt Maintenance
RA   Remote Activation     TD   Time-of-Day Controls      TS   Thru-Dial Service
TR   Transcription Service VF   Voice Forms Service       MS   Voice Menu Service
VM   Voice Messaging

Access DN:   ____________________________

*Service:    AN
Service:     AS        Announcement ID:         344________
Service:     EM        Mailbox ID:              _________________________
                       +or Expansion digits:    _________________________
                       +   Enforce Prefix:      No  [Yes]
Service:     GS
Service:     ACC       Class:  ________
                       Revert DN:  _______________________________________
Service:     NW
Service:     PM        Language of Service:     [American_English]
                                                Canadian_French
Service:     RA        Password:                ___________________
Service:     TS        Thru-Dial ID:            ______________
Service:     TD        Time-of-Day Control ID:  ______________
Service:     TR        Voice Form ID:           ______________
Service:     VF        Voice Form ID:           ______________
Service:     VM        +Expansion digits:       _________________________
                       +Enforce Prefix:         No  [Yes]
Service:     MS        Voice Menu ID:           _________________________
**Session Profile:     Custom    Full_Multimedia  [Full_Voice]   Basic
Service:     FI        Fax Item ID:             _________________________
**Session Profile:     Custom    [Full_Multimedia] Full_Voice
Service:     FIM__          Language of Service:     [American_English]
                                                     Canadian_French
**Session Profile:     Custom    [Full_Multimedia]

Comment:     ____________________________

Select a softkey >

[Save]   [Cancel]   [Session Profile Detail**]   [ ]   [ ]
```

* Only one service field will be displayed on your screen. These fields are for illustration purposes only to show the extra fields that are displayed for the various services.

** This field and softkey are displayed only if the service type is MS, TD, FI, or FIM.

\+ These fields are displayed only if the System Addressing Length field in the General Options screen is set to a value that is greater than 0 (zero).

The fields in the screen are the same as those used in the Add DN Information screen. For a description of the fields, refer to page 7-48.

Procedure 7-7
Modifying DN information

Starting point: The Customer Administration Menu

1 Select Voice Administration.

2 Select Voice Services Administration.

3 Select Voice Services-DN Table.

4 Move the cursor to the voice service you want to view or modify, and press <Space Bar> to select it.

5 Press [View/Modify].

The View/Modify DN Information screen appears (Figure 7-19).

6 Change the *Access DN* if necessary.

7 Change the associated service if necessary.

8 Fill in any additional fields that appear (if necessary). See the field descriptions on the preceding pages.

9 Enter any comments that you may have.

10 If this is a voice menu, fax information service, fax item maintenance service, or time-of-day controller service DN, modify the customized session profile if necessary.

a. Move the cursor to the *Session Profile* field.

b. Select “Custom.”

c. Press [Session Profile Detail].

d. Modify the Session Profile as required.

e. When finished, press [Return to Previous Form].

11 Choose step 10a to save the changes or 10b to cancel.

a. Press [Save].

The changes are saved, and you are returned to the Voice Services-DN Table.

b. Press [Cancel].

The changes are not saved, and you are returned to the Voice Services-DN Table.

Defining the custom session profile values for new or existing DNs

For DN information screens that pertain to a *Service* type of for Voice Menu Service (MS), for Fax Information Service (FI), for Fax Item Maintenance service (FIM), or for Time-of-Day Control service (TD), the [Session

Profile Detail] softkey allows you to view or update the session profile information for new or existing DNs. Depending on the service type that is selected and the value that is currently selected for the *Session Profile* field, different screens are displayed. Table 7-1 lists the screens that appear for different combinations of service types and session profile field values.

Table 11-1 in the “System Status and Maintenance” chapter in the *System Administration Guide* identifies the port requirements for each Meridian Mail MSM service. Use this table to help you determine the appropriate session profile for the service you are configuring.

Table 7-1
Matrix of Session Profile screens and Service Types

Value in Service field	Value in Session Profile field	Figure number of screen displayed
MS	Custom	Figure 7-22, 7-23
MS	Full_Multimedia	Figure 7-20
MS	Full_Voice	Figure 7-22 (read-only)
MS	Basic	Figure 7-23 (read-only)
FI	Custom	Figure 7-22
FI	Full_Multimedia	Figure 7-20
FI	Full_Voice	Figure 7-22 (read-only)
FIM	Custom	Figure 7-24
FIM	Full_Multimedia	Figure 7-21
TD	Custom	Figure 7-22, 7-23

Figure 7-20
Session Profile screen for MS, FI, or TD and Full_Multimedia

```
ABC Company                         Voice Services Administration

   Session Profile

!  Channel Capability Required:              FullMultiMedia  Full_Voice  Basic

   Session Time Limit (minutes):             10

   Maximum Number of Invalid Selections:     10

*# Maximum Number of Fax Selections:         5

*  Page Limit for Fax Selections:            40

*  Fax Activity Revert DN:

*  Sender Fax Number:

*  Sponsor Fax Item ID:

*  Billing DN:

*  Page Transmission Error Handling:         Quit    Continue

*  Fax Delivery Option:                      Call_Back    Same_Call    Caller_Choice

*  Call Back Extension Prompt:               No   Yes

*  Call Back Number Area Code Translation:   None    North_American_Plan

*  Call Back International DDD:              Not_Allowed  Required    Optional

*  Automatic Cover Sheet:                    No   Yes

+* Sender Name Display:

*  Call Back Dialing Restrictions:           Custom    On_switch    Local
                                             Long_distance_1   Long_distance_2

 Select a softkey >

   Return to
 Previous Form
```

```
* These fields are displayed only if Fax on Demand is enabled for the
customer group.
# For FI, this field is set to 1.
+ This field is displayed only if Automatic Cover Sheet is set to "Yes."
! The "Basic" choice does not appear for FI.
```

Figure 7-21
Session Profile screen for FIM and Full_Multimedia

```
ABC Company                    Voice Services Administration

Session Profile

Channel Capability Required:              Full_MultiMedia

Sender Fax Number:

Billing DN:

Page Transmission Error Handling:         Quit   Continue

Call Back Dialing Restrictions:           Custom   On_switch   Local
                                          Long_distance_1  Long_distance_2

Select a softkey >

Return to
Previous Form
```

Figure 7-22
Session Profile screen for MS, FI, or TD and Custom

```
ABC Company                      Voice Services Administration

     Session Profile

 %   Channel Capability Required:           Full_MultiMedia [Full_Voice]  Basic

     Session Time Limit (minutes):          10

     Maximum Number of Invalid Selections:  10

 *#  Maximum Number of Fax Selections:       5

 *!  Page Limit for Fax Selections:         40

 *!  Fax Activity Revert DN:                ___________________________

 *!  Sender Fax Number:                     ___________________

 *!  Sponsor Fax Item ID:                   __________

 *!  Billing DN:                            ____________________________

 *!  Page Transmission Error Handling:      Quit   [Continue]

 &*! Fax Delivery Option:                   Call_Back   Same_Call   Caller_Choice

 *!  Call Back Extension Prompt:            No   [Yes]

 *!  Call Back Number Area Code Translation: None   [North_American_Plan]

 *!  Call Back International DDD:           [Not_Allowed]  Required    Optional

 ^     IDDD Prefix:                         011

 *!  Automatic Cover Sheet:                 No   [Yes]

 *!+ Sender Name Display:                   ______________

 *!  Call Back Dialing Restrictions:        Custom  On_Switch [Local]
                                            Long_Distance_1  Long_Distance_2

The Session Profile will be saved only if the Previous Form is saved.

  Return to
Previous Form
```

* These fields are displayed only if Fax on Demand is enabled for the customer group and Channel Capability Required is set to ”Full_Voice” or ”Full_Multimedia.”
\# For FI, this field is set to 1 and is read-only.
! If the Maximum Number of Fax Selections field is set to 0 for a voice menu (MS), these fields are not displayed.
^ This field is displayed only if the previous field, Call Back International DDD, is set to ”Optional.”
\+ This field is displayed only if Automatic Cover Sheet is set to ”Yes.”
% This field does not show ”Basic” for FI.
& This field is read-only and set to ”Call_Back” when Channel Capability Required is set to ”Full_Voice.”

Note: All of the fields below Fax Delivery Option appear only if Fax Delivery Option is *not* set to “Same_Call.”

Figure 7-23
Session Profile screen for MS or TD, and Custom

```
ABC Company                      Voice Services Administration

 Session Profile

 * Channel Capability Required:             Full_MultiMedia  Full_Voice  [Basic]

 * Session Time Limit (minutes):            10

 * Maximum Number of Invalid Selections:    10

The Session Profile will be saved only if the Previous Form is saved.

 Return to
Previous Form
```

* If Fax On Demand is not enabled, only these fields are displayed.

Figure 7-24
Session Profile screen for FIM, and Custom

```
ABC Company                      Voice Services Administration

 Session Profile

 Channel Capability Required:             Full_MultiMedia

 Sender Fax Number:

 Billing DN:                              _______________________________________

 Page Transmission Error Handling:        Quit   [Continue]

 Call Back Dialing Restrictions:          Custom   On_switch   [Local]
                                          Long_distance_1  Long_distance_2

The Session Profile will be saved only if the Previous Form is saved.

 Return to
Previous Form
```

The following fields appear in the Session Profile screens:

- ***Channel Capability Required*** All services require either a Full_Voice, Full_MultiMedia or Basic service channel. Of the four service types that have session profiles (Voice Menu Service [MS], Fax Information Service [FI], Time-of-Day Controller Service [TD], and Fax Item Maintenance [FIM]), one can be assigned either to a full-service or basic-service channel. A voice menu service or time-of-day controller service can use basic service ports if it runs only voice menu functions (such as announcements, thru-dial services, time-of-day controllers, or other voice menu functions such as play prompt and return to main menu) and/or Meridian ACCESS applications. The other two (Fax Information, and Fax Item Maintenance) always require a full-service channel. If set to Basic, all fax-related services will not be shown on the Session Profile screen.
- ***Session Time Limit (minutes)*** This is the maximum amount of time that a call session may last. For a Fax Information (FI) session, this time does not include the time taken by Same Call Fax Delivery. The valid range for this field is 1 to 99 minutes. The default is 10 minutes.

  Use this field to guard against misuse. The limit should be set high enough to accommodate only the longest session that your organization can tolerate.
- ***Maximum Number of Invalid Selections*** Each time a user makes an invalid selection from a voice menu or fax menu, an error counter is incremented by 1. For fax menus, when this limit is reached, the caller receives the same treatment as for *Maximum Number of Fax Selections*. For regular voice menus, the session will be terminated. The value can be from 1 to 99, and the default is 10.
- ***Maximum Number of Fax Selections*** This field determines the maximum number of faxes that a caller can select during one call session. If a caller reaches this maximum, the following message is played: "*You have made the maximum number of selections allowed in one call. If you would like to make additional selections, please call in again.*"

  For a Fax Information (FI) service directly accessible by dialing a DN (in other words, a VSDN entry for FI), the maximum number of selections is one. Services that are not fax-related have this value set to zero. The value can be between 0 and 25. For fax menus, the default value is set to five. For fax items, the default value is set to one and cannot be changed.

- ***Page Limit for Fax Selections*** This field is displayed if the previous field, *Maximum Number of Fax Selections*, is greater than zero. If a caller makes a fax selection and the page count exceeds this value, the caller will not be able to make another selection. (The current selections, including the last selection which exceeded the page limit, will be delivered.) The valid range is 1 to 99. The default is 40.
- ***Fax Activity Revert DN*** This field defines the voice DN that a caller is transferred to if they encounter any difficulty while doing any fax-related activities, such as delivery setup, same call delivery initiation, and so on. For voice menus that use Fax Items, any revert operation required outside of the fax selections uses the DN specified for the *Voice Menu Revert DN* field in the voice menu. See the *Voice Menus Application Guide* (NTP 555-7001-325) for more information about this field.

  The maximum size of the value that can be given to the *Voice Menu Revert DN* field is 30 characters, and the default value is blank. When this field is left blank, the Customer's Attendant DN is assigned as the revert DN. If the Customer's Attendant DN is also blank, then the caller is informed that the call cannot be continued, and the call is disconnected. (The *Attendant DN* is configured in the General Options screen, which is described in Chapter 6, "General Administration.")
- ***Sender Fax Number*** This number defines the calling terminal ID and identifies the sending fax phone to the caller. This field can be assigned a number of up to 20 digits in length, and the default is blank.

  The *Sender Fax Number* is displayed in the trim tab unless this field is left blank. The trim tab is printed on each page of any transmission from the MSM. It includes the date of the transmission, the start time of the transmission, the sender number, the callback telephone number of the recipient (in the case of callback delivery), an optional extension number, the current page number, and the total number of pages.
- ***Sponsor Fax Item ID*** This field is for an optional Fax Information (FI) identifier that can be up to eight characters long. If a value is specified for this field, then this fax item is implicitly included before the first item selected by the caller. The expected use of this field is to provide a fax identifier after the system-generated cover page. The Sponsor Fax Item is not counted in the *Maximum Number of Fax Selections* or *Page Limit for Fax Selections* fields. This field is the internal Voice Service ID of the Fax Item.

  The default is blank which indicates that no identification information will be inserted after the system-generated cover page.

  A sponsor fax item can be used as a custom cover sheet (in place of, or in addition to the automatic cover sheet). For example, the automatic cover sheet is generated in English only. To create a cover page in another language, you can create a special fax item for the cover page (the sponsor fax item), and then enter its service ID in this field. You can then turn off the automatic cover sheet, or you might want to create a custom cover sheet with your company logo on it.

- ***Billing DN*** This field contains an optional DN for billing purposes. If a value is specified for this field, then any billable activities (such as Call Back Fax Delivery) will be reported against this DN.

  This field is blank by default. If it is left blank, the customer's billing DN is used. If this DN is also undefined, the call is billed to the VSDN that the caller dialed. The customer's billing DN is defined in the Voice Messaging Options screen which is described in the "Voice Administration" chapter.
- ***Page Transmission Error Handling*** The option selected in this field controls how the system will respond to page transmission errors. This field can have two values: "Quit" (current delivery attempt), and "Continue" (with next page). The default is "Continue."
- ***Fax Delivery Option*** If the value set for the *Maximum Number of Fax Selections* field is set to a number greater that 0, then the *Fax Delivery Option* field will have the following choices: "Call_Back," "Same_Call," and "Caller_Choice." The default value is "Call_Back" for "Custom" and "Full_Voice" session profiles. The default value is "Caller_Choice" for "Full_Multimedia" session profiles. This field is selectable only if *Channel Capability Required* is set to "Full_MultiMedia."
  - ***Call_Back*** If callback delivery is selected, callers do not have to call the service from a fax phone. Callers will be prompted to enter a callback number (and optional extension number for routing) when a fax item is selected. A short time after the call session is terminated, the fax item(s) will be delivered to the specified number (as long as the number is not restricted). See the description of the *Call Back Dialing Restrictions* field on page 7-74.

    Fax delivery calls that are originated by the system (in other words, callback deliveries) are charged to the Billing DN.
  - ***Same_Call*** If same call delivery is selected, callers must call the service from a fax phone. The fax item(s) will be delivered after the caller presses Receive on the receiving fax machine. With this setup, long distance charges, if applicable, will be billed to the calling phone.

— ***Caller_Choice*** This option allows the caller to dial in from any phone (a fax phone or a regular phone). When a caller selects a fax item, he or she is prompted to choose the method of delivery (same call or call back). The caller hears the following prompt: *"If you are calling from a fax phone, press 1. To enter a fax number for later transmission, press 2."*

Fax delivery calls that are originated by the system (in other words, callback deliveries) are charged to the Billing DN. Same call fax deliveries are billed to the calling DN.

If you select "Call_Back" or "Caller_Choice," then the following six fields and associated subfields (up to and including the *Call Back Dialing Restrictions* field) apply and are displayed on the screen.

- ***Call Back Extension Prompt*** This field is displayed only if *Fax Delivery Option* is set to "Call_Back" or "Caller_Choice." "Yes" indicates that the caller will be prompted for an extension number (in addition to a callback number) when arranging callback delivery. This extension is printed on the cover sheet. If another party receives the fax, an extension number makes it easier to contact the recipient of the fax item(s).
- ***Call Back Number Area Code Translation*** This field is displayed only if *Fax Delivery Option* is set to "Call_Back" or "Caller_Choice." This field determines the format in which callers must enter a call back number. There are two options:

— ***None*** This indicates that the caller must enter the callback number as it is to be dialed. This option is meant for systems that are located in countries outside of North America because it handles numbers that are not 10 digits.

— ***North_American_Plan*** This indicates that the number of digits required is the North American set of digits (that is, 10 digits, in the format NPA-NXX- X). Note that "1s" are accepted when entered (as in 1-NPA-NXX- X) but are removed by the system.

The default is North American Plan.

- ***Call Back International DDD*** This field is displayed only if *Fax Delivery Option* is set to "Call_Back" or "Caller_Choice." This field specifies whether an international dialing prefix is not allowed, required, or optional. The default is "Not Allowed."

— ***Not Allowed*** This indicates that only domestic dialing is allowed. (Note that only fixed-length domestic dialing plans are supported.) When entering a callback number, the caller is prompted for the area code and the number of the fax phone. The caller is not prompted for a country code. The following prompt is played to callers if this option is selected: *"Please enter the fax number, including the area code."*

Note that if fax services are provided within North America, long distance calling would be allowed between Canada and the United States since the country code ("1") is shared. However, call back numbers outside of Canada and the U.S.A. will not be allowed.

— ***Required*** This indicates that the callback number is allowed to be outside the domestic dialing plan (that is, have a different country code) and that the caller will always be prompted (and required) to enter a country code in addition to the area code and fax phone number (even if the caller's number is within the same country code).

Callers hear the following prompt: *"Please enter the country code followed by number sign."* Once a valid country code is entered, the following prompt is played: "*Please enter the remainder of the number, including area code or city code. When you have finished, press number sign."*

— ***Optional*** This indicates that the callback number is allowed to be outside the domestic dialing plan (that is, have a different country code). The country code is optional if the caller is within the same country code as the system.

The following prompt is played to callers: *"Please enter the fax number, including the area code. For an international number, dial <IDDD prefix> and wait for instructions."* The IDDD prefix that the system announces is taken from the following field.

If a caller does not enter the correct number of digits when entering the call back number, the following prompt is played: *"[error tone] A complete telephone number was not received. Please try again."*

- ***IDDD Prefix*** This field is displayed only if *Fax Delivery Option* is set to "Call_Back" or "Caller_Choice," and if *Call Back International IDDD* is set to "Optional." This field is used to specify the digits that will be used to indicate IDDD dialing. If *Call Back International DDD* is set to "Optional," this prefix must be defined, and you will not be able to leave this screen if this field is blank. The default is 011. The maximum field size is five characters.

When the *Callback International DDD* field is set to “Optional,” the following callback prompt is played to callers: *“Please enter the fax number, including the area code. For an international number, dial <IDDD prefix> and wait for instructions.”*

If the caller enters a prefix that matches this field, the following prompt is played: *“Please enter the country code, followed by number sign.”*

After the caller provides the digits, the system prompts for the remainder of the number: *“Please enter the remainder of the number, including area code or city code. When you have finished, press number sign.”*

Note: In the above examples, the number sign is optional even though it is requested.

- ***Automatic Cover Sheet*** This field is displayed only if *Fax Delivery Option* is set to “Call_Back” or “Caller_Choice.” (In the case of caller choice, this field is used only if the caller selects call back delivery.) If “No” is selected, no cover sheet will be inserted before call back fax transmissions. If “Yes” is selected, a system-generated cover sheet is attached to all call back transmissions. If you are using a sponsor fax item (a customized cover sheet), you may want to suppress the automatic cover sheet. The default is “Yes.”

Figure 7-25 shows the cover page that is transmitted when the caller enters an extension number. The cover page in Figure 7-26 is transmitted if the caller does not provide an extension number. (Note that in this release of Meridian Mail, only American English is available for the cover sheet.)

Figure 7-25
Callback cover page (with caller's extension number)

```
<trim tab>
FACSIMILE TRANSMISSION

TO:          THE PERSON AT EXTENSION  x
FAX#:        nnnnnnnnnn
FROM:        sendername ..............
             (AUTOMATED FACSIMILE SERVICE)
PAGES:       nn (INCLUDING THIS COVER PAGE)

IF THIS FACSIMILE IS NOT COMPLETELY READABLE OR IS
MISSING PAGES, PLEASE INFORM THE PERSON AT EXTENSION
 x; THEY WILL HAVE TO RE-REQUEST THE INFORMATION FROM
THIS SERVICE.
```

Figure 7-26
Callback cover page (without Caller extension number)

```
<trim tab>
FACSIMILE TRANSMISSION

TO FAX#:     nnnnnnnnnn
FROM:        sendername ..............
             (AUTOMATED FACSIMILE SERVICE)
PAGES:       nn (INCLUDING THIS COVER PAGE)

IF THIS FACSIMILE IS NOT COMPLETELY READABLE OR IS
MISSING PAGES, PLEASE INFORM THE PERSON WHO REQUESTED THE
INFORMATION; THEY WILL HAVE TO RE-REQUEST THE INFORMATION
FROM THIS SERVICE.
```

- ***Sender Name Display*** This field is displayed only if *Fax Delivery Option* is set to “Call_Back” or “Caller_Choice,” and if *Automatic Cover Sheet* is set to “Yes.” If this field is set to “Yes,” the name that you enter will appear on the cover sheet. (See the FROM: field in Figure 7-26). This field is blank by default, implying that the sender’s name will not be displayed. You can enter a name of up to 20 characters.
- ***Call Back Dialing Restrictions*** This field is displayed only if *Fax Delivery Option* is set to “Call_Back” or “Caller_Choice.” These codes apply only if the delivery method used is call back since you will be billed for these calls. (Same call delivery is billed to the calling party.) You must, therefore, ensure that you apply the appropriate restriction/permission codes if callback delivery to certain country codes or area codes is not allowed. Perhaps all long distance dialing or international dialing is restricted for some fax items or fax menus, yet permitted for others.

  You can apply one of the already defined restriction/permission sets. (To review these sets, go to the Voice Security Options screen for the customer group.) Alternatively, you can create a custom set of codes that will apply to calls made to this VSDN only.

  To create a custom set of codes, select the “Custom” option. When you do so, additional fields are displayed in which you can define up to 10 restriction codes and 10 permission codes. Each dialing code can be up to five digits in length. Initially, all restriction code fields are prefilled with the digits 0 through 9, essentially restricting all callback numbers. This means that you must modify these fields for callback fax delivery to work. All permission code fields are blank by default.

  Restriction codes are used to identify the general rules, and permission codes are used to identify exceptions to the rule. For example, to restrict all long distance call back delivery, enter the long distance dialing prefix as a restriction code (91 for example). However, to allow long distance call-back delivery to two specific area codes (such as 504 and 205), enter 91504 and 91205 as permission codes.

  Note: For a more detailed discussion of restriction/permission codes, see the “System security” chapter in the *System Administration Guide*.

Procedure 7-8
Defining custom session profile values

Starting point: The Main Menu

1. Select Voice Administration.
2. Select Voice Services Administration.
3. Select Voice Services-DN Table.
4. Press [Add] or [View/Modify].

The Add or View/Modify DN Information screen appears.

5 Enter the Access DN.

6 Specify the service.

7 If you are defining a DN for a voice menu, time-of-day controller, fax information service, or fax item maintenance service, select the desired session profile if the default is not appropriate.

a. Move the cursor to the Session Profile field.

b. Select a session profile.

c. Press [Session Profile Detail].

d. Modify the session profile as required if you selected “Custom,” or simply view it if you have not.

e. Press [Return to Previous Form].

8 Choose step 8a to save the changes or 8b to cancel.

a. Press [Save].

The new or modified session profile is saved, and you are returned to the Voice Services-DN Table.

b. Press [Cancel].

The new or modified session profile is NOT saved, and you are returned to the Voice Services-DN Table.

Deleting DN information

Use the Delete DN Information screen (Figure 7-27) to delete Directory Numbers (DNs) from the Voice Services-DN Table. The fields on this screen are read-only. For a description of the fields used in the Delete DN Information screen, refer to the field descriptions for the Add DN Information screen in the *Customer Administration Guide*.

Figure 7-27
The Delete DN Information screen

```
ABC Company                 Voice Services Administration


Delete DN Information

*Choice of Services:
AN   AMIS Networking        AS   Announcement Service        EM   Express Messaging
FI   Fax Info Service       FIM  Fax Item Maintenance        GS   Greeting Service
ACC  Meridian ACCESS        NW   Meridian Networking         PM   Prompt Maintenance
RA   Remote Activation      TD   Time-of-Day Controls        TS   Thru-Dial Service
TR   Transcription Service  VF   Voice Forms Service         MS   Voice Menu Service
VM   Voice Messaging

Access DN:   56672

#Service:    ACC            Class:      6054
                            Revert DN:  149

Comment:     Personnel Division

________________________________________________________________________________

OK to Delete    Cancel
```

* The Choice of Services list is optionally displayed by setting the display option in the VSDN Table DN Information form field to “No.” The choices displayed vary depending on the features enabled on your system.

This field changes depending on the Service selected.

Procedure 7-9
Deleting DN information

Starting point: The Customer Administration Menu

1 Select Voice Administration.

2 Select Voice Services Administration.

3 Select Voice Services-DN Table.

4 Move the cursor to the voice service you want to delete, and press <Space Bar> to select it.

5 Press [Delete].

The Delete DN Information screen appears (Figure 7-27).

6 Choose step 6a to delete the service or 6b to cancel.

a. Press [OK to Delete].

The entry is deleted and you are returned to the Voice Services-DN Table.

b. Press [Cancel].

You are returned to the Voice Services-DN Table without the entry being deleted.

The Voice Services Profile

The Voice Services Profile screen (Figure 7-28) allows you to set parameters that apply to all voice services (other than Voice Messaging services such as Express Messaging and Call Answering).

Figure 7-28
Voice Services Profile screen

```
ABC Company          Voice Services Administration

Voice Services Profile

Voice Services Volume:  1

Timeouts
  Command Entry:            3.5   seconds   Short Disconnect: 10.0   seconds
  Record (mm:ss):           02:00

Maximum Prompt Sizes for Announcements (mm:ss):             02:00
                            other voice recordings (mm:ss): 02:00

Act on AMIS Initiation Tone:  [No]   Yes

Enable Update Logging:        [No]   Yes

Business Hours Defaults:      08:30 to 17:00

Holidays:
     Start Date     End Date     Start Time     Comments
     (mm/dd/yy)     (mm/dd/yy)   (hh:mm)
  1  12/20/92       01/04/92     08:30          Christmas
  2  01/18/92       ________     08:30          M.L. King
  3  02/15/92       ________     08:30          Washington
  4  05/30/92       ________     08:30          Memorial Day
  5  07/01/92       ________     08:30          Independence
  6  09/05/92       ________     08:30          Labor Day
  7  10/01/92       ________     08:30          Columbus Day
                                                              MORE BELOW
Select a Softkey >

   Save        Cancel
```

The Voice Services Profile includes the following fields:

- ***Voice Services Volume*** This is a read-only field that indicates which volume contains voice menus and voice forms (if any).

  Note: If this volume is anything other than 1, you will have to do a full backup of the indicated volume in order to back up voice services (voice menus, voice forms, fax on demand applications) in addition to a full backup of volume 1.

- ***Timeouts*** The values you enter in the following fields determine how long the system will wait under certain conditions before it takes action (such as disconnecting the caller from the service or playing a delayed prompt).
  - ***Command Entry*** The value entered here represents the amount of time (in seconds) that callers have to enter or complete a command before the appropriate action is taken by the service currently in operation. This field applies to voice menus, announcements, and thru-dialers. The default is 3.5 seconds. The range is from 1.0 to 5.0 seconds.

    This value also affects callers who do not have a touch tone phone and, therefore, cannot enter commands to respond to prompts. The value entered here determines how long the system will wait before connecting the caller to an attendant.
  - ***Short Disconnect*** This value represents the maximum amount of time (in seconds) that the system will wait for a response before disconnecting or connecting a caller to an attendant. This field applies to voice menus and thru-dialers. The default is 10.0 seconds. You may enter a value from 1.0 to 30.0.
  - ***Record*** This is the length of time (in minutes and seconds) a voice service remains active while recording silence. If silence continues to this specified length of time, the voice service disconnects. The default is 02:00 (mm:ss). You may enter a value from 00:06 to 05:00. This affects all voice services other than Voice Messaging and its associated features (Login, Call Answering, Express Messaging).
- ***Maximum Prompt Sizes for Announcements (mm:ss)*** This field controls the allowed recording length for prompts included in announcement definitions.

  This field is not used for any other type of voice recording. Instead, the next field is used.

  A tone is heard when 80% of the maximum prompt size has been reached. The following error message is displayed when the maximum is reached: **Recording stopped. The time limit was exceeded.**

  Enter a value between 00:30 and 10:00. The default is 00:30.
- ***Maximum Prompt Sizes for other voice recordings (mm:ss)*** This field controls the maximum recording length for any voice recording other than announcement prompts that are recorded using either the administration terminal or the Voice Prompt Maintenance service.

  A tone is heard when 80% of the maximum prompt size has been reached. The following error message is displayed when the maximum is reached: **Recording stopped. The time limit was exceeded.** Enter a value between 00:30 and 10:00. The default is 02:00.

- ***Act on AMIS Initiation Tone*** If an AMIS call comes in through a voice service DN, the voice service (such as a voice menu or announcement) will either ignore (if “No” is selected) or react to the AMIS tone and transfer the call to the appropriate AMIS agent (if “Yes” is selected). If this field is set to “No,” you will have to configure a DN specifically for the AMIS service in the VSDN table. If you plan on using a voice menu or thru-dialer to accept AMIS calls, then this field must be set to “Yes.” The default is “No.”

  Note: If you set this field to “Yes,” make sure that the *Command Entry* field for the customer group is set to its maximum value of 5 seconds. This value determines how long the system will wait for a response (telephone keypad entry) before disconnecting a call. Otherwise, an AMIS call that connects to a voice menu or thru-dialer may be prematurely disconnected.

- ***Enable Update Logging*** When this field is set to “Yes,” a SEER is generated whenever a VSDN entry, announcement, thru-dialer, time-of-day controller, voice menu, or fax item is added, modified or deleted (that is, saved while in the View/Modify DN Information screen) to indicate which operation has been performed and on which DN or service ID. The default is “No.”

- ***Business Hours Defaults*** These are the default business hours for the customer. These defaults are used by time-of-day controllers. The hours you enter here are used as defaults in the Add a Time of Day Control Definition screen (see the *Voice Menus Application Guide* [NTP 555-7001-325]). These are the hours that the customer is typically open from Monday to Friday. You can, however, override these defaults if necessary. If, for example, Saturday is also a business day, but the hours are 10:00 a.m. to 4:00 p.m., you can enter these special hours when defining a time-of-day controller. The system defaults are 08:30 to 17:00. Hours that fall outside of the range defined here are considered off hours.

- ***Holidays*** This field identifies the holidays that are observed by your organization (that is, when your organization is closed). Up to 20 holidays can be defined. The holidays you specify here are used when defining time-of-day controllers. For more information about time-of-day controllers, refer to the *Voice Menus Application Guide* (555-7001-325).

  — ***Start Date*** This field is mandatory. Specify the date on which the holiday begins. The date format follows the format defined in the General Options screen selectable from the General Administration menu.

— ***End Date*** Specify the date on which the holiday ends. (This is optional.) If you enter a date, it must be later than or the same as the start date. If no end date is specified, the holiday will end on the start date. If the holiday ends on a regular day, the holiday will end at the end of the business day (five o'clock, for example). However, if it ends on a nonbusiness day, the holiday will end at the end of the day (midnight).

— ***Start Time*** This is the time at which the holiday starts on the start date. This will usually be the normal start of a business day (specified using the 24-hour clock).

— ***Comments*** This field is optional. You may enter up to 11 characters to describe the holiday you are defining.

Procedure 7-10
Setting Voice Service Parameters

Starting point : The Voice Services Administration menu

1 Select Voice Services Profile.

The Voice Services Profile screen appears (Figure 7-28).

2 Modify the existing information as needed.

3 A new holiday entry can be entered on the first available blank line; the screen can be scrolled to view additional lines.

4 Choose step 4a to save the changes or 4b to cancel.

a. Press [Save].

The changes are saved, and you are returned to the Voice Services Administration menu.

b. Press [Cancel].

You are returned to the Voice Services Administration menu.

Announcement Definitions

When you select Announcement Definitions from the Voice Services Administration menu, the Announcement Definitions data screen is displayed. For more information about administering Announcement Definitions, refer to the *Voice Menus Application Guide* (NTP 555-7001-325).

An announcement is recorded information that is played to callers. It is the simplest type of voice service that you can create.

When a caller accesses an announcement directly, it is played twice. A "*Goodbye*" prompt is then played, and the call is disconnected. (Of course, the caller may hang up after hearing the announcement the first time.) The amount of time that the system waits before disconnecting is defined in the Voice Services Profile as the *Command Entry* time-out.

When a caller accesses an announcement through a voice menu, the announcement is played and the caller remains in the menu in order to select another menu action, if desired. No keypad input is required of a caller during the playback of an announcement.

Thru-Dial Definitions

When you select Thru-Dial Definitions from the Voice Services Administration menu, the Thru-Dial Definitions data screen is displayed. For more information about administering Thru-Dial Definitions, refer to the *Voice Menus Application Guide* (555-7001-325).

A thru-dial definition acts like a service and allows callers to dial (make their own call) from Meridian Mail. It is primarily used within a voice menu or automated attendant, but can be configured as a stand-alone service.

The “type” of thru-dial service you create is dependent on the way in which you configure the restriction/permission codes.

Each thru-dial service can be used as many times as you need within different applications. For example, any time you need to allow callers to place local calls from within an automated attendant or voice menu, simply refer to the appropriate thru-dial service.

Time-of-Day Control Definitions

When you select Time-of-Day Control Definitions from the Voice Services Administration menu, the Time-of-Day Control Definitions data screen is displayed. For more information about administering Time-of-Day Control Definitions, refer to the *Voice Menus Application Guide* (555-7001-325).

A time-of-day controller activates a particular service depending on the day (regular business day or holiday) and time of day (business hours or off-hours) at which a call is received.

A time-of-day control definition has three time periods: business hours, off-hours, and holidays. When you create a new time-of-day control definition, Monday to Friday are defined as business days by default, and Saturday and Sunday are defined as nonbusiness days. The default business hours are taken from the Voice Services Profile. The Voice Services Profile must be set up properly for a time-of-day controller to work since, in addition to containing the default business hours, the profile also defines the holidays for which the organization closes. See the section “The Voice Services Profile” in this chapter.

If a time-of-day controller is active when a call is received, the system first checks the Voice Services Profile to see if it is a holiday. If it is a holiday, the holiday service ID is looked up in the time-of-day control definition and the associated voice service is activated. If it is not a holiday, the time-of-day controller checks the defined business hours. If the call has arrived during business hours, the service associated with business hours is activated. If the call has arrived outside of the defined business hours, the service associated with the off-hours is activated.

Voice Menu Definitions

When you select Voice Menu Definitions from the Voice Services Administration menu, the Voice Menu Definitions data screen is displayed. For more information about administering Voice Menu Definitions, refer to the *Voice Menus Application Guide* (555-7001-325).

A voice menu offers callers choices. When a caller activates a voice menu, a courteous greeting is played followed by a list of options and the corresponding key that the caller must press to make a selection.

For example, *"Thank you for calling the University of Wallaballoo. To find out how to register for classes, press 1. To find out about our part-time programs, press 2. To speak with the student registrar, press 3. If you have any inquiries regarding your student records, press 4. To speak with the operator, press 0. If you do not have a touch-tone phone, please wait on the line and an operator will be with you shortly."* Callers make a choice by pressing the appropriate number on their telephone keypads. This means, of course, that callers require a DTMF (touch-tone) phone to use a voice menu.

A simple voice menu consists of only one voice menu (one layer). More complex applications involve creating several layers of voice menus and linking them together to create multilevel menus. Each voice menu service can have up to 20 submenus. With this capability, voice menu applications can become very complex, branching off in many directions. However, more common voice menu applications typically involve three layers or less.

Fax Item Definitions

When you select Fax Item Definitions from the Voice Services Administration menu, the Fax Item Definitions data screen is displayed. For more information about administering Fax Item Definitions, refer to the *Fax on Demand Application Guide* (555-7001-327).

The Fax Information Service (FI), if directly associated to a DN in the VSDN table, provides the ability to fax a single item of information to callers. No menu choices are available in this case.

Alternatively, a Fax Information Service can be associated with a menu related to a DN in the VSDN table. This configuration can provide a selection of fax item information available to callers.

You can define a fax item by filling in a Fax Item Definition form. Once Fax Item Definition forms have been created in the system, you will need to administer them. You can do the following Fax Item Definition administration functions:

- find
- add
- view and modify
- delete

Outcalling Administration

When you select Outcalling Administration from the Voice Administration Menu, the Outcalling Administration screen is displayed. For more information about administering Outcalling, refer to the *Outcalling Application Guide* (NTP 555-7001-323).

Outcalling is an optional feature which provides two types of external messaging:

- Remote Notification
- Delivery to Non-User

Remote Notification (RN) “monitors” a user’s mailbox and, when a message is received, it informs the user of the new message by contacting a remote device such as a pager (voice, tone-only, or numeric), a paging service, or another telephone. For example, a user may wish to be informed of all new messages that arrive after business hours by being contacted at home.

The Delivery to Non-User feature allows users to create and send a message to someone who does not have a mailbox. The non-user may be someone else within the organization or someone at a remote location.

Voice Form Definitions

When you select Voice Form Definitions from the Voice Administration Menu, the Voice Forms screen is displayed. For more information about administering Voice Forms, refer to the *Voice Forms Application Guide* (NTP 555-7001-326).

A *voice form* is the electronic equivalent of a paper form. It is “filled out” by callers who dial a special number which connects them to the voice form. (Alternatively, callers can be connected to a voice form through a voice menu or time-of-day controller.) The form is made up of a series of questions that are played over the telephone to the caller. The caller listens to each question and responds by giving a verbal answer. If callers require assistance while responding to a form, they can press 0 to transfer to an operator. (This functionality can be enabled or disabled for each voice form.) The caller’s *answers* are recorded and stored in the system as a *response*.

Voice forms are intended to help fulfill an organization's information-gathering needs. Voice forms can replace paper forms as well as certain information-gathering tasks that are currently carried out over the phone (such as order-taking).

Voice forms can be used to collect information from external sources (such as customers or potential clients) or from internal sources (employees).

Chapter 8: System Event and Error Reports

System Event and Error Reports (SEERs) collect statistics on every system event and error reported by MSM system software components. The reports provide information about the SEER class, SEER number, the date and time that the SEER was generated, and a description of the event or error that occurred at that time.

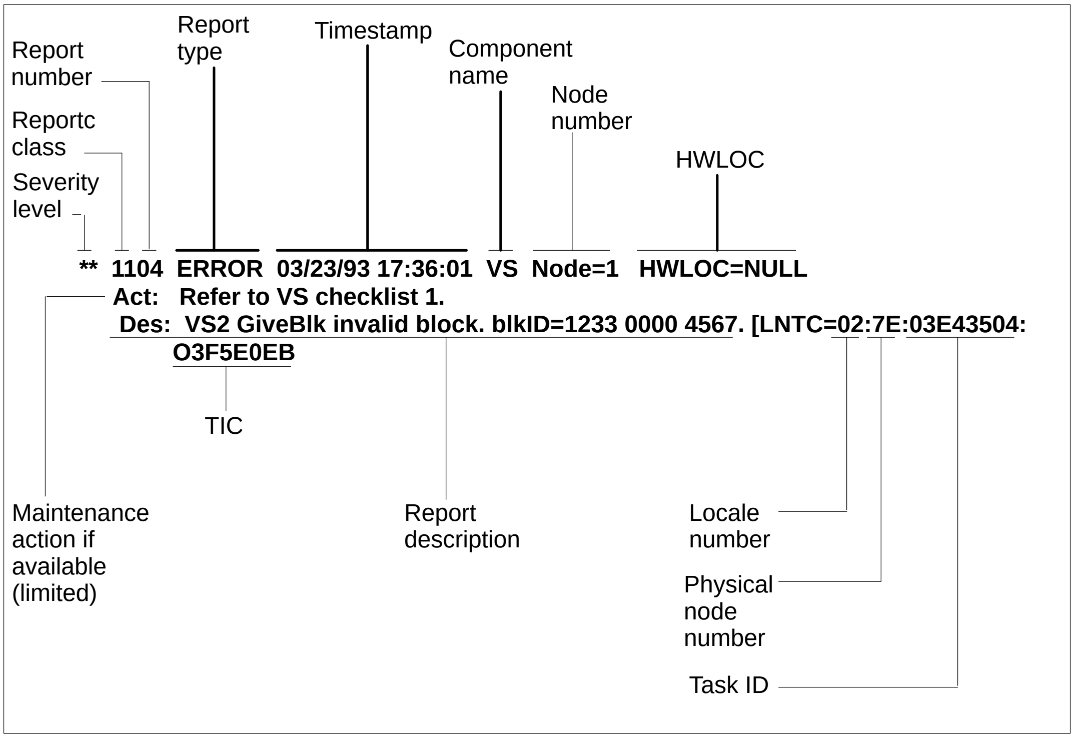
How to use SEERs

SEERs are mostly used by maintenance personnel for isolating system faults, and repairing hardware and software problems. However, administrators should be able to read, interpret, and assess the severity of events and errors to determine if they are regular events (such as a system audit), errors which can be corrected by the administrator, or if it is necessary to alert support personnel. Once the administrator becomes familiar with SEERs, it may also be possible to identify potential problems in their early stages before they become critical errors.

In order to help you judge how serious a system problem might be, SEERs have been classified according to various severity levels. These classifications are based on the impact of the operation that has failed. This reduces the risk of neglecting real problems that have been buried amongst a lot of minor problems or regular system events. When retrieving SEER information, you can filter out all but the most severe problems in order to deal with them quickly.

Figure 8-1 shows a typical SEER that would be printed with a maintenance action category. For more details on SEERs and for a list of SEERs, refer to the *Maintenance Messages (SEERs)* manual (NTP 555-7001-510).

Figure 8-1
Parts of a SEER



SEERs can be classified by:

- type
- severity

For a more detailed description of SEERs and their interpretation, see *Maintenance Messages (SEERs)* manual (NTP 557-7001-510).

Severities of SEERs

Each SEER is put into one of the following severity classifications:

- ***Critical***

  Critical indicates any service-affecting problem. A critical problem requires immediate attention, usually from a qualified technician. Examples of critical errors are system reboots, a major base feature not operating, hardware failure (where the system failed to recover from the failure), system capacity reduced below a threshold, software configuration problems, and a full volume.

- ***Major***

  Major indicates any service-threatening problem. Such problems do not require immediate attention, but will require attention from the administrator or technician to prevent it from becoming a critical problem. A major problem may be allowed to persist up to 24 hours. Examples of major errors are

  — hardware failures from which the system has successfully recovered

  — unrecovered hardware problems in noncritical components such as tape drives or voice cards

  — malfunction of a minor feature such as the recording of spoken names or administrative functions

  — a nearly full volume

  — excessive minor problems

- ***Minor***

  Minor indicates a problem that has no impact on the system or users of the system. No immediate attention is required on the part of the administrator or a technician. The fault can be allowed to exist for some time. However, an excessive accumulation of minor problems can, in itself, become a major problem.

- ***Info***

  Info indicates a normal system event. Knowledge of these events is of use to the administrator as they indicate occurrences such as invalid administrator logon attempts, system time changes, disabled user mailboxes (due to password expiration/violation), successful backups, and the forwarding of non-users to voice messaging.

Types of SEERs

Each SEER can also be one of several types:

- ***Error***

  Error indicates an error which requires the attention of a trained technician.

- ***Admin***

  Admin indicates an error which can probably be solved by the system administrator. If the administrator is unable to solve the problem, they may call a trained technician.

- ***System***

  System indicates a normal event that should be noted (for example, a successful audit or Operational Measurement collection). This does not sound an alarm.

- Debug

  Debug indicates unexpected software conditions which do not impact service. This information is only of interest to MSM designers. If you encounter a problem and Debug SEERs are being generated, keep a record of them to show to the Nortel support organization, should they want to see them.

Determining which SEERs to report

The System Event and Error Reports screen (Figure 8-2) allows you to set parameters for the type of report you want to generate. In this screen, you are able to specify the range of SEERs that you want included in the report by indicating the class and severity level of the SEERs you wish to monitor. You can also specify the period of time that the report should cover (by entering a start and end date and time). Once the report has been generated according to the criteria you have specified in this screen, you can either view it or print it out.

Note: MSM filters SEERs at different levels for printing from the SEER printer. This level can be set so that only those SEERs that the administrator considers important are displayed. SEER filtering is discussed in the *Maintenance Messages (SEERs)* manual (NTP 557-7001-510). To reset the SEER filtering level, contact your Nortel support organization.

Figure 8-2
The System Event and Error Reports screen

```
                    System Status and Maintenance

System Event and Error Reports

SEER Class: ___

Severity Level:  Critical  Major  Minor  [All]

SEER Type:       Error     Admin  System [All]




Report Start (mm/dd/yy hh:mm): 05/17/91 04:00  (or blank for oldest)
Report End   (mm/dd/yy hh:mm): ______________  (or blank for newest)
____________________________________________________________________
Select a softkey >

   Exit            View Reports  Print Reports
```

The System Event and Error Reports screen contains the following fields:

- ***SEER Class*** This field allows you to specify the class of SEERs that you want to view or print. The SEER class is the code that identifies the type of event or error being reported. There are over 40 classes, each pertaining to a particular software component. Explanations for these codes are given in *Maintenance Messages (SEERs)* manual (NTP 557-7001-510). If you want to retrieve SEERs from all classes, leave the field blank.
- ***Severity Level*** The selection you make in this field determines the SEERs that are displayed in the report by allowing you to selectively view SEERs according to their severity. For a description of the severity levels, see the introduction to this section on SEERs.
  - — ***Critical*** This field retrieves only those SEERs classified as Critical.
  - — ***Major*** This field retrieves those SEERs classified as Major plus the SEERs that belong to the higher severity level (Critical).
  - — ***Minor*** This field retrieves those SEERs classified as Minor plus the SEERs that belong to all of the higher severity levels (Major and Critical).
  - — ***All*** This field causes SEERs at all levels of severity to be displayed in the report. This includes the Info level Seers.
- ***SEER Type*** This field allows you to specify the type of SEERs that you want to view or print. The types are:
  - — ***Error*** Error-level SEERs are those that may indicate a system problem that needs to be corrected by the administrator, possibly with the assistance of technical support. Examples of Error-level SEERs include hardware errors, software errors, and indications that a hardware error may develop.
  - — ***Admin*** Administration-level SEERs are those that indicate system problems or configuration difficulties that are likely to be handled by the system administrator without external assistance (for example, a non-MSM user whose calls are forwarded to the MSM system). When the filtering level is set to Admin, the Error-level SEERs are also printed.
  - — ***System*** System-level SEERs are those that indicate normal system behaviour, and others that do not require action (for example, nightly audits by the various subsystems of MSM). When the filtering level is set to System, the Error- and Admin-level SEERs are also printed.
  - — ***All*** When All is selected, all SEER types are printed.

- ***Report Start*** This field determines the day and time at which the report starts. If this field is left blank, the report starts with the oldest SEER data currently stored in the buffer.
- ***Report End*** This field determines the day and time at which the report ends. If this field is left blank, the report will include SEER data up to the last (most recent) entry currently stored in the buffer. If neither the start nor end day and time are specified, all SEER data currently stored in the buffer will be included in the report.

Viewing or printing SEER reports

Once you have filled in the System Event and Error Reports screen, you can do either of the following:

- view the report on screen
- print the report

Viewing SEER reports

If you choose to view the report, a screen similar to the one illustrated in Figure is 8-3 displayed. Procedure 8-1 describes how to view SEER reports.

Figure 8-3
The SEER Report screen

```
ABC Company Limited     System Status and Maintenance

SEER Period from Beginning of SEER Data to End of SEER Data.

Error   Date Time    Type    Severity  Node Location, Action, Description

 35-0  4/12 22:07   System  Inf       1    Null
Des: OpenSeer : new SEER file being created.
 35-0  4/12 22:07   System  Inf       1    Null
Des: SEER registered and active
 35-0  4/12 22:07   System  Inf       2    Null
Des: BKUP SEER registered and on standby
 60-99 4/12 22:08   System  Inf       1    Null
Des: OS loaded successfully 2
 60-28 4/12 22:08   System  Inf       2    Null
Des: PRM2(Backup) Bus Controller Diags: Program Completed, PASS 0
 64-2  4/12 22:08   System  Inf       2    Null
Des: BCInt(2): UpdClk: Backup setting to FreeRun

Select a softkey>
  Exit                                  Next
                                        Page*
```

*Appears when the information fills more than one screen.

SEER reports contain the following read-only fields:

- ***SEER Period*** This field indicates the time period that the report covers. This is determined by the entries that were made in the System Event and Error Reports screen. If no start and end date were entered there, the report will display all SEER data that is currently stored in the buffer.
- ***Error*** This field identifies the SEER. The first number indicates the report class (the identifier of a particular software component). The second number indicates the report number (the identifier of the report within the class, numbered from 0 to 99). This classification system is described in the introduction to the *Maintenance Messages (SEERs)* manual (NTP 557-7001-510). If no class was specified in the System Event and Error Reports screen, SEERs from all classes will be included in the report.
- ***Date & Time*** This field indicates the date and time at which the event or error occurred in the system.
- ***Type/Severity*** This field indicates the SEER type (Error, Admin or System) and its severity level (‘***’ = Critical, ‘**’ = Major, ‘*’ = Minor, and ‘Inf’ = Info).
- ***Node Location*** This field indicates the node on which the error occurred.
- ***Action*** This field gives a suggested action to correct the cause of the event or error.
- ***Description*** This field gives a brief explanation of the event or the cause for the error.

Procedure 8-1
Viewing SEER reports

Starting point: Customer Administration main menu

1 Select System Event and Error Reports.

The System Events and Error Reports screen appears (Figure 8-2).

2 Enter the class of SEERs that you want to retrieve. If you want to retrieve all SEER classes, leave the *Class* field blank.

3 Select a severity level. (To view SEERs at all severity levels, select “ALL”.)

4 Select a SEER (error) type.

5 If you wish to specify a start and end time for the reporting period, enter the required values in the *Report Start* and *Report End* fields.

6 Choose step 6a to view the report on the terminal or 6c to cancel.

a. Press [View Reports].

The report is displayed (Figure 8-3).

Press [Next Page] to view subsequent pages of the report.

b. Press [Cancel].

The System Event and Error Reports screen appears.

Printing SEER reports

An alternative method of obtaining SEER information is to monitor the MSM SEER printer (if there is one) and view the SEERs as they occur. To do so, SEER printing must be enabled in the General Options screen. (It is, by default). Although the format of the report is different from that used by the administration terminal, most of the information is the same (such as the class, number, description, and date and time).

In some instances you may also see additional information at the end of the message such as

Type of additional information	Description
RC x	where x is a number signifying a Return Code. These codes provide further information about the SEER and can be found in Appendix A of the *Maintenance Messages (SEERs)* manual (NTP 557-7001-510).
Serv. File <filename>	where the <filename> refers to a voice service ID.

Procedure 8-2 describes how to print SEER reports.

Procedure 8-2
Printing SEER reports

Starting point: Customer Administration main menu

1 Select System Event and Error Reports.

The System Events and Error Reports screen appears (Figure 8-2).

2 Enter the class of SEERs that you want to retrieve. If you want to retrieve all SEER classes, leave the *Class* field blank.

3 Select a severity level. (To view SEERs at all severity levels, select “ALL”.)

4 Select an error type.

5 If you wish to specify a start and end time for the reporting period, enter the required values in the *Report Start* and *Report End* fields.

6 Choose step 6b to print the report, or 6c to cancel.

a. Press [Print Reports].

You are prompted to make sure your printer is ready and on-line.

Press [Continue Printing] to continue printing, or press [Cancel Printing] at any time to stop printing. There may be some delay before control is returned to the terminal because the system waits for the printer to stop printing.

b. Press [Cancel].

The System Event and Error Reports screen appears.

Chapter 9: Operational Measurements

This chapter describes

- what operational measurements are
- the Operational Measurements menu
- Operational Measurement Options
- OM user usage reports
- how to use OM as a billing tool
- the Outcalling Audit Trail Report
- the Fax Audit Trail Report

Introduction

The Operational Measurement (OM) reports allow administrators to study how an MSM system is being used. These reports may be used to determine if a change in the system is required to improve the level of service provided by MSM.

The Operational Measurements menu

The items listed in the Operational Measurements menu (Figure 9-1) allow you to access screens that are used to view and set parameters related to the collection and storage of data, and to view and print traffic reports and outcalling and fax audit trail reports.

Figure 9-1

The Operational Measurements menu

```
ABC Company            Operational Measurements


          1  Operational Measurement Options

          2  User Usage Reports

        * 3  Outcalling Audit Trail Report

       ** 4  Fax Audit Trail Report


Select an item >

   Exit
```

```
*  This item appears only if Outcalling is enabled.
** This item appears only if Fax on Demand is enabled.
```

Note: Only a general description of the Outcalling Audit Trail Report and the Fax Audit Trail Report are provided at the end of this chapter. For more information about using the Outcalling Audit Trail Report, refer to the *Outcalling Application Guide* (NTP 555-7001-32). For more information about using the Fax Audit Trail Report, refer to the *Fax on Demand Application Guide* (NTP 557-7001-327).

Procedure 9-1

Using the Operational Measurements menu

Starting point: The Main Menu

1 Select Operational Measurements.

The Operational Measurements menu appears (Figure 9-1).

2 To choose an item, enter its number and press <Return>.

The menu corresponding to your selection appears. See the following sections later in this chapter for details:

<1> "Operational Measurement Options" (collection parameters)

<2> "OM user usage reports" (for viewing and printing reports)

<3> "Collecting outcalling audit trail data," or the Outcalling Application Guide for more information about outcalling administration and how to use this menu choice

<4> "Collecting fax audit trail data," or the Fax on Demand Application Guide for more information about fax administration and how to use this menu choice

3 Press [Exit] to return to the Main Menu.

Operational Measurement Options screen

The Operational Measurement Options screen (Figure 9-2) is read-only for customer administrators. The parameters can only be changed by system administrators. As customer administrator, you can view user usage reports because these are specific to each customer group. (Traffic reports present system-wide data and can only be viewed by the system administrator.) Two fields on this screen pertain to user usage reports: *Collect User Usage Data* and *Number of days of User Usage Data stored*.

Note: Because Operational Measurements are kept on hard disk, they are periodically overwritten (as determined by the number of days they have been specified to be kept on disk), and it is important that you view or print these reports before the system overwrites them with new information. The Operational Measurement Options screen determines how long data is stored before it is overwritten with new data.

Figure 9-2
The Operational Measurement Options screen

```
ABC Company             Operational Measurements

Operational Measurement Options
Collect Traffic Data:                      Disabled  Enabled
Traffic Period Start (hh:mm):              01:00
Traffic Period End (hh:mm):                01:00
Traffic Commit Interval (hh:mm):           01:00
Number of Days of Traffic Data Stored:     8
Collect User Usage/Session Trace Data:     Disabled  Enabled
Number of Days of User Usage Data Stored:  31
Collect Audit Trail Data:                  Disabled  Enabled
Number of days of Audit Data Stored:       7
Shutdown Audit Trail at Volume Full (%):   85
OM Collection ACCESS Class                 256

Select a softkey >
   Save
```

The following read-only fields are displayed:

- ***Collect Traffic Data*** When this field is “Enabled,” a statistical record of voice messaging and other voice services, voice channel traffic, networking message traffic (AMIS networking), and voice disk space usage will be collected and stored on disk. The default is “Enabled.” For more information, see the *System Administration Guide* (NTP 557-7001-300).
- ***Traffic Period Start (hh:mm)*** This is the time at which data begins to be collected, based on the 24-hour clock. The default is “01:00.”
- ***Traffic Period End (hh:mm)*** This is the time at which data stops being collected, based on the 24-hour clock. The default is 01:00.
- ***Traffic Commit Interval (hh:mm)*** This is the value entered in this field determines how often the collected traffic statistics are written to the hard disk within the defined traffic period. The default is “01:00.”

- ***Number of Days of Traffic Data Stored*** This field determines the number of days that traffic data is maintained before being overwritten by new traffic data. The default is 8. The old traffic data is removed from the disk during system audits at 1:20 a.m. each morning.
- ***Collect User Usage/Session Trace Data*** This field controls the collection and storage of data recording user activity with respect to the voice messaging, express messaging, and call answering. This field also controls the enabling or disabling of session trace data for these services. The default is “Enabled.”
- ***Number of Days of User Usage Data Stored*** This field determines the number of days that information about user activity is kept on the hard disk before it is overwritten. The range is from 1 to 63. The default is 31.
- ***Collect Audit Trail Data*** When this field is set to “Enabled,” Outcalling Audit Trail Reports are generated by the system. These reports can be used to obtain information about a specific user name, mailbox, or phone number. The reports give you either summary or detailed information about the number of calls, the start time and duration of calls, the numbers called, whether the RN or DNU service was used, and the status of calls. The default is “Enabled.” See the “Collecting outcalling audit trail data” section on page 9-13 for more information.
- ***Number of Days of Audit Trail Data Stored*** This field is used if *Collect Audit Trail Data* is set to “Enabled.” This field determines the number of days that information about user activity is kept on the hard disk before it is overwritten. The range is from 1 to 63. The default is 31.
- ***Shutdown Audit Trail at Volume Full (%)*** This field is used if *Collect Audit Trail Data* is set to “Enabled.” When the volume on which audit trail data is stored meets this percentage, collection of audit trail data is disabled. (Note that this is a percentage of text space, not voice space.) The default is 85%.
- ***OM Collection ACCESS Class*** This field indicates the class number of the ACCESS application for which Operational Measurements should be collected. The valid range for this number is 0 to 8999. It is primarily intended to be used to collect messenger desktop access of Meridian Mail ports.

OM user usage reports

The OM user usage reports are used to monitor how specific users are making use of voice messaging and AMIS networking (if enabled). Data is broken down to show activity on a daily basis. User usage reports display the following information about each user:

- the number of times a user has logged on
- the number of times callers have connected to a user's mailbox through the express messaging and call answering services
- the total connect time for all user logons, express messaging, and call answering sessions
- the number of messages received through the express messaging and call answering services
- the number of messages created during logon
- the total message length (for all messages created and received by a user)
- the disk space used by the user's messages and greetings

Note: Check the Operational Measurement Options screen to make sure that the collection of user usage data is enabled. If it is disabled, ask your system administrator to enable it.

User Usage Reports screen

Fill in the fields in the User Usage Reports screen (Figure 9-3) to specify the criteria that will determine which data is to be retrieved in the report.

Figure 9-3
The User Usage Reports screen

```
 ABC Company              Operational Measurements

   User Usage Reports

   Selection Criteria:                [All]  Lastname  Mailbox  Department

   Sorted:                            [Alphabetically]  By_Department

*  Include Local Usage:               No [Yes]

** Include Meridian Network Usage:    [No] Yes

&  Include AMIS Network Usage:        [No] Yes


   Report Start   (dd/mm/yy): _________________   (or blank for oldest)
   Report End     (dd/mm/yy): _________________   (or blank for newest)
 ______________________________________________________________________
 Select a softkey >

   Exit                        View        Print
                              Reports     Reports
```

```
  *   Appears when AMIS Networking or Meridian Networking is enabled.
  **  Appears when Meridian Networking is enabled.
  &   Appears when AMIS Networking is enabled.
```

The following fields are displayed:

- ***Selection Criteria*** These are the options that are offered represent search parameters. Any statistics matching your selection will be displayed in the report. Your choices are
  - ***All*** retrieves user usage data for all local users and will be displayed in the report.
  - ***Lastname*** retrieves the data for the user that matches the last name you will type in. When this option is selected, you are prompted for the last name of the user whose data you want to view. If the last name is not found, use the Find Users feature in User Administration to verify that the name exists in the system. You may use wildcard characters (+, ?, or _) to retrieve a group of users.
  - ***Department*** retrieves all users associated with that department and displays them in the report. When this option is selected, you are prompted for a department name. The entry you make must correspond to an existing entry in the system. You may use wildcard characters ("+," "?" or "_") to retrieve a group of departments.

    Note: When searching by department, users with blank department fields will not be displayed.

— ***Mailbox*** displays the data for a particular mailbox number. When selected, you are prompted for the mailbox number of the user whose data you want to view. You may use wildcard characters ("+," "?" or "_") to retrieve a range of mailboxes. If the mailbox number is not found, use the Find Users feature in User Administration to verify that the mailbox number exists in the system.

- ***Sorted*** If your selection criteria is "All," you can choose to sort the user data alphabetically according to user names, or according to department names.

  Note: When sorting by department, users with blank department fields will not be displayed.

- ***Include Local Usage*** This field is displayed if Meridian Networking and/or AMIS networking are enabled. (If networking is not enabled, the report only displays local usage.) When this field is set to "Yes," the report will include user usage data for local voice messaging. This includes information about the number of express messaging and logon sessions the user had during the specified interval, the number of messages that were created during the express messaging, the logon sessions, the total length of those messages, the amount of time that the user was connected to MSM, and the amount of disk space used by those messages. The default is "Yes."

- ***Include Meridian Network Usage*** This field is displayed if Meridian Networking is enabled. When this field is set to "Yes," the report will include user usage data for any Meridian Networking activity. This information includes the number of economy, standard and urgent messages that users created during the specified interval as well as the total length of the messages created (for each of the three types of messages). The default is "No."

- ***Include AMIS Network Usage*** This field is displayed if AMIS Networking is enabled. When this field is set to "Yes," the report will include user usage data for any AMIS Networking activity. This information includes the number of economy, standard and urgent messages that users created during the specified interval as well as the total length of the messages created (for each of the three types of messages). The default is "No."

- ***Report Start (dd/mm/yy)*** This is the date on which the selected reports are to start. If *Report Start* predates the earliest available date, the report starts with the earliest available date. Leave the field blank to retrieve reports for the earliest available data.

- ***Report End (dd/mm/yy)*** This is the date on which the selected reports are to end. If *Report End* exceeds the latest available period, the report ends with the last available period. Leave the field blank to report on the most recent data.

Viewing User Usage Reports

Procedure 9-2 describes the steps you need to follow to view User Usage Reports. Figure 9-4 shows an example of how the data is formatted in a User Usage Report, whether it is viewed from a terminal or a printer. This figure shows two types of user usage data (local and AMIS networking).

Procedure 9-2
Viewing User Usage Reports

Starting point: The Operational Measurement Reports screen

1 Select User Usage Reports.

The User Usage Reports screen is displayed (Figure 9-3).

2 Choose the selection criteria by which you want to retrieve data.

3 If the selection criteria is “All,” select how you want the data to be sorted: alphabetically (by user name) or by department name.

4 Select the type of data you want to view: Local Usage, Meridian Network Usage, or AMIS Network Usage. You can select all one, two, or all three if required.

5 If you wish to specify a start and stop time for the reporting period, enter the required values in the *Report Start* and *Report End* fields.

6 Choose step 6a to view the reports, 6b to print the reports, or 6c to exit or cancel.

a. Press [View Reports].

The selected report screens are displayed. (See the following pages for descriptions of each report.)

Press [Next Page] to view subsequent pages of the report; press [Exit] to return to the User Usage Reports screen.

b. Press [Print Reports].

You are prompted to make sure your printer is ready and on-line.

Press [Continue Printing] to print the reports, or press [Cancel Printing] at any time to cancel printing. (There may be some delay before control is re-turned to the screen because it waits for the printer to stop printing.)

c. Press [Exit].

The Operational Measurements menu is redisplayed.

Figure 9-4
The Voice Messaging User Usage report

```
ABC Company                User Usage Reports

Last Name    First Name     Department     Mailbox          COS
Smith        David          9T20           2255              1

Local Usage:
             Number of      Connect     Number of    Message   Disk
             Sessions       Time        Messages     Length    Used
Date        EM/Ans Logon    (mm:ss)   EM/Ans Logon   (mm:ss)   (mm:ss)
02/12/90      10     4         4:00    9    2         6:30     4:30
02/13/90       8     3         3:12    8    3         12:35    5:30
------------------------------------------------------------
Total         18     7         7:12   17    5         19:05


AMIS network Usage:
             Number of    Total   Number of    Total  Number of    Total
             Economy      Length  Standard     Length Urgent       Length
Date         Messages     (mm:ss)  Messages    (mm:ss) Messages    (mm:ss)
02/12/90           10     3:10         1        1:30     0          0:00
02/13/90           10     1:20         7        5:10     0          0:00
                 --------------      -------------    ----------------
Total              20     4:30         8        6:40     0          0:00

----------------------------------------------------------------------
Last name    First name     Department     Mailbox            COS
Roeg         Nick           Marketing      2929                2

Local Usage:
             Number of      Connect      Number of      Message   Disk
             Sessions       Time         Messages       Length    Used
Date         EM/Ans Logon   (mm:ss)     EM/Ans Logon    (mm:ss)   (mm:ss)
No User Activity

Select a softkey >

Exit                                Next Page*
```

* The “Next Page” softkey appears when the information fills more than one screen.

User Usage reports—general fields

The following fields appear on all user usage reports:

- ***Last Name*** This is the user’s last name.
- ***First Name*** This is the user’s first name.
- ***Department*** This is the user’s department name.
- ***Mailbox*** This is the user’s mailbox number.
- ***COS*** This is the COS number that identifies the COS to which the user belongs. If this number is 0, it signifies a personal COS.

Local Usage fields

The following fields appear for Local Usage:

- ***Date*** This is the date of the reporting interval.
- ***Number of Sessions (EM/Ans and Logon)*** This is the number of express messaging, call answering, and logon sessions that occurred during the interval. To check the number of messages that were actually received or created during these sessions, check the *Number of Messages* field.

  If the number of logons is zero, you might want to check the *Time of Last Logon* field in the View/Modify Local Voice User screen. If a considerable amount of time has passed since the last successful logon, you may want to contact the user to see if he or she is having any problems logging on. For example, the user may not know how to log on and retrieve messages (especially if this is a new user), or the user may have forgotten the mailbox password and has stopped trying to log on.
- ***Connect Time (mm:ss)*** This is the length of time that the user was connected to the voice messaging service on the given date.
- ***Number of Messages*** This is the number of messages that the user received and created on the given date.
  - ***EM/Ans*** This refers to the number of messages left in the user's mailbox by both the express messaging and call answering services. The number of abandoned calls (where no message is left) can be calculated by subtracting the Number of EM/Ans Messages from the Number of EM/Ans Sessions.
  - ***Logon*** This refers to the number of messages that the user created on the report date.
- ***Message Length (mm:ss)*** This is the total time (in minutes and seconds) of all call answering messages received and messages created by the user on the given date.
- ***Disk Used (mm:ss)*** This is the amount of storage used by the user (measured in minutes and seconds) on the given date.

Meridian Networking and AMIS Networking Usage fields

The following fields appear for both Meridian Networking and AMIS Networking Usage:

- ***Date*** This is the date of the reporting interval.
- ***Number of Economy Messages*** This is the number of economy messages that the user created on the given date.

- ***Total Length (mm:ss)*** This is the total length (in minutes and seconds) of all AMIS networking messages created by the user on the given date, and tagged as economy.
- ***Number of Standard Messages*** This is the number of standard messages that the user created on the given date.
- ***Total Length (mm:ss)*** This is the total length (in minutes and seconds) of all AMIS Networking messages created by the user on the given date, and tagged as standard.
- ***Number of Urgent Messages*** This is the number of urgent messages that the user created on the given date.
- ***Total Length (mm:ss)*** This is the total length (in minutes and seconds) of all AMIS Networking messages created by the user on the given date, and tagged as urgent.

User Usage report analysis

If the EM/Ans numbers are high and the logon count is low, the user may be accumulating too many messages before checking the mailbox and, thereby, contributing to a low disk space problem. If disk space is already low (ask your system administrator to check the Disk Usage Detail report), you may need to make the user more aware of the importance of not accumulating messages.

If disk space is low, also monitor the length of messages closely. If messages are too long for some users, you may wish to assign a Class of Service (COS) with a shorter storage limit to encourage the users to empty their mailboxes more frequently. (See Chapter 5, “User Administration”). You can also ask the system administrator to alter the maximum message length parameter (as described in Chapter 10, “Class of Service Administration”) to deter callers from leaving long messages.

Another method for reducing the disk space used without compromising service is to configure individual mailboxes (including storage time allowed) as they are needed. Consult your system administrator regarding setting up a personal COS for the specific individuals. If none of the above actions effectively reduce the disk space used, you may need to expand your system.

Using OM as a billing tool

As an accounting and billing tool, Operational Measurements is used to generate the daily user billing files (for local activity). Use the User Usage reports to compile data for billing. Refer to the *AdminPlus Guide* (NTP 557-7001-340) for more information about more sophisticated billing tools.

If your organization does not bill users of MSM, you may not need to use the User Usage component of Operational Measurements. However, it can also be used for tracking problems/history or for security reasons (for example, who is logging on, and who is receiving messages). This can only be done from the customer administration level in a Multi-Customer system.

Collecting outcalling audit trail data

Outcalling audit trail statistics allow you to monitor how users are using the remote notification and delivery to non-user features. There are two outcalling audit trail reports that you can generate: a summary report and a detail report. Each report provides outcalling data for a certain period of time (as specified by you).

For more information about the Outcalling Audit Trail report and other Outcalling administration tasks, refer to the *Outcalling Application Guide* (NTP 555-7001-323).

The summary report provides the following information:

- the user's name
- the user's mailbox number
- the type of call (DNU or RN)
- the call status (answered, busy, and so on.)

The detail report provides the following information:

- the user's name
- the user's mailbox number
- the time at which the transaction started
- the duration of the transaction
- the specific outcall process
- the device (pager, phone, pager service) and the target number
- the channel DN of the channel that was used to place the outcall
- the number of retries

Generating an outcalling audit trail report

The Outcalling Audit Trail Report screen (Figure 9-5) is accessed from the Operational Measurements menu. This is a report selection screen in which you specify the type of report you want to retrieve (summary or detail) as well as the duration of the report period.

The summary report shows each outcall (RN or DNU) that was made during the reporting interval along with the user that made the call, the user's mailbox number, the target number, and the status of the call. It shows only completed (answered) calls.

The detail report provides a more thorough account of each outcall request including the start time and duration of the call, the DN of the channel that was used to place the call, and the number of retries (if any). It shows all outcalls, both successfully completed and unsuccessful.

You must specify whether you want to generate a report for a particular user, mailbox number, phone number, or all. You can either generate a report that includes all of the information currently stored on disk for that user (mailbox number or phone number) or generate a shorter report for a specific time period. The report can either be viewed on your terminal or printed.

Procedure 9-3
Generating an outcalling audit trail report

Starting point: The Customer Administration Menu

Note: Field descriptions are provided on page 9-15.

1 Select Operational Measurements.

2 Select Outcalling Audit Trail Report.

The Outcalling Audit Trail Report screen (Figure 9-5) is displayed.

3 Specify the report type (summary or detail).

4 Specify the selection criteria (name, mailbox, target phone number, or all).

5 Fill in the field that corresponds to the selection criteria you chose.

6 Enter the report start and end times.

If these fields are left blank, all outcalling data that is currently stored on disk will be retrieved.

7 To view the report on screen, go to step 7a. To print the report, go to step 7b.

a. Press [View Reports].

The first outcalling audit trail report is displayed.

If you selected "Summary," see the "The Summary Outcalling Audit Trail Report" section. If you selected "Detail," see the "The Detail Outcalling Audit Trail Report" section.

b. Press [Print Reports].

A new set of softkeys are displayed: [Cancel Printing] and [Continue Printing].

Press [Continue Printing] to print the report or [Cancel] if you do not want to print the report.

If you selected [Continue Printing], a [Cancel] softkey is displayed which can be used to cancel printing, once printing has started.

8 If you are viewing the report, press [Next Page] to view the next page of the report.

When the last page has been displayed, a prompt appears indicating it is the end of the report.

9 Press [Exit].

You are returned to the Outcalling Audit Trail Report screen.

Figure 9-5
The Outcalling Audit Trail Report

```
ABC Company                   Operational Measurements

Outcalling Audit Trail Report

Report Type:            [Summary]   Detail

Selection Criteria:     [All]     Name    Mailbox Target_Phone_Number

*  Last Name:           _____________________________

*  First Name:          _____________________

** Mailbox Number:      _________________________

&  Target Phone Number: ________________________


Report Start  (dd/mm/yy hh:mm): _______________________ (or blank for oldest)
Report End    (dd/mm/yy hh:mm): _______________________ (or blank for newest)



Select a softkey >

Exit                  View Reports    Print Reports
```

```
*  The Name fields appear only when the selection criteria is "Name."
** The Mailbox field appears only when the selection criteria is "Mailbox."
&  The Target Phone Number field appears only when the selection criteria is
   "Target_Phone_Number."
```

The following fields are displayed on the Outcalling Audit Trail Report screen:

- ***Report Type*** Your options are “Summary” and “Detail.” A summary report shows only completed calls. A detail report shows all attempts, both successful and unsuccessful.
- ***Selection Criteria*** All entries in the database can be viewed or you can view data for a specific user, mailbox number, or phone number.
- ***Note:*** If Meridian Networking is installed, you cannot use a remote user’s mailbox number as a search criterion.
- ***Last Name*** This field is displayed if *Selection Criteria* is set to “Name.” If you want to view outcalling data for a particular user, enter that user’s last name (and first name in the next field as there may be more than one user with the same surname). This field accepts all characters, except “+,” “?” and “_” (underscore).

- ***First Name*** This field is displayed if *Selection Criteria* is set to “Name.” If you want to view outcalling data for a particular user, enter that user’s full first name (as well as the last name in the previous field). This field accepts all characters, except “+,” “?” and “_” (underscore).
- ***Mailbox*** This field is displayed if *Selection Criteria* is set to “Mailbox.” To view outcalling data for a specific mailbox, enter the full mailbox number. This field accepts numeric data only.
- ***Target Phone Number*** This field is displayed if *Selection Criteria* is set to “Target Phone Number.” To view outcalling data for a particular target phone number or pager number (the number entered in the *Target DN* field in the outcalling schedule), enter the full number in this field. This field accepts numeric data only.
- ***Report Start/End*** Enter the start date and time and end date and time to indicate the reporting period.

The Summary Outcalling Audit Trail Report

The Summary Outcalling Audit Trail Report (Figure 9-6) is displayed if you selected “Summary” as the report type.

Figure 9-6
The Summary Outcalling Audit Trail Report

```
ABC Company            Operational Measurements

Outcalling Audit Trail from 01/10/90 to end of data.

Date (dd/mm/yy)
 Name          Mailbox Number
  Start   Duration  Target Phone Number    Type    Call Status
  (hh:mm) (mmm:ss)

10/01/90
 Smith, J           7550
  12:40   1:10      98292962               DNU     Answered
  12:45   0:05      98292962               DNU     No DTMF Conf.
  13:45   0:18      8051-345643            RN      Answered


10/02/90
 Jones, D           7091
  8:52    0:02      8052                   RN      Answered
  8:57    0:06      8052                   RN      Disabled

 Select an item >

    Exit                                  Next Page*
```

*This softkey is displayed if data fills more than one screen.

The summary report displays the following information:

- ***Date*** The date the call was made.

- ***Name*** This is the name of the Meridian Mail user who initiated the call.
- ***Mailbox Number*** This is the mailbox that originated the call.
- ***Start Time*** This is the time at which the call was made.
- ***Duration*** This is the length of the call in minutes and seconds.
- ***Target Phone Number*** This is the number called. A maximum of 30 digits can be displayed in this field. For calls placed to paging services (such as SkyPager), the PIN number is also displayed (for example, in 8051-345643, the last 6 digits are the PIN number). If the full number is longer than 30 digits, the first few digits in the paging service phone number will be truncated.
- ***Type*** This field displays the outcalling service that was used: either Remote Notification or Delivery to Non-User.
- ***Call Status*** This field displays the result of the call.
  - ***Answered*** This indicates that the destination number was answered and the message was heard by the called party.
  - ***RN Disabled*** This indicates that the called party answered and pressed 3 to disable RN.
  - ***No DTMF Confirmation*** This indicates that the called party did not press 2 to hear a DNU message (not relevant if DTMF confirmation is not required).
  - ***Not Played*** This indicates that the called party disconnected before the DNU message was played.

The Detail Outcalling Audit Trail Report

The Detail Outcalling Audit Trail Report (Figure 9-7) is displayed if you selected “Detail” as the report type.

Figure 9-7
The Detail Outcalling Audit Trail Report

```
ABC Company                    Operational Measurements

Outcalling Audit Trail from 10/10/90 to end of data.

Date (dd/mm/yy)
 Name              Mailbox Number
Transaction     Start  Duration     Device/Target Phone Number    Channel  Re-
(hh:mm)       (hh:mm)(mmm:ss)                                     DN       try
 Request #      Outcall Process     Call Status    Outcall Action

10/02/90
 Howe G.           3000
15:10           15:10                                                       0
 #1137          RN Submission                    Continue
15:10           15:10                                                       0
 #1137          RN Validation                    Continue
15:10           15:10   0:15      Phone/555-7050            2004            0
 #1137          RN Call Results     Answered       Remove, user logged in

Select a softkey >

   Exit                                            Next
                                                   Page*
```

*This softkey is displayed if data fills more than one screen.

In addition to the information displayed in the summary report, the detailed report contains the following information:

- ***Transaction Time*** This is the time at which the audit trail record was stored.
- ***Start Time*** This is the time at which the current outcall process started.
- ***Duration Time*** This is the length of the call.
- ***Device/Target Phone Number*** This is the type of device called followed by the phone/pager number. The device will be one of the following:

  — Phone

  — ToneP (tone pager)

  — Voice (voice pager)

  — NumPa (numeric pager)

  — PaSrv (pager service)

  If the device is a paging service, the paging service phone number followed by the pager identification number (PIN) will be displayed. The maximum length for this field is 30 digits. If this limit is exceeded, the first few digits of the paging service phone number will be truncated.
- ***Channel DN*** This is the DN associated with the voice channel used.

- ***Retry*** This is the number of retries that have been made at the time of the attempt. This field is incremented by one each time
  - a DN is busy and is retried or
  - when multiple target DNs are defined, and they have all been tried and either not answered or answered with no login
- ***Transaction Request Number*** A unique number identifying the (RN or DNU) request.
- ***Outcall Process*** This is the type of audit trail entry. This could be one of the following:
  - ***Submission*** This indicates that a request has been made for an outcalling service.
  - ***Recovery*** This indicates that messages for outcalling have been detected and submitted after a system reboot.
  - ***Cancellation*** This indicates that during recovery, requests for outcalling have been detected, but have been cancelled since they are no longer valid.
  - ***Logout/Admin*** This indicates that one of two conditions has occurred. The first possibility is that a user has logged out with unannounced messages left in his or her mailbox. Normally, if a user is listening to a message when a new message comes in, the new message is announced after the user has finished listening to the other message. However, if the user hangs up before the message has finished playing, the new message will not be announced. (In this situation, the user will continue to be notified of messages.) The second possibility is that an administrator has modified a user's account while there were unread messages in the user's mailbox.
  - ***Validation*** This indicates a checking process just before a call is made.
  - ***Call Results*** This indicates information regarding the *Call Status* and *Outcall Action* in the adjacent fields to the right.
- ***Call Status*** This is a general statement of the results of a call. The following are the possibilities:
  - ***Busy*** This indicates the RN or DNU target DN was busy. A retry attempt will be scheduled if the busy and no answer retries have not been exhausted.

— ***Answered*** This indicates that an outcall to an RN or DNU target DN was placed. The RN call was answered, but the user did not log in on the same call to listen to the message. Remote notification will be rescheduled if the answered retries have not been exhausted. The DNU call was answered and the message was successfully delivered.

— ***No Answer*** This indicates that an outcall to an RN or DNU target was placed and the call was not answered. A retry attempt will be scheduled if the no answer retries have not been exhausted.

— ***No DTMF Conf*** This indicates that an outcall to a DNU target DN was placed. The call was answered, but the caller did not provide the required DTMF confirmation (in other words, he or she did not press 2 to hear the message). DNU will be rescheduled if the answered retries have not been exhausted.

— ***Reorder*** During an outcall, the target DN was dialed, and a reorder tone was detected. The primary reasons for a reorder tone are an invalid DN was called, there were no resources to complete the call, or there were access restrictions that the DN violated. The call attempt will be treated as a busy attempt, and a retry attempt will be scheduled if the busy and no answer retries have not been exhausted.

— ***Resource Delay*** This indicates that the outcall was not completed because the line on which the call was to be made was taken away due to an incoming call which was given priority. The outgoing call is retried on a different channel. If this is a persistent problem, reserve channels for outcalling and make sure no line DNs terminate on them.

— ***Incomplete*** This indicates that the outcall could not be completed. The call attempt will be treated as a busy attempt, and a retry attempt will be scheduled if the busy and no answer retries have not been exhausted. If there is an accompanying SEER, follow the action described in the *Maintenance Messages (SEERs)* guide (NTP 555-7001-510).

— ***RN Disabled*** During an RN attempt, the target DN was dialed, the call was answered, and 3 was pressed to disable remote notification. There will be no further RNs for this user until the user logs into his or her mailbox.

— ***Not Played*** During a DNU attempt, the target DN was dialed, and the call was answered and disconnected before DNU could play its message. If the answered retries have not been exhausted, DNU will retry using the answered retry limits and intervals.

— ***Illegal Window*** This indicates that a user attempted to send a DNU message. The message became stale during an illegal time window and could not be delivered. (The stale date parameter defaults to 36 hours. If a message cannot be delivered within this time, a message becomes stale.) The user receives a non-delivery notification.

— ***Stale Date*** This indicates that a user attempted to send a DNU message. The message was not delivered immediately (either because it was sent during a restricted time period, or the call was not answered and was, therefore, rescheduled). The message became stale during a permitted time period and could not be delivered. (The stale date parameter defaults to 36 hours. If a message cannot be delivered within this time, a message becomes stale.) The user receives a non-delivery notification (NDN.)

— ***Sit Tone*** During an outcall, the target DN was dialed, and a sit tone was detected. A sit tone is usually a series of tones followed by a voice message indicating that this DN is invalid. This causes remote notification for this user to be turned off by disabling all of his or her remote notification schedules. The administrator or user should define a new valid DN and reenable remote notification for the user. DNU is cancelled for the message and the user receives a non-delivery notification (NDN).

— ***Bad Called DN*** During an outcall, the target DN was dialed, and a bad-called DN was detected by the local switch. (In other words, the target DN is invalid for some reason.) This causes remote notification for this user to be turned off by disabling all of his or her remote notification schedules. The administrator or user should define a new valid DN and reenable remote notification for the user. DNU is cancelled for the message, and the user receives a non-delivery notification (NDN).

- ***Outcall Action*** This field indicates the action performed on the request. The following are the possibilities:

— ***Continue*** This field indicates the validation has been passed and a call attempt is to be made.

— ***Remove, retry limit reached*** This indicates that, after the call, the retry was not rescheduled because the retry limit had been reached.

— ***Remove, another RN exists*** This field indicates the validation step determined that the user has logged on since the last RN attempt and the retry was cancelled.

— ***Reset*** This indicates that a problem was encountered retrieving information. Requests will be discarded and recovered from disk.

— ***Delayed 1*** This indicates that a channel on which to call out was not obtained. The action will be retried later.

— ***Delayed 2*** This indicates that a channel was obtained but it was taken away before the call was made. Will retry later.

— ***Defer*** This indicates that another call attempt has been scheduled. RN calls to pagers are always rescheduled because the user may fail to receive the page. (However, if the user logs on before the next retry, the retry will be cancelled.)

Collecting fax audit trail data

Fax audit trail statistics allow you to monitor how users are using the Fax on Demand features. There are actually two fax audit trail reports that you can generate: a summary report and a detail report. Each report provides fax data for a period (as specified by you).

For more information about the Fax Audit Trail report and other Fax on Demand administration tasks, refer to the *Fax on Demand Application Guide* (557-7001-327).

The summary report provides the following information:

- the name of the application
- the billing DN
- the called DN
- the call status (answered, busy, and so on)

The detail report provides the following information:

- the name of the application
- the billing DN
- the time at which the transaction started
- the duration of the transaction
- the calling DN
- the DN of the channel that was used to place the outcall
- the number of retries
- the specific outcall process
- the call status (answered, busy, and so on)
- the outcall action (for example, transmitted)

Before you can generate a fax audit trail report, you must enable the collection of audit trail data. The following steps are necessary to enable audit trail data collection and generate a report:

1 Enable audit trail data collection.

   This is done in the Operational Measurement Options screen. You must be logged on as the system administrator to do this step.

2 Specify the characteristics of the report you want to generate in the Fax Audit Trail Report screen. This includes:

   — specifying the report type (summary or detail)

   — specifying whether you want to view data for a specific billing DN, a or called DN, or all DNs

   — specifying the period of time that the report should cover (for example, the past 3 hours, the past 2 days)

3 View or print the report and analyze it.

Generating a fax audit trail report

The Fax Audit Trail Report screen (Figure 9-8) is accessed from the Operational Measurements menu. This is a report selection screen in which you specify the type of report you want to retrieve (summary or detail) as well as the duration of the report period.

The summary report shows each fax outcall that was made during the reporting interval along with the calling DN and the status of the call. The detail report provides a more thorough account of each outcall request, including the DN of the channel that was used to place the call and the number of retries (if any).

You must specify whether you want to generate a report for a particular user, mailbox number, phone number, or all. You can either generate a report that includes all of the information currently stored on disk for that billing DN or called DN, or generate a shorter report for a specific time period. The report can either be viewed on your terminal or printed.

Procedure 9-4
Generating a fax audit trail report

Starting point: The Customer Administration Menu

1 Select Operational Measurements.

2 Select Fax Audit Trail Report.

   The Fax Audit Trail Report screen (Figure 9-8) is displayed.

3 Specify the report type (summary or detail).

   See the following pages for field descriptions.

4 Specify the selection criteria (Billing DN, Called DN, or All).

5 Enter the report start and end times.

If these fields are left blank, all outcalling data that is currently stored on disk will be retrieved.

6 Press [View Reports], [Print Reports], or [Cancel] if you do not want to view reports at this point.

The first fax audit trail report is displayed or printed.

See the next section, “The Summary Fax Audit Trail Report.”

7 Press [Next Page] to view the next page of the report.

When the last page has been displayed, a prompt appears indicating it is the end of the report.

8 Press [Exit].

You are returned to the Fax Audit Trail Report screen.

Figure 9-8
The Fax Audit Trail Report

```
ABC Company              Operational Measurements

Fax Audit Trail Report

Report Type:            [Summary]    Detail

Selection Criteria:       [All]      Billing_DN     Called_DN

 *  Billing_DN:  _______________________________

 *  Called_DN:   _______________________________



Report Start  (dd/mm/yy hh:mm): _______________________ (or blank for oldest)
Report End    (dd/mm/yy hh:mm): _______________________ (or blank for newest)

Select a softkey >
   Exit                      View         Print
                             Reports      Reports
```

* Only one of these fields will be displayed, depending on the Selection Criteria. See the field descriptions below.

The following fields are displayed on the Fax Audit Trail Report:

- ***Report Type*** Your options are “Summary” and “Detail.” The detail report displays more information.
- ***Selection Criteria*** All entries in the database can be viewed or you can view data for a specific Billing DN or Called DN.

- ***Billing DN*** This field limits the report to fax deliveries associated with a particular billing DN. This DN can be 0 to 31 digits.
- ***Called DN*** This field limits the report to fax deliveries associated with a particular called (destination) DN. This DN can be 0 to 31 digits.
- ***Report Start/End*** Enter the start and end date and time to indicate the period of time that should be included in the report.

Procedure 9-5
Printing the Fax Audit Trail Report

Starting point: The Customer Administration Menu

1 Select Operational Measurements.

The Operational Measurements menu appears.

2 Select Fax Audit Trail Report.

The Fax Audit Trail Report appears (Figure 9-8).

3 Change the selection criteria as desired.

4 Ensure that the printer is on-line and has paper.

5 Press [Print Reports]. (Ensure that the printer is on-line.)

A new set of softkeys are displayed: [Cancel Printing] and [Continue Printing].

6 Press [Continue Printing] to print the report or [Cancel] if you do not want to print the report.

If you pressed [Continue Printing], a [Cancel] softkey is displayed which can be used to cancel printing once printing has started.

You are returned to the Operational Measurements menu.

The Summary Fax Audit Trail Report

The Summary Fax Audit Trail Report (Figure 9-9) is displayed if the report type is "Summary."

Figure 9-9
The Summary Fax Audit Trail Report

```
ABC Company       Operational Measurements

Fax Audit Trail from  9/23/93 to end of data.

Date (dd/mm/yy)
 Description       Billing DN
  Start   Duration  Called DN             Call Status
  (hh:mm) (mmm:ss)

9/23/93
 FID 2222          3656
  17:37   0:37 4018051              No Carrier
  17:40   0:37 4018051              Transmit Error
  17:44   2:45 4018051              Transmitted

Select an item >

   Exit                                Next Page*
```

*This softkey is displayed if data fills more than one screen.

The summary report displays the following information:

- ***Date*** This is the date the call was made.
- ***Description*** This is the name (acronym) of the application.
- ***Billing DN*** This is the billing DN that originated the call.
- ***Start Time*** This is the time at which the call was made.
- ***Duration*** This is the length of the call in minutes and seconds.
- ***Called DN*** This is this destination DN for the fax delivery.
- ***Call Status*** This is this field displays the result of the call.
  - — ***Transmitted*** This indicates that fax transmission completed without error.
  - — ***Transmit Error*** This indicates that the fax transmission started but was not completed successfully.
  - — ***No Carrier*** This indicates that the fax transmission was not started because the call was not answered, or was answered, but not by a compatible fax device.

The Detail Fax Audit Trail Report

The Detail Fax Audit Trail Report (Figure 9-10) is displayed if the report type is “Detail.”

Figure 9-10
The Detail Fax Audit Trail Report

```
 ABC Company                      Operational Measurements
Fax Audit Trail from  9/23/93 to end of data.

Date (dd/mm/yy)
 Description              Billing DN
Transaction  Start   Duration     Called DN             Channel DN   Retry
(hh:mm)      (hh:mm) (mmm:ss)
 Request #   Outcall Process   Call Status    Outcall Action

9/23/93
 FID 2222                 3656
17:37        17:37                                                   0
#*****       Submission        Transmitted    Continue
17:37        17:37   0:37        4018051                2802         0
#00000       Call              No Carrier     Defer
17:40        17:40   0:37        4018051                2802         1
#00000       Call              Transmit Error Defer
17:44        17:44   2:45        4018051                2802         2
#00000       Call              Transmitted    Remove

Select a softkey >
  Exit                                      Next
                                            Page*
```

*This softkey is displayed if data fills more than one screen.

In addition to the information displayed in the summary report, the detailed report contains the following information:

- ***Transaction Time*** This is the time at which the delivery should have taken place.
- ***Start Time*** This is the time at which the current outcall process started.
- ***Duration Time*** This is the length of the call.
- ***Called DN*** This is the destination DN for the fax delivery.
- ***Channel DN*** This is the DN that was used to originate the call.
- ***Retry*** This is the number of retries that have been made at the time of the attempt. This field is incremented by one each time a DN is retried.
- ***Request #*** This is the number of the transaction request.
- ***Outcall Process*** This is the type of audit trail entry. This could be:
  — ***Submission*** This indicates that a request has been made for an outcalling service.

- Instead of *Submission* you may also see *Recovery*.
- ***Recovery*** This indicates that faxes for outcalling have been detected and submitted after a system reboot.
- ***Validation*** This indicates a checking process just before a call is made.
- ***Call Results*** This indicates information regarding the *Call Status* and *Outcall Action* in the adjacent fields.

- ***Call Status*** This field indicates the status of the call attempt. The following are the possibilities:
  - ***Transmitted*** This indicates that the fax transmission completed without error.
  - ***Transmit Error*** This indicates that the fax transmission was started but was not successfully completed.
  - ***No Carrier*** This indicates that the fax transmission was not started because the call was not answered, or was answered, but not by a compatible fax device.
  - ***Illegal Window*** This indicates that the fax became stale during an illegal time window and could not be delivered. (The stale date parameter defaults to 36 hours. If a message cannot be delivered within this time, a message becomes stale.)
  - ***Stale Date*** This indicates that the fax was not delivered immediately (either because it was sent during a restricted time period or the fax was not transmitted and was, therefore, rescheduled). The fax became stale during a permitted time period and could not be delivered. (The stale date parameter defaults to 36 hours. If a fax cannot be delivered within this time, a fax becomes stale.)
  - ***Bad Called DN*** This indicates that during an outcall, the target DN was dialed, and a bad called DN was detected by the local switch. (In other words, the target DN is invalid for some reason.) The callback fax is not delivered and is removed.
  - ***Resource Delay*** This indicates that the outcall was not completed because the line on which the call was to be made was taken away due to an incoming call which was given priority. The outgoing call is retried on a different channel. If this is a persistent problem, reserve channels for outcalling and make sure no line DNs terminate on them.

- — ***Incomplete*** This indicates that the outcall could not be completed. The call attempt will be treated as a busy attempt, and a retry attempt will be scheduled if the busy and no answer retries have not been exhausted. If there is an accompanying SEER, follow the action described in the *Maintenance Messages (SEERs)* guide (NTP 555-7001-510).

- ***Outcall Action*** This field indicates the action performed on the request. The possibilities are as follow:
  - — ***Continue*** This indicates that the validation has been passed, and a call attempt is to be made.
  - — ***Remove, retry limit reached*** This indicates that, after the call, the retry was not rescheduled because the retry limit had been reached.
  - — ***Remove*** This indicates that the fax was successfully delivered.
  - — ***Reset*** This indicates that a problem was encountered retrieving information. Requests will be discarded and recovered from disk.
  - — ***Delayed 1*** This indicates that a channel on which to call out could not be obtained. Will retry later.
  - — ***Delayed 2*** This indicates that a channel was obtained, but it was taken away before the call was made. Will retry later.
  - — ***Defer*** This indicates that another call attempt has been scheduled.

Chapter 10: Class of Service Administration

This chapter provides you with

- an overview of the Class of Service administration
- a description of the types of COSs that are available
- a description of the customer administrator’s responsibility regarding the administration of Classes of Service
- the information you need to find and view lists of Classes of Service
- the information you need to view the details of a selected Class of Service

Note: As customer administrator, you can only find and view Classes of Service. If you want to add, modify, or delete Classes of Service, you will have to log on as system administrator. For more information, refer to the “Class of Service Administration” chapter in the *System Administration Guide*.

Overview

A Class of Service (COS) is a template that contains information about the capabilities that a user has, and the values that are assigned to specific parameters. It is essentially a method of classifying users according to their needs. When you add a user to a customer group, you must specify the Class of Service to which he or she belongs.

It is the responsibility of the system administrator to determine the types of users that need to be serviced and the corresponding classes of service that will be needed to meet their needs.

For example, to meet the needs of a business environment, the system administrator may have created one COS for secretaries, one for executives, and a standard COS for all other employees. If employees in certain departments are found to have different needs, a COS might be created for each department (one for Accounting, Engineering, Administration, and so on). For your residential customer groups, the system administrator may have created a Standard COS with only basic call answering features enabled, a Deluxe COS that provides additional chargeable features or a larger mailbox (in terms of storage space), a Family COS that provides users with the Family Mailbox feature, and a DialPulse COS for those users that do not have touch-tone phones. The COSs that have been created depend entirely on the types of users that will be added to the system.

If you want to change the capabilities (that is, increase mailbox storage capacity) you offer to certain users, COSs offer you the following advantages:

1. You only need to change the values in the COS, and all of the users that belong to that COS will automatically receive the same modifications.
2. You can reassign users to other COSs that meet their needs.
3. If no existing COSs are adequate, you can create personal COSs for those users.

   Personal COSs are described in more detail in the following section.

ATTENTION

Do not perform user administration during nightly DR audit.

At 3:30 a.m. every day, an audit of the DR directory is performed. Do not perform any user administration (adding, modifying, or deleting users) during this audit. Depending on how unbalanced the system is, this audit can take anywhere from 10 minutes (if the system has not been modified since the last audit) to 2 hours (if there have been many changes such as a lot of users being added).

VMUIF customer groups

VMUIF customer groups are suited for use in an environment like a university where each residence could have its own customer group. For your VMUIF customer groups, you might need

- a Standard COS with only basic call answering features enabled
- a Deluxe COS that provides additional chargeable features or a larger mailbox (in terms of storage space)
- a Family COS that provides users with the Family Mailbox feature
- a DialPulse COS for those users that do not have touch-tone phones

COS types

There are two different types of COS:

- system
- personal

The system COS

System COSs are defined at the system administration level. Up to 127 COSs can be defined for the entire system. For each customer group, you can assign up to 15 of the 127 COSs that are defined at the system level.

A multicustomer system can potentially have up to 2000 customer groups. As a result, some, if not all, of the 127 system COSs will be shared among some of these customer groups. Because system COSs can be shared by customer groups, they are not modifiable at the customer administration level. Customizing a COS to suit the needs of one customer group may adversely affect the users of another customer group. System COSs are, therefore, modifiable by the system administrator only, and the Class of Service Administration screens at the customer administration level are read-only.

The personal COS

The personal COS is a special class. This class allows you to deal with those users who require capabilities that do not fit in with any existing COSs. Mailboxes with a personal COS remain independent of changes made to other COSs.

In addition to the 15 COSs assignable to each customer group, the personal COS will always be available to a user.

Keep in mind, however, that as the number of personal COSs increases, the task of maintaining your classes of service and user profiles will become more difficult since all system COSs and personal COSs will have to be maintained.

Administrator responsibility

It is up to the system administrator to define Classes of Service for the entire system. Once created, the customer administrator is ready to add customer groups, assign up to 15 COSs to each customer group, and then add users. Each user that is added to the system must be assigned to an already defined class of service.

Once the classes of service have been defined for the system, the customer administrator is ready to

1 Add customer groups to the system (if they have not yet been added). This is described in Chapter 3, "Administrator logon."

2 Assign up to 15 COSs for each customer group.

   This is done in the General Options screen in General Administration. For more information about the General Options screen, refer to Chapter 6, "General Administration."

3 Select User Administration to add users to customer groups.

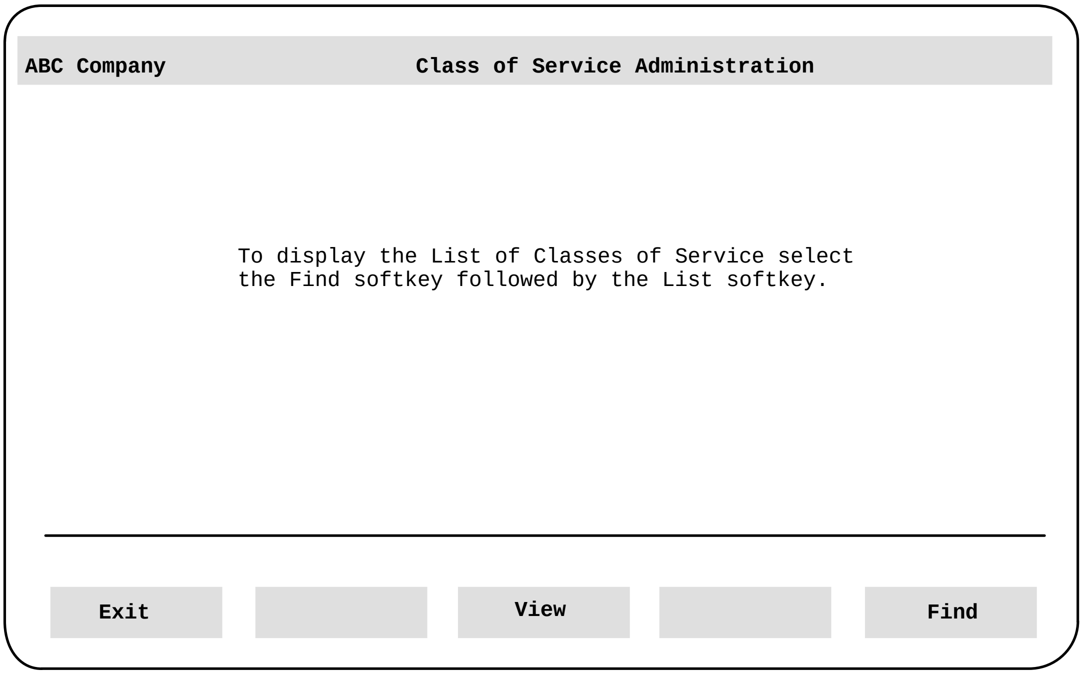
   Each user must be assigned to one of the system COSs, or a personal COS can be created. This is described in Chapter 5 "User Administration."

For information about creating classes of service, see the "Class of Service Administration" chapter in the *System Administration Guide*.

The class of service softkeys

When you select Class of Service Administration from the Customer Administration Menu, the following screen is displayed:

Figure 10-1
The Class of Service softkey selection screen



Use the softkeys as follows:

- If you do not know the number but only the name of the class of service you want to view, press [Find].

  "Finding a class of service" describes how to find a class of service.
- If you know the number of the COS you want to view, press [View]. (When you press [View], you are prompted to enter the class of service number.)
- To leave Class of Service Administration, press [Exit].

Finding and viewing a class of service

The first step in viewing an existing class of service is retrieving it. You can use the find functionality to display a group of COSs, or retrieve a single COS (if you know the exact COS number or name). Since you can have up to 127 COSs, it is recommended that you either retrieve the specific COS you want to view, or at least a subset of COSs. Otherwise, you will have to search through a long list of existing COSs.

Finding a class of service

When you press [Find], the Find Class of Service screen (Figure 10-2) is displayed. This screen allows you to find

- a specific COS by number

- a subset of COSs by name

  This is achieved by using wildcard character matching. For more information about using wildcards when finding a class of service, refer to “Using wildcard characters” on page 5-8.
- a subset of COSs according to interface type (MMUI or VMUIF)

Figure 10-2
The Find Class of Service screen

```
ABC Company                   Class of Service Administration

  Find Class of Service

  Class of Service Number:      ___

  Class of Service Name:        ______________________________

* Voice Messaging Interface:    [Any]  MMUI   VMUIF



Exit                            List          Print
```

* This field is displayed only if VMUIF is installed.

If you do not fill in any of the fields, the resulting list will be the complete set of defined COSs.

On systems on which COSs have been defined, you can either view the list of existing COSs on screen, or print it out. Procedure 10-1 describes how to view a list of existing COSs, and Procedure 10-2 describes how to print a list of COSs.

Procedure 10-1
Viewing a list of COSs

Starting point: The Customer Administration Menu

1 Select Class of Service Administration.

The Class of Service softkey screen is displayed.

2 Press [Find].

The Find Class of Service screen is displayed.

3 Specify the search criteria.

To find a particular COS, enter the COS number in the *Class of Service Number* field.

To find a subset of COSs according to name, enter the appropriate search pattern. (This pattern will consist of the letters and wildcard characters to indicate the pattern that the found COSs must match.)

To find and print those COSs for a particular interface, specify either “MMUI” or “VMUIF.” If you want to retrieve COSs that belong to both interface types, specify “Any.”

4 Press [List].

The List of Classes of Service screen is displayed.

Figure 10-3
The List of Classes of Service screen

```
 ABC Company                       Class of Service Administration


List of Classes of Service

COS  *COS       #VceMsg  Storage      Retain    #Compose     DNU         AMIS     DualLang
Num  Name       I/F      (Mins.)      ReadMsg    Msgs        /RN    Receive/Send   Prompt
1    Standard   MMUI       3           0                     N/N         No  No       No
2    Executive  MMUI      20           2                     Y/Y         Yes Yes      Yes
3    Secretary  MMUI      10           0                     N/Y         Yes No       No
10   Outcalling MMUI       5           0                     Y/Y         No  No       No
11   DNU only   MMUI       5           0                     Y/N         No  No       No
12   RN only    MMUI       5           0                     N/Y         No  No       No
16   VMUIF Stud VMUIF     10           0         No          N/N         No  No
17   VMUIF Facu VMUIF     10           0         Yes         N/N         No  No

  Exit                           View
```

* Only the first 10 characters of the COS name are displayed.
\# These columns are displayed only if VMUIF is installed.

The List of Classes of Service screen displays the COS number and name along with a brief summary of the class of service definition. This summary includes the following information:

- the voice messaging interface (not shown if MMUI is chosen on the Find Class of Service screen)
- the maximum amount of storage available

- the number of days that read messages are retained
- whether or not the user is able to compose messages (not shown if MMUI is chosen on the Find Class of Service screen)
- whether or not DNU and/or RN are enabled
- whether or not AMIS messages are allowed to be received and/or sent
- whether or not dual language prompting is enabled

Procedure 10-2
Printing a list of existing COSs

Starting point: The Customer Administration Menu

1 Select Class of Service Administration.

The Class of Service softkey screen is displayed.

2 Press [Find].

The Find Class of Service screen is displayed.

3 Specify the search criteria.

To find and print a particular COS, enter the COS number in the *Class of Service Number* field.

To find and print a subset of COSs according to name, enter the appropriate search pattern. (This pattern will consist of the letters and wildcard characters to indicate the pattern that the found COSs must match.)

To find and print those COSs for a particular interface, specify either “MMUI” or “VMUIF.” If you want to retrieve COSs that belong to both interface types, specify “Any.”

4 Press [Print].

A list of existing COSs that meet the specified search criteria is printed.

Viewing a class of service definition

From the List Classes of Service screen, you can select a particular COS and press the [View] softkey to bring up the entire COS definition on screen.

Procedure 10-3
Viewing a class of service definition

Starting point: The Customer Administration Menu

1 Select Class of Service Administration.

The Class of Service softkey screen is displayed.

2 Press [Find].

The Find Class of Service screen is displayed.

3 Specify the search criteria.

To find a particular COS, enter the COS number in the *Class of Service Number* field.

To find a subset of COSs according to name, enter the appropriate search pattern. (This pattern will consist of the letters and wildcard characters to indicate the pattern that the found COSs must match.)

To find those COSs for a particular interface, specify either MMUI or VMUIF. If the interface is not important (that is, you want to retrieve COSs regardless of interface type), specify “Any.”

4 Press [List].

The List of Classes of Service screen is displayed (Figure 10-3).

5 Move the cursor to the definition you want to view.

6 Press <spacebar> to select it.

7 Press [View/Modify].

The View Class of Service screen is displayed. The MMUI View Class of Service screen is shown in Figure 10-4 on page 10-11, and the VMUIF View Class of Service screen is shown in Figure 10-5 on page 10-13.

8 Press [Cancel] to leave this COS definition.

Figure 10-4
The View Class of Service screen (MMUI)

```
ABC Company                    Class of Service Administration

View Class of Service

Class of Service Number:                  1

Class of Service Name:                    Secretary

#Voice Messaging Interface:               MMUI    VMUIF

Personal Verification Changeable by User: [No]    Yes

Voice Storage Limit (minutes):            3

Maximum Message Length (mm:ss):           03:00

Delayed Prompts:                          No      Yes

*Dual Language Prompting:                 No      Yes

Auto Logon:                               No      Yes

Administrator Capability:                 No      Yes

Broadcast Capability:                     No      Yes

Auto Play:                                No      Yes

Callers Notified of Busy Line:            No      Yes

Maximum Call Answering
Message Length (mm:ss)                    01:00

Receive Composed Messages:                No      Yes

Receive External Messages:                No      Yes

Message Waiting Indicating Options:       None  Any  Urgent

External Call-Sender                      Unrestricted  On_Switch  Local
Restriction/Permission Codes:             Long_distance_1 Long_distance_2

Read Message Retention (days):            10
("0" implies that read messages
are retained until the user
deletes them manually.)

                                                            MORE BELOW

  Exit         Cancel
```

* This field is displayed only on multilingual systems.
\# This field is displayed only if VMUIF is installed.

Figure 10-4 (Continued)

The View Class of Service screen (MMUI)

```
 ABC Company                    Class of Service Administration                MORE ABOVE

   View Class of Service

   Send Messages to External Users:          No      Yes

   Retain Copy of Sent Messages:             No      Yes

 * Delivery to Non-User Capability:          No      Yes

 *#Delivery to Non-User                      None  On_Switch  Local
   Restriction/Permission Codes:             Long_distance_1 Long_distance_2

 *#Send Message via DNU if Mailbox Not Found:No      Yes

 *#DNU DTMF Confirmation Required:           No      Yes

 * Remote Notification Capability:           No      Yes

 *##Remote Notification                      None  On_Switch  Local
   Restriction/Permission Codes:             Long_distance_1 Long_distance_2

 *##Remote Notification Keypad Interface:    No      Yes

 *##Remote Notification Retry Limits and Frequency:
      Busy        Retry Limit:   3           Retry Interval (hh:mm):  00:05
      No Answer   Retry Limit:   10          Retry Interval (hh:mm):  00:15
      Answered    Retry Limit:   1           Retry Interval (hh:mm):  00:05

 *##RN Business Days:       Sunday           No   Yes
                            Monday           No   Yes
                            Tuesday          No   Yes
                            Wednesday        No   Yes
                            Thursday         No   Yes
                            Friday           No   Yes
                            Saturday         No   Yes

 **Receive AMIS Open Network Messages:       No   Yes

 **Compose/Send AMIS Open Network Messages:  No   Yes

 **!AMIS Open Network                        None On_Switch  Local
   Restriction/Permission Codes:             Long_distance_1 Long_distance_2

   Extension Dialing                         None  On_Switch Local
   Restriction/Permission Codes:             Long_distance_1 Long_distance_2

   Custom Revert                             None  On_Switch Local
   Restriction/Permission Codes:             Long_distance_1 Long_distance_2

 ________________________________________________________________________________

    Save          Cancel
```

```
*  These fields are displayed only if Outcalling is enabled.
** These fields are displayed only if AMIS Networking is enabled.
#  These fields are displayed only if Delivery to Non-User Capability is "Yes."
## These fields are displayed only if Remote Notification Capability is "Yes."
!  This field is displayed only if Compose/Send AMIS Open Network Messages is set to "Yes."
```

Figure 10-5
The View Class of Service screen (VMUIF)

ABC Company	**Class of Service Administration**
View Class of Service	
Class of Service Number:	50
Class of Service Name:	DTMF
Voice Messaging Interface Type:	MMUI **VMUIF**
Maximum Number of SubMailboxes:	0
Voice Storage Limit (minutes):	3
Maximum Message Length (mm:ss):	03:00
Maximum Personal Greeting Length (mm:ss):	01:00
Delayed Prompts:	No **Yes**
Dial Pulse Support:	**No** Yes
Auto Logon:	**No** Yes
Login from Call Answering:	No **Owner** Group
Lockout Duration (hh:mm): (00:00 implies no mailbox reset)	00:00
Broadcast Capability:	**No** Yes
Callers Notified of Busy Line:	No **Yes**
Receive Messages for Call Answering:	No **Yes**
Maximum Call Answering Message Length (mm:ss)	01:00
Receive Composed Messages:	No **Yes**
Receive External Messages:	No **Yes**
Message Waiting Indication Options:	None **Any** Urgent
Skip to First New Message:	**No** Yes
Announce Caller:	**No** Yes
Replay Header with Message:	No **Yes**
Call Sender:	**No** Yes
External Call-Sender Restriction/Permission Codes:	None On_Switch **Local** Long_distance_1 Long_distance_2

MORE BELOW

Save **Cancel**

Figure 10-5 (continued)
The View Class of Service screen (Change Defaults for VMUIF)

```
 ABC Company                  Class of Service Administration                MORE ABOVE
   View Class of Service

   Read Message Retention (days):            10
   ("0" implies that read messages
   are retained until the user
   deletes them manually.)

   Compose Capability:                       No      Yes

   Send Messages to External Users:          No      Yes

   Treatment for Unsent Messages if the
   User Disconnects during Compose:          Send    Delete

 * Delivery to Non-User Capability:          No      Yes

 *# Delivery to Non-User                     Unrestricted  On_Switch  Local
   Restriction/Permission Codes:             Long_distance_1 Long_distance_2

 *# Send Message via DNU if Mailbox Not Found:No     Yes

 *# DNU DTMF Confirmation Required:          No      Yes

 * Remote Notification Capability:           No      Yes

 *##Remote Notification                      Unrestricted  On_Switch  Local
   Restriction/Permission Codes:             Long_distance_1 Long_distance_2

 *##Remote Notification Retry Limits and Frequency:
      Busy        Retry Limit:   3           Retry Interval (hh:mm):  00:05
      No Answer   Retry Limit:   10          Retry Interval (hh:mm):  00:15
      Answered    Retry Limit:   1           Retry Interval (hh:mm):  00:05

 *##RN Business Days:       Sunday           No   Yes
                            Monday           No   Yes
                            Tuesday          No   Yes
                            Wednesday        No   Yes
                            Thursday         No   Yes
                            Friday           No   Yes
                            Saturday         No   Yes

 ** Receive AMIS Open Network Messages:      No   Yes

 ** Compose/Send AMIS Open Network Messages: No   Yes

 **!AMIS Open Network                        Unrestricted On_Switch  Local
   Restriction/Permission Codes:             Long_distance_1 Long_distance_2

   Custom Revert                             Unrestricted  On_Switch  Local
   Restriction/Permission Codes:             Long_distance_1 Long_distance_2

 ______________________________________________________________________________
   Save          Cancel
```

* These fields are displayed only if Outcalling is enabled.
** These fields are displayed only if AMIS networking is enabled.
\# These fields are displayed only if Delivery to Non-User Capability is "Yes."
\## These fields are displayed only if Remote Notification Capability is "Yes."
! This field is displayed only if Compose/Send AMIS Open Network Messages is set to "Yes."

The following read-only fields are displayed:

- ***Class of Service Number*** The class of service number. This number is used to uniquely identify this class of service and distinguish it from all others. This number will be in the range of 1 to 127.
- ***Class of Service Name*** The name assigned to the class of service. This name can be up to 30 characters long.
- ***Voice Messaging Interface Type*** The interface that will be used by users assigned to this class of service. This must match the interface that is selected for the customer group. This field is displayed only if VMUIF is installed on the system.
- ***Maximum Number of SubMailboxes*** (VMUIF only) A value other than zero in this field means that the submailbox capability is enabled for this COS. The submailbox feature allows a mailbox to be divided into several personal mailboxes, all of which are accessible from a single DN. “0” implies that the submailbox feature is disabled. If enabled, between 1 and 8 submailboxes are permitted.
- ***Personal Verification Changeable by User*** (MMUI only) If this field is set to “No,” only the administrator is allowed to record personal verifications for users belonging to the COS. If this field is set to “Yes,” users can record their own personal verifications from their telephone sets. The latter option is generally desirable since callers prefer to hear the voice of the person they are calling. The default is “No.”
- ***Voice Storage Limit (minutes)*** The maximum amount of storage available to the user. This value will be between 1 and 360 (minutes). The default is 3 minutes.

  Note: If submailboxes are enabled for this COS, all submailboxes contend for the same storage space.

  If a user surpasses this limit his calls are not cut off. The user hears a message indicating that his mailbox is full, and he is restricted in what he can do. For example, he can only read and delete messages and is not allowed to record a personal greeting, compose, send, or forward messages. Once the user has deleted some of his messages, he will not be able to reply to messages until he has logged out of Meridian Mail and logged back in again.
- ***Maximum Message Length (mm:ss)*** This value determines the longest possible composed message or greeting that a user is allowed to record. This value will be between 00:30 and 99:00. The default is “03:00.”

  Note: This value cannot be greater than the *Voice Storage Limit*.

- ***Maximum Personal Greeting Length (mm:ss)*** (VMUIF only) This value determines the longest possible personal greeting that a user is allowed to record. This value will be between 00:30 and 05:00. The default is “01:00.”

  Note: This value cannot be greater than the *Voice Storage Limit*.

  For MMUI classes of service, this field does not control the maximum length of a user’s personal greeting. However, a user’s internal and external greeting *combined* cannot exceed 7 minutes (07:00). If the internal greeting plus the external greeting together total more than 7 minutes, the last recorded greeting may not be saved, and an error message is issued indicating this.
- ***Delayed Prompts*** When this field is set to “Yes,” the system will prompt the user for an action if the user does not initiate any action for 3.5 seconds. The default is “Yes.”
- ***Dial Pulse Support*** (VMUIF only) This option allows users to log on to their mailboxes without having to enter a mailbox number, password, or any other key presses. The default is “No.”

  Note: If this field is set to “Yes,” *Auto Logon* must also be set to “Yes.”
- ***Dual Language Prompting*** (MMUI only) This field is displayed on multilingual systems only. The selection made here affects the prompts played to people calling from external phones. (It does not apply to the prompts played to Meridian Mail users. The language in which prompts are played to users who are logged on to MSM is determined by the user’s *Preferred Language* field. See the “Adding local voice users” section in Chapter 5, “User Administration” for more details.) The default is “Yes.”

  If this field is set to “Yes,” callers hear prompts in the user’s preferred language, followed by the primary default language. If the primary default language is the same as the user’s preferred language, prompts are first played in the preferred language followed by the secondary default language. Both the primary default language and the secondary default language are specified in the Voice Messaging Options screen for the customer group.
- ***Auto Logon*** When this field is set to “Yes,” users do not need to enter a mailbox number or password to gain access to Meridian Mail. When set to “No,” users must enter a mailbox number and password. “Yes” should be used only for voice messaging users with telephones in secure locations, or for call-answering users that require dial pulse support. The default is “No.”

- ***Administrator Capability*** (MMUI only) If this field is set to “Yes,” the user is able to record a custom call answering greeting and personal verifications for all other users. The default is “No.”
- ***Broadcast Capability*** If this field is set to “Yes,” users are able to compose and send broadcast messages. A broadcast message is sent to all users in the same customer group. The default is “No.”
- ***Auto Play*** (MMUI only) When this field is set to “Yes,” the messages in the user’s mailbox are automatically played when the user logs on, starting from the first new message. Once all new messages are played, old (read) messages are then played back (if there are any), starting with the oldest read message.

  When this field is set to “No,” the user must explicitly request that each message be played by pressing “2” on the telephone keypad.

  Auto Play can be used in combination with *Auto Logon* to allow totally “handsfree” message retrieval. The default is “No.”
- ***Login from Call Answering*** (VMUIF only) This field determines whether or not users can log into their mailbox during or after a call answering session. When this feature is enabled, users have an alternative method of logging in which does not require that they dial a special access DN. Users can access their mailbox from a phone other than their “home phone” by dialing their telephone number and then pressing *.

  When this field is set to “Owner,” users are allowed to log into their mailbox only if the destination mailbox is their own. After pressing *, the user is prompted to enter his or her password.

  When this field is set to “Group,” the user will be allowed to log in to his or her mailbox if it belongs to the same customer group as the destination mailbox. After pressing *, the user is prompted to enter the mailbox number followed by the password. For example, a user who is away from home can call a friend who is a user in the same customer group, leave a message, and then log on to their own mailbox.

  When this field is set to “No,” the user will not be allowed to log in from call answering.

  The default is “Owner.”
- ***Lockout Duration (hh:mm)*** (VMUIF only) When a user’s mailbox is disabled due to password violation, this field determines how long the user is locked out before he can log on again. This value will be between 00:00 and 23:59. 00:00 means that the user will be locked out until you (the administrator) reenable the mailbox. The default is “00:00.”

- ***Callers Notified of Busy Line*** If this field is set to “Yes,” a special prompt is played to inform callers that the called line is busy. After being so informed, the caller is connected to Meridian Mail. If the field is set to “No,” the caller is simply connected to Meridian Mail and given the chance to leave a message. The default is “Yes.”

  Note: If the user’s mailbox is associated with two (or three) DNs, they must all be busy for this prompt to be played.

- ***Receive Messages for Call Answering*** (VMUIF only) This field determines if the user’s mailbox will take call answering messages. The default is “Yes.”

- ***Maximum Call Answering Message Length (mm:ss)*** This value determines the longest possible call answering message that a caller can record. This value will be between 00:30 and 99:00. The default is “01:00.”

  Note: This value cannot be greater than the *Voice Storage Limit*.

- ***Receive Composed Messages*** If this field is set to “No,” the user’s mailbox will not accept composed messages. Furthermore, callers will not be allowed to receive external messages or AMIS open network messages. Setting this field to “No” automatically sets the *Receive External Messages* and *Receive AMIS Open Network Messages* fields to “No.” The default is “Yes.”

- ***Receive External Messages*** If this field is set to “Yes,” a user can receive composed messages from users outside the customer group to which the user belongs. To set this field to “Yes,” the *Receive Composed Messages* field must be set to “Yes.” If this field is set to “No,” the user will only be able to receive messages from users belonging to the same customer group. The default is “Yes.”

- ***Message Waiting Indication Options*** The chosen setting determines the type of messages that will cause a message waiting indication (a flashing light or an interrupted dial tone) on the user’s telephone set. If “Any” is selected, users are notified of all new messages. If “Urgent” is selected, users are notified of only those messages that are tagged as urgent. If “None” is selected, users are not notified at all. (“None” may be selected if, for example, mailboxes belonging to the COS do not have telephone sets associated with them.) The default is “Any.”

  This field should be set to “None” for users who do not have a physical telephone set but who do have a mailbox. For example, a salesperson may only rarely be at the office and does not have a phone as a result, but still requires a number for callers to leave messages.

- ***Skip to First New Message*** (VMUIF only) This field determines what happens when a user logs on to listen to new messages. If this field is set to “Yes,” the first new message is automatically played when the user successfully logs on. If this field is set to “No,” users must use the Play command to listen to new messages. The default is “No.”
- ***Announce Caller*** (VMUIF only) If this field is set to “Yes,” the prompt *“From <caller>”* will be announced in the header/envelope for call answering messages left by callers. The default is “No.”
- ***Replay Header with Message*** (VMUIF only) If “Yes” is selected, the header will be played whenever a user selects the Play command to listen to messages that have been left in the mailbox.
- ***Call Sender*** (VMUIF only) When this field is set to “Yes,” users can immediately call back the originator of a message using the voice messaging system. After listening to a message, a user presses “42” to dial the caller’s number. The default is “No.”
- ***External Call Sender Restriction/Permission Codes*** Apply one of the four restriction/permission sets to restrict the DNs to which external calls can be placed using the call sender feature. The actual restriction/permission codes are defined in the Voice Security Options screen by the system administrator. The default is the third option (“Local,” if the default names have not been modified).

  You may want to restrict users from using this feature to dial certain long distance DNs (or other specified external DNs). To do so, select the appropriate restriction/permission codes. The four choices that are presented in this screen reflect the four sets of dialing codes that are defined in the Voice Security Options screen. If “Unrestricted” is selected, all dialing codes are permitted since no specific restrictions are applied.
- ***Read Message Retention (days)*** This field specifies the number of days that messages are kept in users’ mailboxes after they have been read. The value in this field is limited by the customer-wide value set in the *Max Read Message Retention* field in the Voice Messaging Options screen. (See “Voice Messaging Options” in Chapter 7, “Voice Administration.”)

  Once the lesser of these two values is reached, read messages are automatically deleted. If “0” is entered in both fields, read messages are not automatically deleted by the system but can only be deleted by the user. The value will be between 0 and 99. The default is “0.”

The following table explains which value is used to determine how long the user's read messages are kept:

System retention limit	User retention limit	Amount of time read messages are kept
0 (zero)	0 (zero)	Messages are kept until the user deletes them. The system will not automatically delete read messages.
0 (zero)	A value other than zero	The user retention limit determines how long messages are kept.
A value other than zero	0 (zero)	The system retention limit determines how long messages are kept.
A value other than zero	A value other than zero	The lesser value is used to determine how long messages are kept.

- ***Compose Capability*** (VMUIF only) If this field is set to "Yes," users can compose and send voice messages. The default is "No."
- ***Send Messages to External Users*** If this field is set to "Yes," users can compose and send messages to users outside of the user's own customer group. The default is "No."
- ***Retain Copy of Sent Messages*** (MMUI only) When this field is set to "Yes," copies of sent messages are not deleted from the user's mailbox. When it is set to "No," messages are deleted as soon as they are sent. Carefully consider how many users you can allow to have this capability, since the more users that have this ability, the faster your available storage space will be used up. The default is "No."
- ***Treatment for Unsent Messages if the User Disconnects during Compose*** (VMUIF only) This field is displayed only if *Compose Capability* is set to "Yes." The selection made in this field determines what happens to an unsent message if the user disconnects while composing the message. If this field is set to "Delete," the unsent message is deleted. If this field is set to "Send," the (possibly incomplete) message is sent. The default is "Delete."
- ***Delivery to Non-User Capability*** This field is displayed only if Outcalling is enabled. This field determines whether or not users belonging to this COS can compose and send messages to people who are not Meridian Mail users. The default is "No."

- ***Delivery to Non-User Restriction/Permission Codes*** This field is displayed only if Outcalling is enabled and *Delivery to Non-User Capability* is set to “Yes.”

  The selected option determines which dialing codes can and cannot be dialed when a user attempts to send a message to a non-user. The actual dialing codes are defined in the Voice Security Options screen, accessible through the Voice Administration menu. The default is the third set in the list (“Local,” if the default names have not been modified).
- ***Send Message via DNU if Mailbox Not Found*** This field is displayed only if Outcalling is enabled and *Delivery to Non-User Capability* is set to “Yes.” The default is “No.”
- ***DNU DTMF Confirmation Required*** This field is displayed only if Outcalling is enabled and *Delivery to Non-User Capability* is set to “Yes.” This field indicates whether or not a recipient of a Delivery to Non-user (DNU) message is required to confirm that they want to hear the message by pressing **2**. This can help avoid messages being delivered to an answering machine or to the wrong person. When disabled, the message is played upon voice detection. The default is “No.”
- ***Remote Notification Capability*** This field is displayed only if Outcalling is enabled. This field determines whether or not this user can be notified at a remote telephone or pager regarding messages waiting in his or her mailbox. The default is “No.”
- ***Remote Notification Restriction/Permission Codes*** This field is displayed only if Outcalling is enabled and *Remote Notification Capability* is set to “Yes.”

  The selection made in this field determines the restricted/permitted dialing codes that apply when the target DNs at which the user is to be notified are specified in the business day schedule, non-business day schedule, and temporary schedule. The actual dialing codes are defined in the Voice Security Options screen, accessible from the Voice Administration menu. The default is the third set in the list (“Local,” if the default names have not been modified).
- ***Remote Notification Keypad Interface*** (MMUI only) This field is displayed only if Outcalling is enabled and *Remote Notification Capability* is set to “Yes.” When this field is “Yes,” users are able to change their schedules, periods, and targets from a telephone keypad. The default is “No.”
- ***Remote Notification Retry Limits and Frequency*** The following fields are displayed only if *Remote Notification Capability* is set to “Yes.”

These fields are limited by the *Maximum Number of Remote Notification Retry Repeats* field in the Outcalling Administration screen. For example, if the system attempts to notify a user of a message but the notification numbers are not answered, the system will stop notification attempts after the No Answer limit has been exhausted for the user. This is considered one retry repeat. If another new message is left for the user and retry attempts are again exhausted, this would be counted as the second retry repeat. This continues until the maximum number of retry repeats set in this field is reached at which time Meridian Mail no longer attempts to notify the user of new messages. If a user logs on to the mailbox and retrieves the messages, the counter is reset to “0,” and remote notification is reenabled for the user.

Note: Call Progress Tone Detection (CPTD) can be set to Standard (the default) or France during software installation. The retry limits and intervals will be different (as specified in the following descriptions) depending on this setting. To change this setting from the default value, call your Nortel technical support center.

— ***Busy Retry Limit*** The number of times notification is retried at a remote phone, pager, or paging service if the destination number is busy. You may enter a value from 0 to 10. The default is “3.”

  If more than one target DN is defined in the user’s schedule, Meridian Mail will not try the next target DN if the current one is busy. Instead, the system will send the remote notification call to the same DN on the retry (after waiting the amount of time specified as the busy retry interval).

  If this limit is exhausted, then the No Answer Retry Limit and No Answer Retry Interval are used for further instances of busy. Therefore, the total number of allowed retries is actually Busy Retries + No Answer Retries.

  Note: If CPTD is set to France, the valid range is 0 to 5, and the default is “1.”

— ***Busy Retry Interval (hh:mm)*** This field determines how long the MSM will wait before retrying remote notification if the destination number is busy. The valid range is from 00:00 to 23:59. The default is “00:05.”

  Note: If CPTD is set to France, the valid range is 00:00 to 00:12, and the default is “00:05.”

— ***No Answer Retry Limit*** The number of times notification is retried at a remote phone, pager, or paging service if the destination number is not answered. You may enter a value from 0 to 10. The default is “10.”

If more than one target DN is defined in the user's schedule, Meridian Mail will try calling the first target DN. If there is no answer, Meridian Mail immediately tries calling the second target DN. If there is no answer at this DN, Meridian Mail will call the the third target DN (if defined). If it, too, is not answered, the system will wait the amount of time specified as the *No Answer Interval* before retrying remote notification to the first target DN.

If there is a mixture of No Answer and Answer results in a multiple DN scenario, the *Answered Retry Interval* and *Answered Retry Limit* are used.

Note: If CPTD is set to France, the valid range is 0 to 5, and the default is "4."

— ***No Answer Interval (hh:mm)*** This field determines how long the MSM will wait before retrying remote notification if the destination number is not answered. The valid range is from 00:00 to 23:59. The default is "00:15."

Note: If CPTD is set to France, the valid range is 00:00 to 00:12, and the default is "00:05."

— ***Answered Retry Limit*** The number of times the MSM will retry a remote number when the number is answered but the user does not log in (by pressing "1") or turn off further remote notification (by pressing "3"). The valid range is from 0 to 10. The default is "1."

This number should be relatively low. (The default is usually sufficient). If an answering machine answers the call, you do not want the RN service to keep calling back since RN can not be turned off. However, if the MSM is calling a pager, you would like the pager to go off periodically to remind the user of calls.

If more than one target DN is defined in the user's schedule, Meridian Mail will try calling the first target DN; if it is answered with no login, Meridian Mail immediately tries calling the second target DN. If it, too, is answered with no login, Meridian Mail will call the the third target DN (if defined). If it, too, is answered with no login, the system will wait the amount of time specified as the *Answered Retry Interval* before retrying remote notification to the first target DN.

If there is a mixture of No Answer and Answered results in a multiple DN scenario, the *Answered Retry Interval* and *Answered Retry Limit* are used.

Note: If CPTD is set to France, the valid range is 0 to 5, and the default is "0."

— ***Answered Retry Interval (hh:mm)*** The length of time the system will wait before retrying a remote number when the destination number is answered but no messages are retrieved. The valid range is from 00:00 to 23:59. The default is “00:05.”

Note: If CPTD is set to France, the valid range is 00:00 to 00:12, and the default is “00:05.”

- ***RN Business Days*** This field is displayed only if Outcalling is enabled and *Remote Notification Capability* is set to “Yes.” “Yes” indicates a business day. “No” indicates a non-business day. This information is used when creating remote notification schedules. By default, Monday to Friday are set to “Yes,” and Saturday and Sunday are set to “No.”
- ***Receive AMIS Open Network Messages*** This field is displayed only if AMIS is enabled. If this field is set to “Yes,” users can receive messages that are sent from remote AMIS open network sites. (To set this field to “Yes,” the *Receive Composed Messages* field must also be set to “Yes’.) The default is “No.”
- ***Compose/Send AMIS Open Network Messages*** This field is displayed only if AMIS is enabled. If this field is set to “Yes,” users belonging to this COS can compose and send messages to remote AMIS open network sites. (*Compose Capability* must also be set to “Yes.”) The default is “No.”
- ***AMIS Open Network Restriction/Permission Codes*** This field is displayed only if AMIS is enabled, and the previous field, *Compose/Send AMIS Open Network Messages*, is set to “Yes.”

  When a user composes a message for an AMIS open network site, the system checks to see if the address is restricted. If it is restricted, the user gets a non-delivery notification (NDN). The default is the third option (“Local,” if the default names have not been modified).
- ***Extension Dialing Restriction/Permission Codes*** (MMUI only) This field indicates which restricted/permitted dialing codes apply when a user dials a phone number while logged on to his mailbox (known as mailbox thru-dialing). For example, a user may dial into the office from an external trunk in order to listen to messages. While listening to messages he realizes he would like to speak to someone at the office. Instead of logging out and calling back, the user can press “0” followed by the extension number. The four choices displayed in this screen reflect the four sets of dialing codes that have been defined at the system level in the Voice Security Options screen (described in the chapter “Voice Administration” in the *System Administration Guide*). Each set contains up to 10 permission and 10 restriction codes. The default is the third option, “Local,” if the default names have not been modified.

- ***Custom Revert Restriction/Permission Codes*** The custom revert DN is the extension to which a caller is passed when the caller presses 0 during a call answering session. Since users can customize this DN from their telephone set, you must determine which dialing codes you want to restrict (or explicitly permit). For example, you may want to ensure that users cannot revert callers to long distance numbers.

  The actual restriction/permission sets are defined at the system administration level in the Voice Security Options screen (described in the "Voice Administration" chapter in the *System Administration Guide*). Up to 10 restriction and 10 permission codes can be defined for each option. The default is the third option ("Local," if the default names have not been modified).

  To block users from changing their own revert DNs from their telephone sets, restrict the dialing codes 0–9. The administrator is still able to enter a revert DN in the Add or View/Modify Local Voice User screen, and this revert DN will work. However, users will be unable to change it from their telephone sets.

List of terms

MMP40

The MMP40 processor card

AMIS

Audio Messaging Interchange Specification

Analog

Pertains to representation by means of continuously variable physical quantities.

Batch Change Supplement (BCS)

An SL-100/DMS-100 software release

Call

In the MSM, any demand to set up a connection through the switch. Also used as a unit of telephone traffic. Synonymous with cue.

Call Processing

The software system that handles the processes involved in setting up connections through the Meridian Mail MSM network between calling and called party.

Card

A plug-in circuit pack containing components. In the MSM, “card” is the preferred term for a printed circuit pack or printed circuit board.

CDP

Coordinated Dialing Plan

Central office (CO)

A switching office arranged for terminating subscriber lines and provided with switching equipment and trunks for establishing connections to and from other switching offices. Synonymous with class 5 office; end office; local office. *See* office classification.

Central processing unit (CPU)

A hardware entity, located in the central control complex frame, that contains the central data processor for Meridian Mail MSM.

Centrex

A service that provides a Business telephone subscriber with direct inward dialing to extensions on the same system and direct outward dialing from all extensions. Centrex switching equipment is normally located at the central office, but may be located on the operating company client's premises.

Channel capacity

A measure of the maximum possible information rate through a channel, subject to specified constraints.

Circuit pack (CP)

Consists of multi-layer PCB, through-hole electronic components, backpanel connector, faceplate, lock latches, and stiffeners.

CO

Central office

COS

Class of Service

CPE

Customer Premises equipment

Customer Premises Equipment (CPE)

Refers to equipment, such as the Message Services Module (MSM), that is located on the customer's premises.

Data

In translations, tables contain data. Each field or subfield has specific data values which are valid for that field. For example, a field called SECONDS may accept integer values from 0 through 60. A field called DAY may accept values of SUNDAY, MONDAY, TUESDAY. The set of all possible data values for a field is known as the *range* of the field.

Datafill

In translations, datafill is the process of entering data into a table, for example, "I am going to datafill the table now." Datafill is also used as a synonym for data, for example, "The datafill in that table is incorrect."

DID

Direct inward dialing

Directory

In Meridian Mail, a software structure that may be used to look up, store, and delete symbols.

Directory number (DN)

The full complement of digits required to designate a subscriber’s station within one NPA—usually a three-digit central office code followed by a four-digit station number.

Disk drive unit

Consists of a disk drive and a power-converter card installed in an input/output equipment frame.

DMS

Digital Multiplex System

DN

Directory number

DSP

Digital Signal Processor

Error

In telephony, a detectable trouble condition that cannot be reproduced at will by the system or by external means; a transient or intermittent fault that does not yield consistent diagnostic test results. Compare with fault.

Error message

An indication that an error has been detected.

ESN

Electronic Switched Network

Function

In Meridian Mail call processing, refers to one of several procedure-type capable of accomplishing a specific task.

Ground start line

A line circuit arrangement in which dial-tone is sent in response to a ground signal on the ring conductor applied by the calling station or PBX. This differs from the more common loop start configuration, in which seizure is accomplished by bridging the tip and ring conductors.

Hundred call seconds (CCS)

Calculated by multiplying the average number of calls during busy hour by the average holding time in seconds, divided by 100. (36 CCS=1 Erlang.)

IBN

Integrated Business Network

IF

Interface (card)

Input/output (I/O)

Refers to a device or medium that is used to achieve a bi-directional exchange of data. Data exchange in the Meridian Mail MSM system is performed in accordance with the input/output message system.

Input/output device (IOD)

A hardware device that interprets input and formats output for human users or remote computes.

Integrated Business Network (IBN)

Now known as Meridian Digital Centrex. A special MSM business services package that utilizes the data-handling capabilities of a central office to provide a centralized telephone exchange service. Many optional features are also available.

Integrated Services Digital Network (ISDN)

A set of standards proposed by the International Telegraph and Telephone Consultative Committee (CCITT) to establish compatibility between the telephone network and various data terminals and devices. ISDN provides a path for transmission of voice, data, and images.

I/O

Input/output

IOD

Input/output device

ISDN

Integrated Services Digital Network

Line hunting

Procedure for searching a number of lines to find one that is idle. See Multi-line Hunt.

Link

- In the MSM, a connection between any two nodes. *See* node.
- A four-wire group of conductors providing transmit and receive paths for the serial speech or message data between components of Meridian Mail systems. Speech links connect peripheral modules to the network modules. Message links connect network message controllers or input/output controllers to the central message controller.

Link protocol

A set of rules for data communication over a data link. Link protocols exist for transmission codes, transmission nodes, and for data control and recovery procedures.

MAT

See Multiple Administration Terminal

Meridian SL-100 PBX

Message Services Module (MSM)

Message Waiting Indicator (MWI)

MMUI

Meridian Mail User Interface

Modem

Contraction of modulator/demodulator; a device that modulates and demodulates signals for transmission and reception, respectively, over communication facilities. A modem is used to permit digital signals to be sent out over analog lines. Synonymous with data set.

Module

- The basic building block of software structure. A module consists of interface and implementation sections.
- A discrete hardware package, designed for use in conjunction with other components.

MPC

Multi-protocol controller

MSP

Multi-server Processor

MSM

Message Services Module

Multiple Administration Terminal (MAT)

MWI

See Message Waiting Indicator

Multi-line Hunt

A service-related telephony feature that permits calls to a busy line to be routed to other specified lines without assigning a directory number to each line. Refer to line hunting.

Multi-protocol controller (MPC)

A general-purpose data communications card that allows data communications between the Meridian SL-100 switch (or a DMS-100 switch) and an external computer. The MPC provides the SMDI link between the Meridian SL-100 PBX (or DMS-100 switch) and the MSM. The MPC card resides on the input/output controller shelf.

Multi-server Processor (MSP)

A node running multi-server programs on the Message Services Module.

Network

- An organization of stations capable of intercommunication but not necessarily on the same channel
- Two or more interrelated circuits
- A combination of terminals and circuits in which transmission facilities interconnect user stations directly
- A combination of circuits and terminals serviced by a single switching or processing center
- An interconnected group of computers or terminals
- (NET) The network module frame of the Meridian Mail system

Network administration system

A stand-alone computer that is involved in operation, administration, and maintenance of ISDN services. The NAS uses data on service and system operation to generate files that contain information on alarms, accounting, billing, and network operation.

Network module

The basic building-block of the Meridian Mail switching network. The NM accepts incoming calls and, using connection instructions from the central control complex, connects them to the appropriate outgoing channels. Activities in the NM are controlled by the network message controllers.

NM

Network module

Node

The terminating point of a link. Node is a relative term; its meaning depends entirely on the context within which it is used. For example, a circuit may be a node in the context of another circuit within a module; the module itself may be a node in the context of another component of the network, and so forth. In MSM, nodes can be MSP, SPN, or TIFN.

Nortel practice (NTP)

A document that contains descriptive information about the Meridian Mail hardware and software modules, and performance oriented practices for testing and maintaining the system. NTPs are supplied as part of the standard documentation package provided to an operating company.

NTP

Northern Telecom practice

PBX

Private branch exchange

Port

In the MSM, the point at which a voice, T1, or SMDI link is connected to the system.

Private branch exchange (PBX)

A private telephone exchange, either automatic or attendant-operated, serving extensions in an organization and providing access to the public network.

Service Order System (SERVORD)

A user interface used to change, add, or delete a subscriber line. Standard telephone industry command-format is used.

SERVORD

Service Order System

Shelf

A container for drawers, cards, or both.

Signal Processing Node (SPN)

A node on the Message Services Module that is used for signal processing.

Simplified message desk interface (SMDI)

An interface feature that enables a PBX/switch switch to communicate with a message desk. It provides the directory number of the called station, the calling station number (if available), and the reason for the call being forwarded to a message desk. For example, calls can be forwarded because a busy signal was received (CFB, call forward busy), or no answer was received (CFN, call forward no answer). In addition, it provides the message desk with the ability to activate or deactivate the message waiting indication for any station able to forward calls to the desk.

SMDI
Simplified message desk interface

SPN
Signal Processing Node

Table
Two-dimensional entities in which data associated with the hardware and software systems of the MSM are stored.

Telephony Interface Node (TIFN)
A node that is used to interface between incoming telephony lines and place the communications on the MM bus of the Message Services Module.

Terminal

- The point of origination or termination in a communications network
- Any device capable of sending and/or receiving information over a communication channel
- Also, in MSM, the smallest unit of address space within the input/output system

TIFN
Telephony Interface Node

Transition Module (TM)
A transition module (TM) is a short circuit pack, based on the standard circuit pack that carries the cable interfaces and/or local service functions. These include local clock sources and bus terminations, located on the back of the PBX/switch or MSM shelf.

Translations
Translations is the process the Meridian Mail of switches uses to determine the destination of a call based on the digits the caller dials and the capabilities available to the caller. It also allows the MSM software to recognize the hardware components of the system.

T1
The standard 24-channel, 1.544 Mb/s pulse code modulation system as used in North America. This digital carrier carries a signal whose designation is DS1.

UCD
Uniform Call Distribution

Uniform Call Distribution (UCD)

A Meridian Digital Centrex feature which allows calls to be evenly distributed to a number of pre-designated stations known as UCD stations or UCD positions. This feature is used to queue incoming calls to the message desk.

VMUIF

See Voice Messaging User Interface Forum

Voice Messaging User Interface Forum

The interface provided by MSM that complies with the industry standard Voice Messaging User Interface Forum specification.

Voice Processor card

A twelve-port card that is used in the Message Services Module for voice processing.

VP12

Voice Processor card

VSDN Table

Voice Services-DN Table

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Reader's Response Form for:

Message Services Module
***Customer Administration Guide for Multi-Customer Systems*,**
557-7001-301,
August 1995

Tell us about yourself:

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Please return your comments by fax to (416) 597-7104, or mail your comments to: Nortel Customer Documentation, 522 University Ave., 12th Floor, Toronto, ON, Canada. M5G 1W7.

Reader's Response Form

Meridian Mail

Message Services Module

Customer Administration Guide for Multi-Customer Systems

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